Package 'RCy3'

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```
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R topics documented:

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.exportShowImage .exportShowImage

Description

Show network view in notebook output.

Usage

```
.exportShowImage(
  exportFirst,
  filename = "image",
  type = "PNG",
  resolution = NULL,
  units = NULL,
  height = NULL,
  width = NULL,
  zoom = NULL,
  sandboxName = NULL,
  network = NULL,
  base.url = .defaultBaseUrl,
  overwriteFile = TRUE
)
```

Arguments

exportFirst	$FALSE\ for\ notebook Show Image,\ TRUE\ for\ notebook Export Show Image.$
filename	(character) Full path or path relative to current working directory, in addition to the name of the file. Extension is automatically added based on the type argument. If blank, the current network name will be used.
type	(character) Type of image to export, e.g., PNG (default), JPEG, PDF, SVG.
resolution	(numeric) The resolution of the exported image, in DPI. Valid only for bitmap formats, when the selected width and height 'units' is inches. The possible values are: 72 (default), 100, 150, 300, 600.
units	(character) The units for the 'width' and 'height' values. Valid only for bitmap formats, such as PNG and JPEG. The possible values are: pixels (default), inches.
height	(numeric) The height of the exported image. Valid only for bitmap formats, such as PNG and JPEG.
width	(numeric) The width of the exported image. Valid only for bitmap formats, such as PNG and JPEG.
ZOOM	(numeric) The zoom value to proportionally scale the image. The default value is 100.0. Valid only for bitmap formats, such as PNG and JPEG
sandboxName	Name of sandbox containing file. None means "the current sandbox".

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network (optional) Name or SUID of a network or view. Default is the "current" network

active in Cytoscape. The first (presummably only) view associated a network is

used if a specific view SUID is not provided.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

overwriteFile (optional) FALSE allows Cytoscape show a message box before overwriting the

file if the file already exists; TRUE allows Cytoscape to overwrite it without

asking. Default value is TRUE.

Details

Show network view in notebook output.

Value

display image

Examples

.exportShowImage()

.getDefaultSandbox

.getDefaultSandbox

Description

.getDefaultSandbox

Usage

```
.getDefaultSandbox(base.url = .defaultBaseUrl)
```

Arguments

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

None

```
.getDefaultSandbox()
```

.getRequester 13

.getRequester

. get Requester

Description

```
.getRequester
```

Usage

```
.getRequester(base.url = .defaultBaseUrl)
```

Arguments

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
.getRequester()
```

addAnnotationBoundedText

Add Bounded Text Annotation

Description

Adds a bounded text annotation to a Cytoscape network view. The object will also be added to the Annotation Panel in the GUI.

```
addAnnotationBoundedText(
  text = NULL,
  x.pos = NULL,
  y.pos = NULL,
  fontSize = NULL,
  fontFamily = NULL,
  fontStyle = NULL,
  color = NULL,
  angle = NULL,
```

```
type = NULL,
customShape = NULL,
fillColor = NULL,
opacity = NULL,
borderThickness = NULL,
borderColor = NULL,
borderOpacity = NULL,
height = NULL,
width = NULL,
canvas = NULL,
canvas = NULL,
z.order = NULL,
network = NULL,
base.url = .defaultBaseUrl
)
```

Arguments

text	The text to be displayed
------	--------------------------

x.pos (optional) X position in pixels from left; default is center of current view y.pos (optional) Y position in pixels from top; default is center of current view

fontSize (optional) Numeric value; default is 12 fontFamily (optional) Font family; default is Arial

fontStyle (optional) Font style; default is

color (optional) Hexidecimal color; default is #000000 (black) angle (optional) Angle of text orientation; default is 0.0 (horizontal)

type (optional) The type of the shape, default is RECTANGLE. See getNodeShapes()

for valid options.

customShape (optional) If a custom shape, this is the text of the shape fillColor (optional) Hexidecimal color; default is #000000 (black)

opacity (optional) Opacity of fill color. Must be an integer between 0 and 100; default

is 100.

borderThickness

(optional) Integer

borderColor (optional) Hexidecimal color; default is #000000 (black) borderOpacity (optional) Integer between 0 and 100; default is 100.

height (optional) Height of bounding shape; default is based on text height. width (optional) Width of bounding shape; default is based on text length.

name (optional) Name of annotation object; default is "Text"

canvas (optional) Canvas to display annotation, i.e., foreground (default) or background z.order (optional) Arrangement order specified by number (larger values are in front of

smaller values); default is 0

addAnnotationImage 15

network	(optional) Name or SUID of the network. Default is the "current" network active
	in Cytoscape.
base.url	(optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

A named list of annotation properties, including UUID

Examples

 $add {\tt AnnotationImage}$

Add Image Annotation

Description

Adds a Image annotation to a Cytoscape network view. The object will also be added to the Annotation Panel in the GUI.

```
addAnnotationImage(
  url = NULL,
  x.pos = NULL,
 y.pos = NULL,
  angle = NULL,
  opacity = NULL,
  brightness = NULL,
  contrast = NULL,
  borderThickness = NULL,
  borderColor = NULL,
  borderOpacity = NULL,
  height = NULL,
 width = NULL,
  name = NULL,
  canvas = NULL,
  z.order = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

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Arguments

url	URL or path to image file. File paths can be absolute or relative to current working directory. URLs must start with http:// or https://.
x.pos	(optional) X position in pixels from left; default is center of current view
y.pos	(optional) Y position in pixels from top; default is center of current view
angle	(optional) Angle of text orientation; default is 0.0 (horizontal)
opacity	(optional) Opacity of fill color. Must be an integer between 0 and 100; default is 100.
brightness	(optional) Image brightness. Must be an integer between -100 and 100; default is $\boldsymbol{0}$
contrast	(optional) Image contrast. Must be an integer between -100 and 100; default is $\boldsymbol{0}$
borderThicknes	
	(optional) Integer
borderColor	(optional) Hexidecimal color; default is #000000 (black)
borderOpacity	(optional) Integer between 0 and 100; default is 100.
height	(optional) Height of image; default is based on text height.
width	(optional) Width of image; default is based on text length.
name	(optional) Name of annotation object; default is "Image"
canvas	(optional) Canvas to display annotation, i.e., foreground (default) or background
z.order	(optional) Arrangement order specified by number (larger values are in front of smaller values); default is $\boldsymbol{0}$
network	(optional) Name or SUID of the network. Default is the "current" network active in Cytoscape.
base.url	(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

A named list of annotation properties, including UUID

addAnnotationShape 17

addAnnotationShape Add Shape Annotation

Description

Adds a shape annotation to a Cytoscape network view. The object will also be added to the Annotation Panel in the GUI.

Usage

```
addAnnotationShape(
  type = NULL,
  customShape = NULL,
 x.pos = NULL,
 y.pos = NULL,
  angle = NULL,
  fillColor = NULL,
  opacity = NULL,
  borderThickness = NULL,
  borderColor = NULL,
  borderOpacity = NULL,
  height = NULL,
 width = NULL,
  name = NULL,
  canvas = NULL,
  z.order = NULL,
  network = NULL,
 base.url = .defaultBaseUrl
)
```

Arguments

type	(optional) The type of the shape, default is RECTANGLE. See getNodeShapes() for valid options.
customShape	(optional) If a custom shape, this is the text of the shape
x.pos	(optional) X position in pixels from left; default is center of current view
y.pos	(optional) Y position in pixels from top; default is center of current view
angle	(optional) Angle of text orientation; default is 0.0 (horizontal)
fillColor	(optional) Hexidecimal color; default is #000000 (black)
opacity	(optional) Opacity of fill color. Must be an integer between 0 and 100; default is 100.
borderThicknes	s
	(optional) Integer
borderColor	(optional) Hexidecimal color; default is #000000 (black)

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(optional) Integer between 0 and 100; default is 100. borderOpacity height (optional) Height of shape; default is based on text height. (optional) Width of shape; default is based on text length. width name (optional) Name of annotation object; default is "Shape" (optional) Canvas to display annotation, i.e., foreground (default) or background canvas (optional) Arrangement order specified by number (larger values are in front of z.order smaller values); default is 0 (optional) Name or SUID of the network. Default is the "current" network active network in Cytoscape. base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

A named list of annotation properties, including UUID

Examples

addAnnotationText

Add Text Annotation

Description

Adds a text annotation to a Cytoscape network view. The object will also be added to the Annotation Panel in the GUI.

```
addAnnotationText(
  text = NULL,
  x.pos = NULL,
  y.pos = NULL,
  fontSize = NULL,
  fontFamily = NULL,
  fontStyle = NULL,
  color = NULL,
  angle = NULL,
  name = NULL,
  canvas = NULL,
```

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```
z.order = NULL,
network = NULL,
base.url = .defaultBaseUrl
)
```

Arguments

text	The text to be displayed
x.pos	(optional) X position in pixels from left; default is center of current view
y.pos	(optional) Y position in pixels from top; default is center of current view
fontSize	(optional) Numeric value; default is 12
fontFamily	(optional) Font family; default is Arial
fontStyle	(optional) Font style; default is
color	(optional) Hexidecimal color; default is #000000 (black)
angle	(optional) Angle of text orientation; default is 0.0 (horizontal)
name	(optional) Name of annotation object; default is "Text"
canvas	(optional) Canvas to display annotation, i.e., foreground (default) or background
z.order	(optional) Arrangement order specified by number (larger values are in front of smaller values); default is $\boldsymbol{0}$
network	(optional) Name or SUID of the network. Default is the "current" network active in Cytoscape.
base.url	(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

A named list of annotation properties, including UUID

20 addCyEdges

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addc	Luges

Add CyEdges

Description

Add one or more edges to a Cytoscape network by listing source and target node pairs.

Usage

```
addCyEdges(
  source.target.list,
  edgeType = "interacts with",
  directed = FALSE,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

source.target.list

A list (or list of lists) of source and target node name or SUID pairs

edgeType The type of interaction. Default is 'interacts with'.

directed boolean for whether interactions are directed. Default is FALSE.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

A list of named lists of SUID, source and target for each edge added.

```
addCyEdges(c('sourceNode','targetNode'))
addCyEdges(list(c('s1','t1'),c('s2','t2')))
```

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addCyNodes

Add CyNodes

Description

Add one or more nodes to a Cytoscape network.

Usage

```
addCyNodes(
  node.names,
  skip.duplicate.names = TRUE,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

 ${\tt node.names} \qquad \quad A \; {\tt list} \; of \; node \; names \\$

skip.duplicate.names

Skip adding a node if a node with the same name is already in the network. If FALSE then a duplicate node (with a unique SUID) will be added. Default is

TRUE.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

A list of named lists of name and SUID for each node added.

```
addCyNodes(c('Node A','Node B','Node C'))
```

22 AddToGroup

AddToGroup	Add to Group

Description

Adds the specified nodes and edges to the specified group.

Usage

```
AddToGroup(
  group.name,
  nodes = NULL,
  nodes.by.col = "SUID",
  edges = NULL,
  edges.by.col = "SUID",
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

group.name	Specifies the name used to identify the group
nodes	List of node SUIDs, names, other column values, or keyword: selected, unselected or all. Default is currently selected nodes.
nodes.by.col	name of node table column corresponding to provided nodes list. Default is 'SUID'.
edges	List of edge SUIDs, names, other column values, or keyword: selected, unselected or all. Default is currently selected edges.
edges.by.col	name of edge table column corresponding to provided edges list. Default is 'SUID'.
network	(optional) Name or SUID of the network. Default is the "current" network active in Cytoscape.
base.url	(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

None

```
AddToGroup('myGroup')
```

analyzeNetwork 23

Description

Calculate various network statistics.

Usage

```
analyzeNetwork(directed = FALSE, base.url = .defaultBaseUrl)
```

Arguments

directed (optional) If TRUE, the network is considered a directed graph. Default is

FALSE.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

The results are added to the Node and Edge tables and the Results Panel. The summary statistics in the Results Panel are also returned by the function as a list of named values.

Value

Named list of summary statistics

Examples

```
analyzeNetwork()
analyzeNetwork(TRUE)
```

Description

Run an existing filter by supplying the filter name.

24 applyFilter

Usage

```
applyFilter(
  filter.name = "Default filter",
  hide = FALSE,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

filter.name Name of filter to apply. Default is "Default filter".

hide Whether to hide filtered out nodes and edges. Default is FALSE. Ignored if all

nodes or edges are filtered out. This is an alternative to filtering for node and

edge selection.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

Known bug: selection (or hiding) of edges using edge-based column filters does not work. As a workaround, simply repeat the createColumnFilter operation to perform selection (or hiding) of edges.

Value

List of selected nodes and edges.

See Also

unhideAll

```
applyFilter('myFilter')
applyFilter('myFilter', hide = TRUE)
```

bundleEdges 25

bundleEdges

Bundle Edges

Description

Apply edge bundling to the network specified. Edge bundling is executed with default parameters; optional parameters are not supported.

Usage

```
bundleEdges(network = NULL, base.url = .defaultBaseUrl)
```

Arguments

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

bundleEdges()

checkNotebookIsRunning

checkNotebookIsRunning

Description

checkNotebookIsRunning

Usage

checkNotebookIsRunning()

Value

None

26 clearEdgeBends

Examples

checkNotebookIsRunning()

checkRunningRemote

checkRunningRemote

Description

Determine whether we're running locally or on a remote server. If locally (either via raw R or via a locally installed Notebook), we prefer to connect to Cytoscape over a local socket. If remote, we have to connect over Jupyter-Bridge. Either way, we can determine which by whether Cytoscape answers to a version check. If Cytoscape doesn't answer, we have no information ... and we have to wait until Cytoscape is started and becomes reachable before we can determine local vs remote.

Usage

```
checkRunningRemote(base.url = .defaultBaseUrl)
```

Arguments

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

None

Examples

checkRunningRemote()

 ${\tt clearEdgeBends}$

Clear Edge Bends

Description

Clear all edge bends, e.g., those created from edge bundling.

```
clearEdgeBends(network = NULL, base.url = .defaultBaseUrl)
```

Arguments

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
clearEdgeBends()
```

clearEdgePropertyBypass

Clear Edge Property Bypass

Description

Clear bypass values for any edge property of the specified edges, effectively restoring any previously defined style defaults or mappings.

Usage

```
clearEdgePropertyBypass(
  edge.names,
  visual.property,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

edge.names List of edge names or SUIDs. Pending CyREST updates, if set to 'all', then the

property is cleared for all edges.

visual.property

Name of a visual property. See getVisualPropertyNames.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

See Also

setEdgePropertyBypass

Examples

clearEdgePropertyBypass()

clearNetworkCenterBypass

Clear Network Center Bypass

Description

Clear the bypass value for center x and y for the network, effectively restoring prior default values.

Usage

```
clearNetworkCenterBypass(network = NULL, base.url = .defaultBaseUrl)
```

Arguments

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

clearNetworkCenterBypass()

clearNetworkPropertyBypass

Clear Network Property Bypass

Description

Clear bypass values for any network property, effectively restoring any previously defined style defaults or mappings.

Usage

```
clearNetworkPropertyBypass(
  visual.property,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

visual.property

Name of a visual property. See getVisualPropertyNames.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

See Also

set Node Property Bypass

```
clearNetworkPropertyBypass()
```

clearNetworkZoomBypass

Clear Network Zoom Bypass

Description

Clear the bypass value for the scale factor for the network, effectively restoring prior default values.

Usage

```
clearNetworkZoomBypass(network = NULL, base.url = .defaultBaseUrl)
```

Arguments

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

clearNetworkZoomBypass()

clearNodeOpacityBypass

Clear Node Opacity Bypass

Description

Clear the bypass value for node fill, label and border opacity for the specified node or nodes, effectively restoring any previously defined style defaults or mappings.

```
clearNodeOpacityBypass(node.names, network = NULL, base.url = .defaultBaseUrl)
```

Arguments

node.names List of node names or SUIDs

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

See Also

set Node Opacity Bypass

Examples

```
clearNodeOpacityBypass(c('Node 1','Node 2'))
```

clearNodePropertyBypass

Clear Node Property Bypass

Description

Clear bypass values for any node property of the specified nodes, effectively restoring any previously defined style defaults or mappings.

Usage

```
clearNodePropertyBypass(
  node.names,
  visual.property,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

node.names List of node names or SUIDs. Pending CyREST updates, if set to 'all', then the

property is cleared for all nodes.

visual.property

Name of a visual property. See getVisualPropertyNames.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

32 clearSelection

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

None

See Also

set Node Property Bypass

Examples

clearNodePropertyBypass()

clearSelection

Clear Selection

Description

If any nodes are selected in the network, they will be unselected.

Usage

```
clearSelection(type = "both", network = NULL, base.url = .defaultBaseUrl)
```

Arguments

type 'nodes', 'edges' or 'both' (default)

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Author(s)

AlexanderPico, Tanja Muetze, Georgi Kolishovski, Paul Shannon

Examples

clearSelection()

cloneNetwork 33

cloneNetwork

Clone a Cytoscape Network

Description

Makes a copy of a Cytoscape Network with all of its edges and nodes.

Usage

```
cloneNetwork(network = NULL, base.url = .defaultBaseUrl)
```

Arguments

network (optional) Name or SUID of the network you want to clone; default is "current"

network

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

The suid of the new network

Author(s)

Alexander Pico, Julia Gustavsen

Examples

cloneNetwork("cloned network")

closeSession

Close Session

Description

Closes the current session in Cytoscape, destroying all unsaved work.

```
closeSession(save.before.closing, filename = NULL, base.url = .defaultBaseUrl)
```

34 collapseGroup

Arguments

save.before.closing

boolean Whether to save before closing the current session. If FALSE, then all

unsaved work will be lost.

filename (optional) If save.before.closing is TRUE and the session has not previously

been saved, then the path and name of the session file to save should be provided.

Default is NULL.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

A boolean for whether to save before closing is required since you could lose data by closing without saving.

Value

None

Examples

```
closeSession(FALSE)
closeSession(TRUE, '/fullpath/mySession')
closeSession(TRUE)
```

collapseGroup

Collapse Group

Description

Replaces the representation of all of the nodes and edges in a group with a single node.

Usage

```
collapseGroup(groups = NULL, network = NULL, base.url = .defaultBaseUrl)
```

Arguments

groups (optional) List of group names or keywords: all, selected, unselected. Default is

the currently selected group.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

commandEcho 35

Value

None

Examples

collapseGroup()

commandEcho

Command Echo

Description

The echo command will display the value of the variable specified by the variableName argument, or all variables if variableName is not provided.

Usage

```
commandEcho(variable.name = "*", base.url = .defaultBaseUrl)
```

Arguments

variable.name (optional) The name of the variable to display. Default is to display all variable

values using "*".

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

Value of variable

Examples

commandEcho()

36 commandPause

commandOpenDialog

Command Open Dialog

Description

The command line dialog provides a field to enter commands and view results. It also provides the help command to display namespaces, commands, and arguments

Usage

```
commandOpenDialog(base.url = .defaultBaseUrl)
```

Arguments

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

None

Examples

commandOpenDialog()

commandPause

Command Pause

Description

The pause command displays a dialog with the text provided in the message argument and waits for the user to click OK.

Usage

```
commandPause(message = "", base.url = .defaultBaseUrl)
```

Arguments

message (optional) Text to display in pause dialog

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

commandQuit 37

Value

None

Examples

```
commandPause('Please click OK to continue.')
```

commandQuit

Command Quit

Description

This command causes Cytoscape to exit. It is typically used at the end of a script file

Usage

```
commandQuit(base.url = .defaultBaseUrl)
```

Arguments

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

None

Examples

commandQuit()

commandRunFile

Command Run File

Description

The run command will execute a command script from the file pointed to by the file argument, which should contain Cytoscape commands, one per line. Arguments to the script are provided by the args argument

```
commandRunFile(file, args = NULL, base.url = .defaultBaseUrl)
```

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Arguments

file Path to command script file

args The script arguments as key:value pairs separated by commas

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
commandRunFile('/path/to/my/file.txt')
```

commandsAPI

Open Swagger docs for CyREST Commands API

Description

Opens swagger docs in default browser for a live instance of Commands available via CyREST.

Usage

```
commandsAPI(base.url = .defaultBaseUrl)
```

Arguments

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

Web page in browser

Examples

commandsAPI()

commandsGET 39

commandsGET

Commands GET

Description

Using the same syntax as Cytoscape's Command Line Dialog, this function converts a command string into a CyREST query URL, executes a GET request, and parses the result content into an R list object. The function check whether actual call is local or remote first. If remote, requests will go through Jupyter-Bridge.

Usage

```
commandsGET(cmd.string, base.url = .defaultBaseUrl)
```

Arguments

cmd.string (char) command

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

A list, status or None.

Examples

```
commandsGET('layout get preferred network=current')
commandsGET('network list properties network=current')
commandsGET('layout force-directed defaultNodeMass=1')
```

commandsHelp

Commands Help

Description

Using the same syntax as Cytoscape's Command Line Dialog, this function returns a list of available commands or args. The function check whether actual call is local or remote first. If remote, requests will go through Jupyter-Bridge.

```
commandsHelp(cmd.string = "help", base.url = .defaultBaseUrl)
```

40 commandSleep

Arguments

cmd.string (char) command

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

Works with or without 'help' command prefix. Note that if you ask about a command that doesn't have any arguments, this function will run the command!

Value

List of available commands or args

Examples

```
commandsHelp()
commandsHelp('node')
commandsHelp('node get attribute')
```

commandSleep

Command Sleep

Description

The sleep command will pause processing for a period of time as specified by duration seconds. It is typically used as part of a command script.

Usage

```
commandSleep(duration = NULL, base.url = .defaultBaseUrl)
```

Arguments

duration (optional) The time in seconds to sleep

base.url (optional) Ignore unless you need to specify a custom domain, #' port or version

to connect to the CyREST API. Default is http://localhost:1234 #' and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

commandSleep(5)

commandsPOST 41

Description

Using the same syntax as Cytoscape's Command Line Dialog, this function converts a command string into a CyREST query URL, executes a POST request, and parses the result content into an R list object. The function check whether actual call is local or remote first. If remote, requests will go through Jupyter-Bridge.

Usage

```
commandsPOST(cmd.string, base.url = .defaultBaseUrl)
```

Arguments

cmd.string (char) command

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

A list, named list, status or None.

Examples

```
commandsPOST('layout get preferred')
commandsPOST('network list properties')
commandsPOST('layout force-directed defaultNodeMass=1')
```

commandsRun Run a Command

Description

Using the same syntax as Cytoscape's Command Line Dialog, this function converts a command string into a CyREST query URL, executes a GET request, and parses the result content into an R list object. Same as commandsGET.

```
commandsRun(cmd.string, base.url = .defaultBaseUrl)
```

42 copyVisualStyle

Arguments

cmd.string (char) command

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

A list, status or None.

Examples

```
commandsRun('layout get preferred')
commandsRun('network list properties')
commandsRun('layout force-directed defaultNodeMass=1')
```

copyVisualStyle

Copy Visual Style

Description

Create a new visual style by copying a specified style.

Usage

```
copyVisualStyle(from.style, to.style, base.url = .defaultBaseUrl)
```

Arguments

from.style Name of visual style to copy to.style Name of new visual style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

```
copyVisualStyle()
```

createColumnFilter 43

createColumnFilter Create Column Filter

Description

Creates a filter to control node or edge selection. Works on columns of boolean, string, numeric and lists. Note the unique restrictions for criterion and predicate depending on the type of column being filtered.

Usage

```
createColumnFilter(
   filter.name,
   column,
   criterion,
   predicate,
   caseSensitive = FALSE,
   anyMatch = TRUE,
   type = "nodes",
   hide = FALSE,
   network = NULL,
   base.url = .defaultBaseUrl,
   apply = TRUE
)
```

Arguments

filter.name Name	for	filter.
------------------	-----	---------

column Table column to base filter upon.

criterion For boolean columns: TRUE or FALSE. For string columns: a string value, e.g.,

"hello". If the predicate is REGEX then this can be a regular expression as ac-

cepted by the Java Pattern class (https://docs.oracle.com/javase/7/docs/api/java/util/regex/Pattern.html).

For numeric columns: If the predicate is BETWEEN or IS_NOT_BETWEEN then this is a two-element vector of numbers, example: c(1,5), otherwise a single

number.

predicate For boolean columns: IS, IS_NOT. For string columns: IS, IS_NOT, CON-

TAINS, DOES_NOT_CONTAIN, REGEX. For numeric columns: IS, IS_NOT,

GREATER_THAN, GREATER_THAN_OR_EQUAL, LESS_THAN, LESS_THAN_OR_EQUAL,

BETWEEN, IS_NOT_BETWEEN

caseSensitive (optional) If string matching should be case sensitive. Default is FALSE.

anyMatch (optional) Only applies to List columns. If true then at least one element in the

list must pass the filter, if false then all the elements in the list must pass the

filter. Default is TRUE.

type (optional) Apply filter to "nodes" (default) or "edges".

hide	Whether to hide filtered out nodes and edges. Default is FALSE. Ignored if all nodes or edges are filtered out. This is an alternative to filtering for node and edge selection.
network	(optional) Name or SUID of the network. Default is the "current" network active in Cytoscape.
base.url	(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.
apply	(bool) True to execute filter immediately (default); False to define filter but not execute it (available in Cytoscape 3.9+).

Value

List of selected nodes and edges.

Examples

```
createColumnFilter('myFilter', 'log2FC', c(-1,1), "IS_NOT_BETWEEN")
createColumnFilter('myFilter', 'pValue', 0.05, "LESS_THAN")
createColumnFilter('myFilter', 'function', "kinase", "CONTAINS", FALSE)
createColumnFilter('myFilter', 'name', "^Y.*C$", "REGEX")
createColumnFilter('myFilter', 'isTarget', TRUE, "IS", apply=FALSE)
createColumnFilter('myFilter', 'isTarget', TRUE, "IS", hide=TRUE)
```

 ${\tt createCompositeFilter} \ \ \textit{Create Composite Filter}$

Description

Combines filters to control node and edge selection based on previously created filters.

```
createCompositeFilter(
  filter.name,
  filter.list,
  type = "ALL",
  hide = FALSE,
  network = NULL,
  base.url = .defaultBaseUrl,
  apply = TRUE
)
```

Arguments

filter.name	Name for filter.
filter.list	List of filters to combine.
type	(optional) Type of composition, requiring ALL (default) or ANY filters to pass for final node and edge selection.
hide	Whether to hide filtered out nodes and edges. Default is FALSE. Ignored if all nodes or edges are filtered out. This is an alternative to filtering for node and edge selection.
network	(optional) Name or SUID of the network. Default is the "current" network active in Cytoscape.
base.url	(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.
apply	(bool) True to execute filter immediately (default); False to define filter but not execute it (available in Cytoscape 3.9+).

Value

List of selected nodes and edges.

Examples

```
createCompositeFilter("comp1", c("filter1", "filter2"))
createCompositeFilter("comp2", c("filter1", "filter2"), "ANY")
createCompositeFilter("comp3", c("comp1", "filter3"), apply=FALSE)
```

createCytoscapejsFromNetwork

Create Cytoscapejs from Network

Description

Create a Cytoscape JS representation of a Cytoscape network

Usage

```
createCytoscapejsFromNetwork(network = NULL, base.url = .defaultBaseUrl)
```

Arguments

network (SUID or str or NULL): Name or SUID of a network or view. Default is the

"current" network active in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

46 createDegreeFilter

Value

```
(list) The Cytoscape JS object
```

Examples

```
createCytoscapejsFromNetwork()
```

createDegreeFilter

Create Degree Filter

Description

Creates a filter to control node selection base on in/out degree.

Usage

```
createDegreeFilter(
  filter.name,
  criterion,
  predicate = "BETWEEN",
  edgeType = "ANY",
  hide = FALSE,
  network = NULL,
  base.url = .defaultBaseUrl,
  apply = TRUE
)
```

Arguments

filter.name	Name for filter.
criterion	A two-element vector of numbers, example: c(1,5).
predicate	BETWEEN (default) or IS_NOT_BETWEEN
edgeType	(optional) Type of edges to consider in degree count: ANY (default), UNDIRECTED, INCOMING, OUTGOING, DIRECTED
hide	Whether to hide filtered out nodes and edges. Default is FALSE. Ignored if all nodes or edges are filtered out. This is an alternative to filtering for node and edge selection.
network	(optional) Name or SUID of the network. Default is the "current" network active in Cytoscape.
base.url	(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.
apply	(bool) True to execute filter immediately (default); False to define filter but not execute it (available in Cytoscape 3.9+).

Value

List of selected nodes and edges.

Examples

```
createDegreeFilter('myFilter', c(4,5))
createDegreeFilter('myFilter', c(2,5), apply=FALSE)
```

createGraphFromNetwork

createGraphFromNetwork

Description

Returns the Cytoscape network as a Bioconductor graph.

Usage

```
createGraphFromNetwork(network = NULL, base.url = .defaultBaseUrl)
```

Arguments

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

A Bioconductor graph object.

Author(s)

Alexander Pico, Tanja Muetze, Georgi Kolishovski, Paul Shannon

```
cw <- CytoscapeWindow('network', graph=make_graphnel())
g <- createGraphFromNetwork()
g <- createGraphFromNetwork('myNetwork')</pre>
```

48 createGroup

createGrou	n
creategrou	v

Create Group

Description

Create a group from the specified nodes.

Usage

```
createGroup(
  group.name,
  nodes = NULL,
  nodes.by.col = "SUID",
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

The name used to identify and optionaly label the group

List of node SUIDs, names, other column values, or keyword: selected, unselected or all. Default is currently selected nodes.

nodes.by.col name of node table column corresponding to provided nodes list. Default is 'SUID'.

network (optional) Name or SUID of the network. Default is the "current" network active in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

Group SUID

```
createGroup('myGroup')
```

createGroupByColumn

 ${\tt createGroupByColumn}$

Create Group by Column

Description

Create a group of nodes defined by a column value.

Usage

```
createGroupByColumn(
  group.name,
  column = NULL,
  value = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

group.name	The name used to identify and optionaly label the group
column	The name or header of the Node Table column to use for selecting nodes to group
value	The value in the column to use for selecting nodes to group
network	(optional) Name or SUID of the network. Default is the "current" network active in Cytoscape. $ \\$
base.url	(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

Group SUID

```
{\tt createGroupByColumn('myGroup','Cluster', 'A')}
```

createIgraphFromNetwork

Create an igraph network from a Cytoscape network

Description

Takes a Cytoscape network and generates data frames for vertices and edges to send to the graph_from_data_frame function. Returns the network.suid and applies the perferred layout set in Cytoscape preferences.

Usage

```
createIgraphFromNetwork(network = NULL, base.url = .defaultBaseUrl)
```

Arguments

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

Nodes and edges from the Cytoscape network will be translated into vertices and edges in igraph. Associated table columns will also be passed to igraph as vertiex and edge attributes. Note: all networks are implicitly modeled as directed in Cytoscape. Round-trip conversion of an undirected network in igraph via createNetworkFromIgraph to Cytoscape and back to igraph will result in a directed network.

Value

(igraph) an igraph network

See Also

 $create Network From Data Frames, \ create Network From I graph$

```
ig <- createIgraphFromNetwork()
ig <- createIgraphFromNetwork('myNetwork')</pre>
```

createNetworkFromCytoscapejs

Create a Network from Cytoscapejs

Description

Create a network from CytoscapeJS JSON

Usage

```
createNetworkFromCytoscapejs(
  cytoscapejs,
  title = NULL,
  collection = "My CytoscapeJS Network Collection",
  base.url = .defaultBaseUrl
)
```

Arguments

cytoscapejs network (nodes, edges, attributes, node positions and metadata) in CytoscapeJS

format

title network name (NULL means use the name in cytoscapejs)
collection collection name (NULL means create an unnamed collection)

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

The SUID of the new network

Examples

```
createNetworkFromCytoscapejs()
```

createNetworkFromDataFrames

Create a network from data frames

Description

Takes data frames for nodes and edges, as well as naming parameters to generate the JSON data format required by the "networks" POST operation via CyREST. Returns the network.suid and applies the perferred layout set in Cytoscape preferences.

Usage

```
createNetworkFromDataFrames(
  nodes = NULL,
  edges = NULL,
  title = "From dataframe",
  collection = "My Dataframe Network Collection",
  base.url = .defaultBaseUrl,
  ...
)
```

Arguments

nodes	(data.frame) see details and examples below; default NULL to derive nodes from edge sources and targets
edges	(data.frame) see details and examples below; default NULL for disconnected set of nodes
title	(char) network name
collection	(char) network collection name
base.url	(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.
	params for nodeSet2JSON() and edgeSet2JSON()

Details

NODES should contain a column of character strings named: id. This name can be overridden by the arg: node.id.list. Additional columns are loaded as node attributes. EDGES should contain columns of character strings named: source, target and interaction. These names can be overridden by args: source.id.list, target.id.list, interaction.type.list. Additional columns are loaded as edge attributes. The 'interaction' list can contain a single value to apply to all rows; and if excluded altogether, the interaction type wiil be set to "interacts with". NOTE: attribute values of types (num) will be imported as (Double); (int) as (Integer); (chr) as (String); and (logical) as (Boolean). (Lists) will be imported as (Lists) in CyREST v3.9+.

Value

```
(int) network SUID
```

createNetworkFromDataFrames(nodes,edges)

createNetworkFromGraph

Create Network From Graph

Description

Creates a Cytoscape network from a Bioconductor graph.

Usage

```
createNetworkFromGraph(
  graph,
  title = "From graph",
  collection = "My GraphNEL Network Collection",
  base.url = .defaultBaseUrl
)
```

Arguments

graph A GraphNEL object title (char) network name

collection (char) network collection name

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

Network SUID

Author(s)

Alexander Pico, Tanja Muetze, Georgi Kolishovski, Paul Shannon

```
library(graph)
g <- makeSimpleGraph()
createNetworkFromGraph(g)</pre>
```

createNetworkFromIgraph

Create a Cytoscape network from an igraph network

Description

Takes an igraph network and generates data frames for nodes and edges to send to the createNetwork function. Returns the network.suid and applies the perferred layout set in Cytoscape preferences.

Usage

```
createNetworkFromIgraph(
  igraph,
  title = "From igraph",
  collection = "My Igraph Network Collection",
  base.url = .defaultBaseUrl,
  ...
)
```

Arguments

igraph (igraph) igraph network object

title (char) network name

collection (char) network collection name

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

... params for nodeSet2JSON() and edgeSet2JSON(); see createNetwork

Details

Vertices and edges from the igraph network will be translated into nodes and edges in Cytoscape. Associated attributes will also be passed to Cytoscape as node and edge table columns. Note: undirected networks will be implicitly modeled as directed in Cytoscape. Conversion back via createIgraphFromNetwork will result in a directed network. Also note: igraph attributes of type "other" denoted by "x" are converted to "String" in Cytoscape.

Value

```
(int) network SUID
```

See Also

 $create Network From Data Frames, \ create I graph From Network$

createSubnetwork 55

Examples

```
library(igraph)
ig <- makeSimpleIgraph()
createNetworkFromIgraph(ig)</pre>
```

createSubnetwork

Create subnetwork from existing network

Description

Copies a subset of nodes and edges into a newly created subnetwork.

Usage

```
createSubnetwork(
  nodes = NULL,
  nodes.by.col = "SUID",
  edges = NULL,
  edges.by.col = "SUID",
  exclude.edges = FALSE,
  subnetwork.name = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

nodes list of nodes by SUID, by specified nodes.by.col value (e.g., name) or by keyword: selected, unselected or all. Default is currently selected nodes.

nodes.by.col name of node table column corresponding to provided nodes list; default is

'SUID'

edges list of edges by SUID, by specified nodes.by.col value (e.g., name) or by key-

word: selected, unselected or all. Default is currently selected edges.

edges.by.col name of edge table column corresponding to provided edges list; default is

'SUID'

 ${\tt exclude.edges} \quad \text{(boolean) whether to exclude connecting edges; default is FALSE}$

subnetwork.name

name of new subnetwork to be created; default is to add a numbered suffix to

source network name

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

56 create View

Details

If you specify both nodes and edges, the resulting subset will be the union of those sets. Typical usage only requires specifying either nodes or edges. Note that selected nodes will bring along their connecting edges by default (see exclude.edges arg) and selected edges will always bring along their source and target nodes.

Value

SUID of new subnetwork

Examples

```
createSubnetwork()
createSubnetwork("all")
createSubnetwork(subnetwork.name="mySubnetwork")
createSubnetwork(c("node 1","node 2","node 3"),"name")
createSubnetwork(c("AKT1","TP53","PIK3CA"),"display name")
createSubnetwork(edges="all") #subnetwork of all connected nodes
```

createView

Create Network View

Description

Create a network view if one does not already exist

Usage

```
createView(layout = TRUE, network = NULL, base.url = .defaultBaseUrl)
```

Arguments

layout (optional) If TRUE (default), the preferred layout will be applied to the new

view. If FALSE, no layout will be applied.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

For networks larger than the view creation threshold, a network view is not created by default. This function creates a network view if one does not already exist.

create Visual Style 57

Value

Network view SUID

Examples

getNetworkViews()

createVisualStyle

Create a visual style from components

Description

Create a style from defaults and predefined mappings.

Usage

```
createVisualStyle(style.name, defaults, mappings, base.url = .defaultBaseUrl)
```

Arguments

style.name (char) name for style

defaults (list) key-value pairs for default mappings.

mappings (list) visual property mappings, see mapVisualProperty

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

Requires attribute mappings to be previously created, see mapVisualProperty.

Value

None

See Also

applyStyle, mapVisualProperty

58 cybrowserClose

Examples

```
#first there has to be a network to apply style to
example(createNetworkFromDataFrames)
#then prepare style variables
style.name = "myStyle"
defaults <- list(NODE_SHAPE="diamond",</pre>
                 NODE_SIZE=30,
                 EDGE_TRANSPARENCY=120,
                 NODE_LABEL_POSITION="W,E,c,0.00,0.00")
nodeLabels <- mapVisualProperty('node label','id','p')</pre>
nodeFills <- mapVisualProperty('node fill color','group','d',c("A","B"), c("#FF9900","#66AAAA"))</pre>
arrowShapes <- mapVisualProperty('Edge Target Arrow Shape','interaction','d',</pre>
                             c("activates","inhibits","interacts"),c("Arrow","T","None"))
edgeWidth <- mapVisualProperty('edge width','weight','p')</pre>
#and then create the style
createVisualStyle(style.name, defaults, list(nodeLabels,nodeFills,arrowShapes,edgeWidth))
#finsh by applying the style
setVisualStyle(style.name)
```

cybrowserClose

Cybrowser Close

Description

Close an internal web browser and remove all content. Provide an id for the browser you want to close.

Usage

```
cybrowserClose(id = NULL, base.url = .defaultBaseUrl)
```

Arguments

id (optional) The identifier for the browser window to close

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

```
cybrowserClose('554')
```

cybrowserDialog 59

cybrowserDialog	Cybrowser Dialog
-----------------	------------------

Description

Launch Cytoscape's internal web browser in a separate window. Provide an id for the window if you want subsequent control of the window e.g., via cybrowser hide.

Usage

```
cybrowserDialog(
  id = NULL,
  text = NULL,
  title = NULL,
  url = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

id (optional) The identifier for the browser window

text (optional) HTML text to initially load into the browser

title (optional) Text to be shown in the title bar of the browser window

url (optional) The URL the browser should load

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

base.url

See Also

```
cybrowserShow
cybrowserHide
```

```
cybrowserDialog(url='http://cytoscape.org')
```

60 cybrowserList

cybrowserHide

Cybrowser Hide

Description

Hide an existing browser, whether it's in the Results panel or a separate window.

Usage

```
cybrowserHide(id = NULL, base.url = .defaultBaseUrl)
```

Arguments

id (optional) The identifier for the browser window to hide

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

See Also

```
cybrowserShow
cybrowserDialog
```

Examples

cybrowserHide()

cybrowserList

Cybrowser List

Description

List all browsers that are currently open, whether as a dialog or in the results panel.

```
cybrowserList(base.url = .defaultBaseUrl)
```

cybrowserSend 61

Arguments

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

List of open cybrowser windows

Examples

```
cybrowserList()
```

cybrowserSend

Cybrowser Send

Description

Send the text to the browser indicated by the id and return the response, if any. Note that the JSON result field could either be a bare string or JSON formatted text.

Usage

```
cybrowserSend(id = NULL, script, base.url = .defaultBaseUrl)
```

Arguments

id (optional) The identifier for the browser window

script (optional) A string that represents a JavaScript variable, script, or call to be

executed in the browser. Note that only string results are returned.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

String result

```
cybrowserSend(id="Window 1", script="navigator.userAgent;")
```

62 cybrowserShow

cybrowserShow

Cybrowser Show

Description

Launch Cytoscape's internal web browser in a pane in the Result Panel. Provide an id for the window if you want subsequent control of the window via cybrowser hide.

Usage

```
cybrowserShow(
  id = NULL,
  text = NULL,
  title = NULL,
  url = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

id (optional) The identifier for the browser window

text (optional) HTML text to initially load into the browser

title (optional) Text to be shown in the title bar of the browser window

url (optional) The URL the browser should load

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

See Also

```
cybrowserDialog
cybrowserHide
```

```
cybrowserShow(url='http://cytoscape.org')
```

cybrowser Version 63

cybrowserVersion

Cybrowser Version

Description

Display the version of the CyBrowser app.

Usage

```
cybrowserVersion(base.url = .defaultBaseUrl)
```

Arguments

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

Version number

Examples

cybrowserVersion()

cyrestAPI

Open Swagger docs for CyREST API

Description

Opens swagger docs in default browser for a live instance of CyREST operations.

Usage

```
cyrestAPI(base.url = .defaultBaseUrl)
```

Arguments

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

Web page in browser

64 cyrestGET

Examples

```
cyrestAPI()
```

cyrestDELETE

CyREST DELETE

Description

Constructs the query, makes DELETE call and processes the result. The function check whether actual call is local or remote first. If remote, requests will go through Jupyter-Bridge.

Usage

```
cyrestDELETE(operation = NULL, parameters = NULL, base.url = .defaultBaseUrl)
```

Arguments

operation A string to be converted to the REST query namespace

parameters A named list of values to be converted to REST query parameters

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

CyREST result content

Examples

```
cyrestDELETE('session')
```

cyrestGET

CyREST GET

Description

Constructs the query, makes GET call and processes the result. The function check whether actual call is local or remote first. If remote, requests will go through Jupyter-Bridge.

```
cyrestGET(operation = NULL, parameters = NULL, base.url = .defaultBaseUrl)
```

cyrestPOST 65

Arguments

operation A string to be converted to the REST query namespace

parameters A named list of values to be converted to REST query parameters

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

CyREST result content

Examples

```
cyrestGET('version')
```

cyrestP0ST

CyREST POST

Description

Constructs the query and body, makes POST call and processes the result. The function check whether actual call is local or remote first. If remote, requests will go through Jupyter-Bridge.

Usage

```
cyrestPOST(
  operation,
  parameters = NULL,
  body = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

operation A string to be converted to the REST query namespace

parameters A named list of values to be converted to REST query parameters

body A named list of values to be converted to JSON

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

CyREST result content

66 cyrestPUT

Examples

```
cyrestPOST('networks/51/views')
```

cyrestPUT

CyREST PUT

Description

Constructs the query and body, makes PUT call and processes the result. The function check whether actual call is local or remote first. If remote, requests will go through Jupyter-Bridge.

Usage

```
cyrestPUT(
  operation,
  parameters = NULL,
  body = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

operation A string to be converted to the REST query namespace

parameters A named list of values to be converted to REST query parameters

body A named list of values to be converted to JSON

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

CyREST result content

```
cyrestPUT()
```

cytoscapeApiVersions 67

Description

Get the list of available CyREST API versions

Usage

```
cytoscapeApiVersions(base.url = .defaultBaseUrl)
```

Arguments

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

A list of API versions as character strings, e.g., "v1"

Author(s)

Alexander Pico, Tanja Muetze, Georgi Kolishovski, Paul Shannon

Examples

```
cytoscapeApiVersions()
# [1] "v1"
```

cytoscapeFreeMemory

Free Up Unused Memory for Cytoscape

Description

Manually call Java's garbage collection System.gc() to free up unused memory. This process happens automatically, but may be useful to call explicitly for testing or evaluation purposes.

Usage

```
cytoscapeFreeMemory(base.url = .defaultBaseUrl)
```

Arguments

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

status message

Author(s)

Alexander Pico

Examples

```
cytoscapeFreeMemory()
# [1] "Unused memory freed up."
```

 ${\tt cytoscape Memory Available \ to \ Cytoscape}$

Description

Returns the memory resources of the server running Cytoscape

Usage

```
cytoscapeMemoryStatus(base.url = .defaultBaseUrl)
```

Arguments

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

A list of numeric values

Author(s)

Alexander Pico

```
cytoscapeMemoryStatus()
# usedMemory freeMemory totalMemory maxMemory
# 181 2624 2805 13653
```

cytoscapeNumberOfCores

Number of Processors Available to Cytoscape

Description

Returns the processor resources of the server running Cytoscape

Usage

```
cytoscapeNumberOfCores(base.url = .defaultBaseUrl)
```

Arguments

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

A numeric value

Author(s)

Alexander Pico

Examples

```
cytoscapeNumberOfCores()
# [1] 8
```

cytoscapePing

Ping Cytoscape

Description

Tests the connection to Cytoscape via CyREST and verifies that supported versions of Cytoscape and CyREST API are loaded.

```
cytoscapePing(base.url = .defaultBaseUrl)
```

70 cytoscape VersionInfo

Arguments

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

status message

Author(s)

Alexander Pico, Tanja Muetze, Georgi Kolishovski, Paul Shannon

Examples

```
cytoscapePing()
# [1] "You are connected to Cytoscape!"
```

cytoscapeVersionInfo Cytoscape and CyREST API Versions

Description

Returns the versions of the current Cytoscape and CyREST API

Usage

```
cytoscapeVersionInfo(base.url = .defaultBaseUrl)
```

Arguments

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

list of versions

Author(s)

Alexander Pico

```
cytoscapeVersionInfo()
# apiVersion cytoscapeVersion
# "v1" "3.7.0-SNAPSHOT"
```

delete All Networks 71

deleteAllNetworks

Delete All Networks

Description

Delete all networks from the current Cytoscape session.

Usage

```
deleteAllNetworks(base.url = .defaultBaseUrl)
```

Arguments

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

None

Examples

deleteAllNetworks()

deleteAllVisualStyle Delete All Visual Style

Description

Delete all visual styles from current Cytoscape session

Usage

```
deleteAllVisualStyle(base.url = .defaultBaseUrl)
```

Arguments

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

None

Examples

deleteAllVisualStyle()

deleteAnnotation

Delete Annotation

Description

Remove an annotation from the current network view in Cytoscape

Usage

```
deleteAnnotation(names = NULL, base.url = .defaultBaseUrl)
```

Arguments

names List of annotations by UUID or Name

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
deleteAnnotation("016a4af1-69bc-4b99-8183-d6f118847f96")
deleteAnnotation(c("T2","T3"))
deleteAnnotation(sapply(getAnnotationList(), '[[', 'uuid'))
```

Description

Removes edges with duplicate names. Only considers cases with identical source, target, interaction and directionality.

```
deleteDuplicateEdges(network = NULL, base.url = .defaultBaseUrl)
```

deleteGroup 73

Arguments

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

Duplicate edges are first selected and then deleted. Prior edge selections will be lost; node selections will not be affected.

Value

Lists of SUIDs for selected nodes and edges

Examples

```
deleteDuplicateEdges()
```

deleteGroup

Delete (or Ungroup) a Group

Description

Deletes one or more groups, while leaving member nodes intact.

Usage

```
deleteGroup(
  groups = NULL,
  groups.by.col = "SUID",
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

groups (optional) List of group SUIDs, names, other column values or keywords: all,

selected, unselected. Default is the currently selected group.

groups.by.col name of node table column corresponding to provided groups list. Default is

'SUID'.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

74 deleteNetwork

Details

Note: group nodes are ungrouped but not deleted in Cytoscape version 3.6.1

Value

None

Examples

deleteGroup()

deleteNetwork

Delete Network

Description

Delete a network from the current Cytoscape session.

Usage

```
deleteNetwork(network = NULL, base.url = .defaultBaseUrl)
```

Arguments

 $network \qquad \qquad (optional) \ Name \ or \ SUID \ of \ the \ network. \ Default \ is \ the \ "current" \ network \ active$

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

deleteNetwork()

deleteSelectedEdges 75

Description

Delete the currently selected edges in the network.

Usage

```
deleteSelectedEdges(network = NULL, base.url = .defaultBaseUrl)
```

Arguments

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

list of deleted edge SUIDs

Author(s)

AlexanderPico, Tanja Muetze, Georgi Kolishovski, Paul Shannon

Examples

deleteSelectedEdges()

Description

Delete currently selected nodes from the network.

```
deleteSelectedNodes(network = NULL, base.url = .defaultBaseUrl)
```

76 deleteSelfLoops

Arguments

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

A named list of deleted node suids (\$nodes) as well as edge suids (\$edges) deleted as a result of the node deletion

Examples

deleteSelectedNodes()

deleteSelfLoops

Delete Self Loops

Description

Removes edges that connect to a single node as both source and target.

Usage

```
deleteSelfLoops(network = NULL, base.url = .defaultBaseUrl)
```

Arguments

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

Self loop edges are first selected and then deleted. Prior edge and node selections will be lost.

Value

Lists of SUIDs for selected nodes and edges

Examples

deleteSelfLoops()

deleteStyleMapping 77

deleteStyleMapping

Delete Style Mapping

Description

Deletes a specified visual style mapping from specified style.

Usage

```
deleteStyleMapping(style.name, visual.prop, base.url = .defaultBaseUrl)
```

Arguments

style.name (char) name for style

visual.prop (char) name of visual property to map. See getVisualPropertyNames().

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
deleteStyleMapping()
```

deleteTableColumn

Delete a table column

Description

Delete a column from node, edge or network tables.

```
deleteTableColumn(
  column,
  table = "node",
  namespace = "default",
  network = NULL,
  base.url = .defaultBaseUrl
)
```

78 deleteVisualStyle

Arguments

column Name of the column to delete

table Name of table, e.g., node (default), edge, network

namespace Namespace of table. Default is "default".

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

A data. frame of column values

Examples

```
deleteTableColumn('node','group')
```

deleteVisualStyle

Delete Visual Style

Description

Deletes the specified visual style from current session.

Usage

```
deleteVisualStyle(style.name, base.url = .defaultBaseUrl)
```

Arguments

style.name (char) name of style to delete

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
deleteVisualStyle("myStyle")
```

diffusionAdvanced 79

diffusionAdvanced

Diffusion Advanced

Description

Diffusion will send the selected network view and its selected nodes to a web-based REST service to calculate network propagation. Results are returned and represented by columns in the node table. Advanced operation supports parameters.

Usage

```
diffusionAdvanced(
  heat.column.name = NULL,
  time = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

heat.column.name

(optional) A node column name intended to override the default table column 'diffusion_input'. This represents the query vector and corresponds to h in the

diffusion equation.

time (optional) The extent of spread over the network. This corresponds to t in the

diffusion equation.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

Columns are created for each execution of Diffusion and their names are returned in the response. The nodes you would like to use as input should be selected. This will be used to generate the contents of the diffusion_input column, which represents the query vector and corresponds to h in the diffusion equation.

Value

Version number

Examples

```
diffusionAdvanced()
```

80 disableApp

diffusionBasic

Diffusion Basic

Description

Diffusion will send the selected network view and its selected nodes to a web-based REST service to calculate network propagation. Results are returned and represented by columns in the node table.

Usage

```
diffusionBasic(base.url = .defaultBaseUrl)
```

Arguments

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Details

Columns are created for each execution of Diffusion and their names are returned in the response. The nodes you would like to use as input should be selected. This will be used to generate the contents of the diffusion_input column, which represents the query vector and corresponds to h in the diffusion equation.

Value

Version number

Examples

diffusionBasic()

disableApp

Disable App

Description

Disable an app to effectively remove it from your Cytoscape session without having to uninstall it.

```
disableApp(app, base.url = .defaultBaseUrl)
```

dockPanel 81

Arguments

app Name of app

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

disableApp()

dockPanel

Dock Panel

Description

Dock a panel back into the UI of Cytoscape.

Usage

```
dockPanel(panel.name, base.url = .defaultBaseUrl)
```

Arguments

panel.name Name of the panel. Multiple ways of referencing panels is supported:

WEST, control panel, control, c SOUTH, table panel, table, ta SOUTH_WEST, tool panel, tool, to EAST, results panel, results, r

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
dockPanel('table')
```

82 doRequestRemote

doInitializeSandbox doInitializeSandbox

Description

doInitializeSandbox

Usage

```
doInitializeSandbox(requester = NULL, base.url = .defaultBaseUrl)
```

Arguments

requester requester

base.url Ignore unless you need to specify a custom domain, port or version to connect

to the CyREST API. Default is http://127.0.0.1:1234 and the latest version of

the CyREST API supported by this version of RCy3.

Value

None

Examples

doInitializeSandbox()

doRequestRemote

doRequestRemote

Description

Do requests remotely by connecting over Jupyter-Bridge.

Usage

```
doRequestRemote(method, qurl, qbody = NULL, headers = NULL)
```

Arguments

method A string to be converted to the REST query namespace

qurl A named list of values to be converted to REST query parameters

qbody A named list of values to be converted to JSON

headers httr headers

doSetSandbox 83

Value

httr response

Examples

doRequestRemote()

doSetSandbox

doSetSandbox

Description

doSetSandbox

Usage

```
doSetSandbox(sandboxToSet, requester = NULL, base.url = .defaultBaseUrl)
```

Arguments

sandboxToSet sandbox to set

requester requester

base.url Ignore unless you need to specify a custom domain, port or version to connect

to the CyREST API. Default is http://127.0.0.1:1234 and the latest version of

the CyREST API supported by this version of RCy3.

Value

None

Examples

doSetSandbox()

84 expandGroup

enableApp Enable	App
------------------	-----

Description

Enable a previously installed and disabled app in Cytoscape.

Usage

```
enableApp(app, base.url = .defaultBaseUrl)
```

Arguments

app Name of app

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

enableApp()

expandGrou	Expa	and Group

Description

Replaces the group node with member nodes for a set of groups.

Usage

```
expandGroup(groups = NULL, network = NULL, base.url = .defaultBaseUrl)
```

Arguments

groups (optional) List of group names or keywords: all, selected, unselected. Default is

the currently selected group.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

exportFilters 85

Value

None

Examples

```
expandGroup()
```

exportFilters

Export Filters

Description

Saves filters to file in JSON format.

Usage

```
exportFilters(
  filename = "filters.json",
  base.url = .defaultBaseUrl,
  overwriteFile = TRUE
)
```

Arguments

filename (char) Full path or path relative to current working directory, in addition to the

name of the file. Default is "filters.json"

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

overwriteFile (optional) FALSE allows an error to be generated if the file already exists; TRUE

allows Cytoscape to overwrite it without asking. Default value is TRUE.

Details

Unlike other export functions, Cytoscape will automatically overwrite files with the same name. You will not be prompted to confirm or reject overwrite. Use carefully!

Value

None

Examples

```
exportFilters()
```

86 exportImage

exportImage

Export Image

Description

Saves the current network view as an image file.

Usage

```
exportImage(
  filename = NULL,
  type = "PNG",
  resolution = NULL,
  units = NULL,
  height = NULL,
  width = NULL,
  zoom = NULL,
  network = NULL,
  base.url = .defaultBaseUrl,
  overwriteFile = TRUE
)
```

Arguments

filename	(character) Full path or path relative to current working directory, in addition to the name of the file. Extension is automatically added based on the type argument. If blank, the current network name will be used.
type	(character) Type of image to export, e.g., PNG (default), JPEG, PDF, SVG, PS (PostScript).
resolution	(numeric) The resolution of the exported image, in DPI. Valid only for bitmap formats, when the selected width and height 'units' is inches. The possible values are: 72 (default), 100, 150, 300, 600.
units	(character) The units for the 'width' and 'height' values. Valid only for bitmap formats, such as PNG and JPEG. The possible values are: pixels (default), inches.
height	(numeric) The height of the exported image. Valid only for bitmap formats, such as PNG and JPEG.
width	(numeric) The width of the exported image. Valid only for bitmap formats, such as PNG and JPEG.
ZOOM	(numeric) The zoom value to proportionally scale the image. The default value is 100.0. Valid only for bitmap formats, such as PNG and JPEG
network	(optional) Name or SUID of a network or view. Default is the "current" network active in Cytoscape. The first (presummably only) view associated a network is used if a specific view SUID is not provided.

exportJPG 87

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

overwriteFile (optional) FALSE allows Cytoscape show a message box before overwriting the

file if the file already exists; TRUE allows Cytoscape to overwrite it without

asking. Default value is TRUE.

Details

The image is cropped per the current view in Cytoscape. Consider applying fitContent prior to export.

Value

server response

Examples

```
exportImage('/fullpath/myNetwork','PDF')
```

exportJPG

Export JPG

Description

Saves the current network view as an jpg file.

Usage

```
exportJPG(
  filename = NULL,
  allGraphicsDetails = TRUE,
  hideLabels = FALSE,
  zoom = NULL,
  network = NULL,
  base.url = .defaultBaseUrl,
  overwriteFile = TRUE
)
```

Arguments

filename

(character) Full path or path relative to current working directory, in addition to the name of the file. Extension is automatically added based on the type argument. If blank, the current network name will be used.

allGraphicsDetails

(optional): TRUE results in image with highest detail; False allows faster image generation. The default is TRUE.

88 exportNetwork

hideLabels	(optional): TRUE makes node and edge labels invisible in image. False allows them to be drawn. The default is False.
ZOOM	(numeric) The zoom value to proportionally scale the image. The default value is 100.0. Valid only for bitmap formats, such as PNG and JPEG $$
network	(optional) Name or SUID of a network or view. Default is the "current" network active in Cytoscape. The first (presummably only) view associated a network is used if a specific view SUID is not provided.
base.url	(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.
overwriteFile	(optional) FALSE allows Cytoscape show a message box before overwriting the file if the file already exists; TRUE allows Cytoscape to overwrite it without asking. Default value is TRUE.

Details

Exports the current view to a graphics file and returns the path to the saved file. To speed up image export for large networks use the option 'allGraphicsDetails=FALSE'. Available for Cytoscape v3.10 or later.

Value

server response

Examples

```
exportJPG('/fullpath/myNetwork')
```

exportNetwork

Export Network

Description

Export a network to one of mulitple file formats

```
exportNetwork(
  filename = NULL,
  type = "SIF",
  network = NULL,
  base.url = .defaultBaseUrl,
  overwriteFile = TRUE
)
```

exportNetworkToNDEx

Arguments

filename Full path or path relative to current working directory, in addition to the name of

the file. Extension is automatically added based on the type argument. If blank,

then the current network name is used.

type File type. SIF (default), CX, cyjs, graphML, NNF, xGMML.

network (optional) Name or SUID of a network or view. Default is the "current" network

active in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

overwriteFile (optional) FALSE allows Cytoscape show a message box before overwriting the

file if the file already exists; TRUE. allows Cytoscape to overwrite it without

asking. Default value is TRUE.

Value

None.

Examples

```
exportNetwork('/path/filename','SIF')
```

exportNetworkToNDEx

Export Network To NDEx

Description

Send a copy of a Cytoscape network to NDEx as a new submission.

```
exportNetworkToNDEx(
  username,
  password,
  isPublic,
  network = NULL,
  metadata = NULL,
  ndex.url = "http://ndexbio.org",
  ndex.version = "v2",
  base.url = .defaultBaseUrl
)
```

90 exportPDF

Arguments

username	NDEx account username
password	NDEx account password
isPublic	(Boolean) Whether to make the network publicly accessible at NDEx.
network	(optional) Name or SUID of the network. Default is the "current" network active in Cytoscape.
metadata	(optional) A list of structured information describing the network
ndex.url	(optional) For alternative instances or deployments of NDEx; default is "http://ndexbio.org"
ndex.version	(optional) For alternative versions of the NDEx API; default is "v2"
base.url	(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

NDEx identifier (externalId) for new submission

Examples

```
exportNetworkToNDEx("user", "pass", TRUE)
```

Description

Saves the current network view as an pdf file.

```
exportPDF(
  filename = NULL,
  exportTextAsFont = TRUE,
  hideLabels = FALSE,
  pageSize = "Letter",
  orientation = "Portrait",
  network = NULL,
  base.url = .defaultBaseUrl,
  overwriteFile = TRUE
)
```

exportPNG 91

Arguments

filename (character) Full path or path relative to current working directory, in addition

to the name of the file. Extension is automatically added based on the type

argument. If blank, the current network name will be used.

exportTextAsFont

(optional): If TRUE (the default value), texts will be exported as fonts.

hideLabels (optional): TRUE makes node and edge labels invisible in image. False allows

them to be drawn. The default is False.

pageSize (optional): (AutolLetterlLegallTabloidlA0lA1lA2lA3lA4lA5) Predefined standard

page size, or choose custom. Default is 'Letter'.

orientation (optional): Page orientation, portrait or landscape.

network (optional) Name or SUID of a network or view. Default is the "current" network

active in Cytoscape. The first (presummably only) view associated a network is

used if a specific view SUID is not provided.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

overwriteFile (optional) FALSE allows Cytoscape show a message box before overwriting the

file if the file already exists; TRUE allows Cytoscape to overwrite it without

asking. Default value is TRUE.

Details

Exports the current view to a graphics file and returns the path to the saved file. To speed up image export for large networks use the option 'allGraphicsDetails=FALSE'. Available for Cytoscape v3.10 or later.

Value

server response

Examples

exportPDF('/fullpath/myNetwork')

exportPNG Export PNG

Description

Saves the current network view as an png file.

92 exportPNG

Usage

```
exportPNG(
  filename = NULL,
  allGraphicsDetails = TRUE,
  hideLabels = FALSE,
  transparentBackground = FALSE,
  zoom = NULL,
  network = NULL,
  base.url = .defaultBaseUrl,
  overwriteFile = TRUE
)
```

Arguments

filename (character) Full path or path relative to current working directory, in addition

to the name of the file. Extension is automatically added based on the type

argument. If blank, the current network name will be used.

allGraphicsDetails

(optional): TRUE results in image with highest detail; False allows faster image

generation. The default is TRUE.

hideLabels (optional): TRUE makes node and edge labels invisible in image. False allows

them to be drawn. The default is False.

transparentBackground

(optional): TRUE causes background to be transparent. The default is FALSE.

zoom (numeric) The zoom value to proportionally scale the image. The default value

is 100.0. Valid only for bitmap formats, such as PNG and JPEG

network (optional) Name or SUID of a network or view. Default is the "current" network

active in Cytoscape. The first (presummably only) view associated a network is

used if a specific view SUID is not provided.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

overwriteFile (optional) FALSE allows Cytoscape show a message box before overwriting the

file if the file already exists; TRUE allows Cytoscape to overwrite it without

asking. Default value is TRUE.

Details

Exports the current view to a graphics file and returns the path to the saved file. To speed up image export for large networks use the option 'allGraphicsDetails=FALSE'. Available for Cytoscape v3.10 or later.

Value

server response

exportPS 93

Examples

```
exportPNG('/fullpath/myNetwork')
```

exportPS

Export PS

Description

Saves the current network view as an ps file.

Usage

```
exportPS(
   filename = NULL,
   exportTextAsFont = TRUE,
   hideLabels = FALSE,
   network = NULL,
   base.url = .defaultBaseUrl,
   overwriteFile = TRUE
)
```

Arguments

filename

(character) Full path or path relative to current working directory, in addition to the name of the file. Extension is automatically added based on the type argument. If blank, the current network name will be used.

exportTextAsFont

(optional): If TRUE (the default value), texts will be exported as fonts.

hideLabels

(optional): TRUE makes node and edge labels invisible in image. False allows

them to be drawn. The default is False.

network

(optional) Name or SUID of a network or view. Default is the "current" network active in Cytoscape. The first (presummably only) view associated a network is

used if a specific view SUID is not provided.

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

overwriteFile

(optional) FALSE allows Cytoscape show a message box before overwriting the file if the file already exists; TRUE allows Cytoscape to overwrite it without

asking. Default value is TRUE.

Details

Exports the current view to a graphics file and returns the path to the saved file. To speed up image export for large networks use the option 'allGraphicsDetails=FALSE'. Available for Cytoscape v3.10 or later.

94 exportSVG

Value

```
server response
```

Examples

```
exportPS('/fullpath/myNetwork')
```

exportSVG

Export SVG

Description

Saves the current network view as an svg file.

Usage

```
exportSVG(
   filename = NULL,
   exportTextAsFont = TRUE,
   hideLabels = FALSE,
   network = NULL,
   base.url = .defaultBaseUrl,
   overwriteFile = TRUE
)
```

Arguments

filename

(character) Full path or path relative to current working directory, in addition to the name of the file. Extension is automatically added based on the type argument. If blank, the current network name will be used.

exportTextAsFont

(optional): If TRUE (the default value), texts will be exported as fonts.

hideLabels (optional): TRUE makes node and edge labels invisible in image. False allows

them to be drawn. The default is False.

network (optional) Name or SUID of a network or view. Default is the "current" network

active in Cytoscape. The first (presummably only) view associated a network is

used if a specific view SUID is not provided.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

overwriteFile (optional) FALSE allows Cytoscape show a message box before overwriting the

file if the file already exists; TRUE allows Cytoscape to overwrite it without

asking. Default value is TRUE.

exportVisualStyles 95

Details

Exports the current view to a graphics file and returns the path to the saved file. To speed up image export for large networks use the option 'allGraphicsDetails=FALSE'. Available for Cytoscape v3.10 or later.

Value

server response

Examples

```
exportSVG('/fullpath/myNetwork')
```

exportVisualStyles

Export Visual Styles

Description

Save one or more visual styles to file.

Usage

```
exportVisualStyles(
  filename = NULL,
  type = "XML",
  styles = NULL,
  base.url = .defaultBaseUrl,
  overwriteFile = TRUE
)
```

Arguments

filename (char) Full path or path relative to current working directory, in addition to the

name of the file. Extension is automatically added based on the type argument.

Default is "styles.xml"

type (optional) Type of data file to export, e.g., XML, JSON (case sensitive). Default

is XML. Note: Only XML can be read by importVisualStyles().

styles (optional) The styles to be exported, listed as a comma-separated string. If no

styles are specified, only the current one is exported.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

overwriteFile (optional) FALSE allows Cytoscape show a message box before overwriting the

file if the file already exists; TRUE. allows Cytoscape to overwrite it without

asking. Default value is TRUE.

Value

Path to saved file

See Also

importVisualStyles

Examples

```
exportVisualStyles('/fullpath/myStyle')
exportVisualStyles('/fullpath/myStyle', type = 'JSON')
exportVisualStyles('/fullpath/myStyle', style = 'Minimal,default,Directed')
```

 ${\tt findRemoteCytoscape}$

findRemoteCytoscape

Description

Figure out whether CyREST is local or remote. If remote, we'll want to go through Jupyter-Bridge.

Usage

```
findRemoteCytoscape(base.url = .defaultBaseUrl)
```

Arguments

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

None

Examples

findRemoteCytoscape()

fitContent 97

fitContent	Fit Content
	1 11 00.110.11

Description

Zoom and pan network view to maximize either height or width of current network window.

Usage

```
fitContent(selected.only = FALSE, network = NULL, base.url = .defaultBaseUrl)
```

Arguments

selected.only (Boolean) Whether to fit only current selection. Default is false, i.e., to fit the

entire network.

network (optional) Name or SUID of a network or view. Default is the "current" network

active in Cytoscape. The first (presummably only) view associated a network is

used if a specific view SUID is not provided.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

Takes first (presumably only) view associated with provided network

Value

None

Examples

fitContent()

floatPanel	Float Panel		
------------	-------------	--	--

Description

Pop out a panel from the UI of Cytoscape. Other panels will expand into the space.

```
floatPanel(panel.name, base.url = .defaultBaseUrl)
```

98 getAbsSandboxPath

Arguments

panel.name Name of the panel. Multiple ways of referencing panels is supported:

WEST, control panel, control, c SOUTH, table panel, table, ta SOUTH_WEST, tool panel, tool, to EAST, results panel, results, r

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
floatPanel('table')
```

 ${\tt getAbsSandboxPath}$

getAbsSandboxPath

Description

Get absolute sandbox path.

Usage

```
getAbsSandboxPath(fileLocation)
```

Arguments

fileLocation fileLocation

Value

file location

Examples

getAbsSandboxPath()

getAllEdges 99

|--|

Description

Retrieve the names of all the edges in the network.

Usage

```
getAllEdges(network = NULL, base.url = .defaultBaseUrl)
```

Arguments

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

list of node edges

Examples

getAllEdges()

getAllNodes Get All Nodes

Description

Retrieve the names of all the nodes in the network.

Usage

```
getAllNodes(network = NULL, base.url = .defaultBaseUrl)
```

Arguments

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

list of node names

Examples

getAllNodes()

 ${\tt getAllStyleMappings}$

Get All Style Mappings

Description

Retrieve the values the define all the mappings per visual property in a given style.

Usage

```
getAllStyleMappings(style.name = NULL, base.url = .defaultBaseUrl)
```

Arguments

style.name Name for style; default is the 'default' style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

List of lists with named values defining the visual property mappings

Examples

getStyleMapping()

getAnnotationList 101

getAnnotationList

Get Annotation List

Description

A list of named lists with annotation information

Usage

```
getAnnotationList(network = NULL, base.url = .defaultBaseUrl)
```

Arguments

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

You can obtain a list of UUIDs by applying a subset function like so: sapply(getAnnotationList(), '[[', 'uuid')

Value

RETURN_DESCRIPTION

Examples

```
getAnnotationList()
```

 ${\tt getAppInformation}$

Get App Information

Description

Retrieve the name, brief description and version of a Cytoscape app.

```
getAppInformation(app, base.url = .defaultBaseUrl)
```

102 getAppStatus

Arguments

app Name of app

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

App name, brief description and version.

Examples

getAppInformation()

getAppStatus

App Status

Description

Retrieve the current status of a Cytoscape app: Installed, Uninstalled or Disabled.

Usage

```
getAppStatus(app, base.url = .defaultBaseUrl)
```

Arguments

app Name of app

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

App name and status

Examples

getAppStatus()

getAppUpdates 103

getAppUpdates

List Apps With Updates

Description

Retrieve list of currently installed Cytoscape apps with updates available.

Usage

```
getAppUpdates(base.url = .defaultBaseUrl)
```

Arguments

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

A list of updatable app names, versions and statuses

Examples

```
getAppUpdates()
```

getArrowShapes

Get Arrow Shapes

Description

Retrieve the names of the currently supported 'arrows' – the decorations can (optionally) appear at the ends of edges, adjacent to the nodes they connect, and conveying information about the nature of the nodes' relationship.

Usage

```
getArrowShapes(base.url = .defaultBaseUrl)
```

Arguments

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

A list of character strings, e.g., 'DIAMOND', 'T', 'ARROW'

Examples

```
getArrowShapes()
```

getAvailableApps

List Available Apps

Description

Retrieve a list of apps available for installation in Cytoscape.

Usage

```
getAvailableApps(base.url = .defaultBaseUrl)
```

Arguments

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

A list of app names and latest versions

Examples

```
getAvailableApps()
```

getBackgroundColorDefault

Get Background Color Default

Description

Retrieve the default background color.

```
getBackgroundColorDefault(style.name = NULL, base.url = .defaultBaseUrl)
```

Arguments

style.name Name of style; default is "default" style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
getBackgroundColorDefault()
```

getBrowserClientChannel

getBrowserClientChannel

Description

Get the unique channel

Usage

```
getBrowserClientChannel()
```

Value

client channel

Examples

getBrowserClientChannel()

106 getCollectionList

 ${\tt getBrowserClientJs}$

getBrowserClientJs

Description

Prepend channel number of client Javascript so it can communicate with this process via Jupyterbridge

Usage

```
getBrowserClientJs()
```

Value

Javascript inject code

Examples

```
getBrowserClientJs()
```

getCollectionList

Get Collection List

Description

FUNCTION_DESCRIPTION

Usage

```
getCollectionList(base.url = .defaultBaseUrl)
```

Arguments

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

RETURN_DESCRIPTION

Examples

```
getCollectionList()
```

getCollectionName 107

 ${\tt getCollectionName}$

Get Collection Name

Description

```
FUNCTION_DESCRIPTION
```

Usage

```
getCollectionName(collection.suid = NULL, base.url = .defaultBaseUrl)
```

Arguments

collection.suid

DESCRIPTION

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

RETURN_DESCRIPTION

Examples

getCollectionName()

getCollectionNetworks Get Collection Networks

Description

FUNCTION_DESCRIPTION

Usage

```
getCollectionNetworks(collection.suid = NULL, base.url = .defaultBaseUrl)
```

Arguments

collection.suid

DESCRIPTION

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

108 getCollectionSuid

Value

RETURN_DESCRIPTION

Examples

getCollectionNetworks()

 ${\tt getCollectionSuid}$

Get Collection Suid

Description

FUNCTION_DESCRIPTION

Usage

```
getCollectionSuid(network = NULL, base.url = .defaultBaseUrl)
```

Arguments

network DESCRIPTION

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

RETURN_DESCRIPTION

Examples

getCollectionSuid()

getCurrentSandbox 109

getCurrentSandbox

getCurrentSandbox

Description

Return both the current sandbox name and path.

Usage

```
getCurrentSandbox()
```

Value

current sandbox

Examples

getCurrentSandbox()

 ${\tt getCurrentSandboxName} \quad {\tt getCurrentSandboxName}$

Description

Return the current sandbox name.

Usage

getCurrentSandboxName()

Value

current sandbox name

Examples

getCurrentSandboxName()

110 getCurrentStyle

getCurrentSandboxPath getCurrentSandboxPath

Description

Return the current sandbox path.

Usage

```
getCurrentSandboxPath()
```

Value

current sandbox path

Examples

```
getCurrentSandboxPath()
```

getCurrentStyle

Get Current Style

Description

Get the current visual style applied to a network.

Usage

```
getCurrentStyle(network = NULL, base.url = .defaultBaseUrl)
```

Arguments

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

Name of style

```
getCurrentStyle()
getCurrentStyle('myNetwork')
```

getDefaultSandbox 111

getDefaultSandbox

getDefaultSandbox

Description

Return whatever is the current default sandbox properties.

Usage

```
getDefaultSandbox()
```

Value

default sandbox

Examples

```
getDefaultSandbox()
```

 ${\tt getDefaultSandboxPath} \ \ \textit{getDefaultSandboxPath}$

Description

Return the default path, which isn't one of the properties tracked in the default_sandbox.

Usage

```
getDefaultSandboxPath()
```

Value

default sandbox path

```
getDefaultSandboxPath()
```

112 getEdgeColor

getDisabledApps

List Disabled Apps

Description

Retrieve list of currently disabled apps in Cytoscape.

Usage

```
getDisabledApps(base.url = .defaultBaseUrl)
```

Arguments

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

A list of disabled app names, versions and statuses

Examples

```
getDisabledApps()
```

getEdgeColor

Get Edge Color

Description

Retrieve the actual line color of specified edges.

Usage

```
getEdgeColor(edge.names = NULL, network = NULL, base.url = .defaultBaseUrl)
```

Arguments

edge.names List of edge names or SUIDs. Default is NULL for all edges.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

getEdgeCount 113

Value

Named list of property values

Examples

```
getEdgeColor()
```

getEdgeCount

Get Edge Count

Description

Reports the number of the edges in the network.

Usage

```
getEdgeCount(network = NULL, base.url = .defaultBaseUrl)
```

Arguments

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

numeric

Author(s)

Alexander Pico, Tanja Muetze, Georgi Kolishovski, Paul Shannon

Examples

getEdgeCount()

114 getEdgeInfo

getEdgeInfo	Get Edge Information

Description

Returns source, target and edge table row values.

Usage

```
getEdgeInfo(edges, network = NULL, base.url = .defaultBaseUrl)
```

Arguments

edges List of SUIDs or names of edges, i.e., values in the "name" column. Can also

input a single edge.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This function is kinda slow. It takes approximately 70ms per edge to return a result, e.g., 850 edges will take a one minute.

Value

named list of lists

Author(s)

Alexander Pico

Examples

getEdgeInfo()

getEdgeLineStyle 115

antEdanlingStyla	Cat Edga Lina Stula
getEdgeLineStyle	Get Edge Line Style

Description

Retrieve the actual line style of specified edges.

Usage

```
getEdgeLineStyle(edge.names = NULL, network = NULL, base.url = .defaultBaseUrl)
```

Arguments

edge.names List of edge names or SUIDs. Default is NULL for all edges.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

Named list of property values

Examples

```
getEdgeLineStyle()
```

getEdgeLineWidth Get Edge Line Width

Description

Retrieve the actual line width of specified edges.

```
getEdgeLineWidth(edge.names = NULL, network = NULL, base.url = .defaultBaseUrl)
```

116 getEdgeProperty

Arguments

edge.names List of edge names or SUIDs. Default is NULL for all edges.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

Named list of property values

Examples

```
getEdgeLineWidth()
```

getEdgeProperty

Get Edge Property Values

Description

Get values for any edge property of the specified edges.

Usage

```
getEdgeProperty(
  edge.names = NULL,
  visual.property,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

edge.names List of edge names or SUIDs. Default is NULL for all edges.

visual.property

Name of a visual property. See getVisualPropertyNames.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method retrieves the actual property of the node, given the current visual style, factoring together any default, mapping and bypass setting.

Value

Named list of property values

Examples

```
getEdgeProperty(c('node 0 (pp) node 1', 'node 0 (pp) node 2'), 'EDGE_WIDTH')
```

```
getEdgeSelectionColorDefault
```

Get Edge Selection Color Default

Description

Retrieve the default selected edge color.

Usage

```
getEdgeSelectionColorDefault(style.name = NULL, base.url = .defaultBaseUrl)
```

Arguments

style.name Name of style; default is "default" style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

```
getEdgeSelectionColorDefault()
```

118 getFilterList

```
getEdgeTargetArrowShape
```

Get Edge Target Arrow Shape

Description

Retrieve the actual target arrow shape of specified edges.

Usage

```
getEdgeTargetArrowShape(
  edge.names = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

edge.names List of edge names or SUIDs. Default is NULL for all edges.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

Named list of property values

Examples

```
getEdgeTargetArrowShape()
```

getFilterList

Get Filter List

Description

Retrieve list of named filters in current session.

```
getFilterList(base.url = .defaultBaseUrl)
```

getFirstNeighbors 119

Arguments

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

List of filter names

Examples

```
getFilterList()
```

getFirstNeighbors

Get list of nodes neighboring provided list

Description

Returns a non-redundant list of first neighbors of the supplied list of nodes or current node selection.

Usage

```
getFirstNeighbors(
  node.names = NULL,
  as.nested.list = FALSE,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

node.names A list of SUIDs or names from the name column of the node table. Default

is currently selected nodes.

as.nested.list logical Whether to return lists of neighbors per query node

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

A list of unique node names, optionally nested per query node name.

120 getGroupInfo

Author(s)

Alexander Pico, Tanja Muetze, Georgi Kolishovski, Paul Shannon

See Also

selectNodes selectFirstNeighbors

Examples

```
getFirstNeighbors()
```

getGroupInfo

Get Group Information

Description

Retrieve information about a group by name or identifier.

Usage

```
getGroupInfo(group, network = NULL, base.url = .defaultBaseUrl)
```

Arguments

group Group name or SUID.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

Group information

```
getGroupInfo('myGroup')
```

getInstalledApps 121

 ${\tt getInstalledApps}$

List Installed Apps

Description

Retrieve list of currently installed apps in Cytoscape.

Usage

```
getInstalledApps(base.url = .defaultBaseUrl)
```

Arguments

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

A list of installed app names, versions and statuses

Examples

```
getInstalledApps()
```

getJupyterBridgeURL

get Jupyter Bridge URL

Description

Get the jupyter bridge server url

Usage

```
getJupyterBridgeURL()
```

Value

jupyter bridge server url

```
getJupyterBridgeURL()
```

122 getLayoutNames

getLayoutNameMapping Get Layout Name Mapping

Description

The Cytoscape 'Layout' menu lists many layout algorithms, but the names presented there are different from the names by which these algorithms are known to layout method. This method returns a named list in which the names are from the GUI, and the values identify the names you must use to choose an algorithms in the programmatic interface.

Usage

```
getLayoutNameMapping(base.url = .defaultBaseUrl)
```

Arguments

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

A named list of character strings

Author(s)

Alexander Pico, Tanja Muetze, Georgi Kolishovski, Paul Shannon

Examples

getLayoutNames

Get Layout Names

Description

Retrieve the names of the currently supported layout algorithms. These may be used in subsequent calls to the 'layoutNetwork' function.

```
getLayoutNames(base.url = .defaultBaseUrl)
```

Arguments

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

A list of character strings, e.g., "force-directed" "circular" "grid"

Author(s)

Alexander Pico, Tanja Muetze, Georgi Kolishovski, Paul Shannon

Examples

getLayoutPropertyNames

Get Layout Property Names

Description

Returns a list of the tunable properties for the specified layout.

Usage

```
getLayoutPropertyNames(layout.name, base.url = .defaultBaseUrl)
```

Arguments

layout.name (character) Name of the layout

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

Run getLayoutNames to list available layouts.

Value

A list of character strings

Author(s)

Alexander Pico, Tanja Muetze, Georgi Kolishovski, Paul Shannon

Examples

 ${\tt getLayoutPropertyType} \quad \textit{Get Layout Property Type}$

Description

Returns the type of one of the tunable properties (property.name) for the specified layout.

Usage

```
getLayoutPropertyType(layout.name, property.name, base.url = .defaultBaseUrl)
```

Arguments

```
layout.name (character) Name of the layout property.name (character) Name of the property
```

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

Run getLayoutNames to list available layouts. Run getLayoutPropertyNames to list properties per layout.

Value

A character string specifying the type

Author(s)

Alexander Pico, Tanja Muetze, Georgi Kolishovski, Paul Shannon

```
getLayoutPropertyType('force-directed','defaultSpringLength')
# "double"
```

```
getLayoutPropertyValue
```

Get Layout Property Value

Description

Returns the appropriately typed value of the specified tunable property for the specified layout.

Usage

```
getLayoutPropertyValue(layout.name, property.name, base.url = .defaultBaseUrl)
```

Arguments

layout.name (character) Name of the layout property.name (character) Name of the property

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

 $Run\ get Layout Names\ to\ list\ available\ layouts.\ Run\ get Layout Property Names\ to\ list\ properties\ per\ layout.$

Value

The current value set for this layout property. Typically an integer, numeric or character string value.

Author(s)

Alexander Pico, Tanja Muetze, Georgi Kolishovski, Paul Shannon

```
getLayoutPropertyValue('force-directed','defaultSpringLength')
# 80
```

126 getNetworkCenter

getLineStyles

Get Line Styles

Description

Retrieve the names of the currently supported line types – values which can be used to render edges, and thus can be used in calls to 'setEdgeLineStyleRule'.

Usage

```
getLineStyles(base.url = .defaultBaseUrl)
```

Arguments

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

A list of character strings, e.g., 'SOLID', 'DOT'

Examples

```
getLineStyles()
```

getNetworkCenter

Get Network Center

Description

Retrieve the center of specified network.

Usage

```
getNetworkCenter(network = NULL, base.url = .defaultBaseUrl)
```

Arguments

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

getNetworkCount 127

Value

Named list of property values

Examples

```
getNetworkCenter()
```

getNetworkCount

Get the number of Cytoscape networks

Description

Returns the number of Cytoscape networks in the current Cytoscape session

Usage

```
getNetworkCount(base.url = .defaultBaseUrl)
```

Arguments

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

numeric

Author(s)

Alexander Pico, Tanja Muetze, Georgi Kolishovski, Paul Shannon

```
getNetworkCount()
# 3
```

128 getNetworkName

getNetworkList

Get the list of Cytoscape networks

Description

Returns the list of Cytoscape network names in the current Cytoscape session

Usage

```
getNetworkList(getSUIDs = FALSE, base.url = .defaultBaseUrl)
```

Arguments

getSUIDs (optional) Whether to return SUIDs instead of titles; default is FALSE.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

list

Author(s)

Alexander Pico, Tanja Muetze, Georgi Kolishovski, Paul Shannon

Examples

```
getNetworkList()
# 3
```

getNetworkName

Get the name of a network

Description

Retrieve the title of a network

```
getNetworkName(suid = NULL, base.url = .defaultBaseUrl)
```

getNetworkNDExId 129

Arguments

suid (optional) SUID of the network; default is current network. If a name is pro-

vided, then it is validated and returned.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

network name

Examples

```
getNetworkName()
getNetworkName(1111)
```

getNetworkNDExId

Get Network NDEx Id

Description

Retrieve the NDEx externalId for a Cytoscape network, presuming it has already been exported to NDEx.

Usage

```
getNetworkNDExId(network = NULL, base.url = .defaultBaseUrl)
```

Arguments

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

If the Cytoscape network is not associated with an NDEx network, the return value will be NULL.

Value

NDEx identifier (externalId) or NULL

Examples

getNetworkNDExId()

130 getNetworkSuid

getNetworkProperty

Get Network Property Values

Description

Get values for any network property.

Usage

```
getNetworkProperty(visual.property, network = NULL, base.url = .defaultBaseUrl)
```

Arguments

visual.property

Name of a visual property. See getVisualPropertyNames.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method retrieves the actual property of the node, given the current visual style, factoring together any default, mapping and bypass setting.

Value

Named list of property values

Examples

```
getNetworkProperty('NETWORK_SCALE_FACTOR')
```

getNetworkSuid

Get the SUID of a network

Description

Retrieve the SUID of a network

```
getNetworkSuid(title = NULL, base.url = .defaultBaseUrl)
```

getNetworkViews 131

Arguments

title (optional) Name of the network; default is "current" network. If an SUID is

provided, then it is validated and returned.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

(numeric) Network suid

Author(s)

Alexander Pico

Examples

```
getNetworkSuid()
getNetworkSuid("myNetwork")
# 80
```

getNetworkViews

Get Network Views

Description

Retrieve list of network view SUIDs

Usage

```
getNetworkViews(network = NULL, base.url = .defaultBaseUrl)
```

Arguments

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

List of network view SUIDs

```
getNetworkViews()
```

132 getNetworkZoom

getNetworkViewSuid

Get the SUID of a network view

Description

Retrieve the SUID of a network view

Usage

```
getNetworkViewSuid(network = NULL, base.url = .defaultBaseUrl)
```

Arguments

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape. If a network view SUID is provided, then it is validated and

returned.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

(numeric) Network view suid. The first (presumably only) view associated a network is returned.

Author(s)

Alexander Pico

Examples

```
getNetworkViewSuid()
getNetworkViewSuid("myNetwork")
# 90
```

getNetworkZoom

Get Network Zoom

Description

Retrieve the scale factor of specified network.

```
getNetworkZoom(network = NULL, base.url = .defaultBaseUrl)
```

getNodeColor 133

Arguments

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

Named list of property values

Examples

getNetworkZoom()

getNodeColor

Get Node Color

Description

Retrieve the actual fill color of specified nodes.

Usage

```
getNodeColor(node.names = NULL, network = NULL, base.url = .defaultBaseUrl)
```

Arguments

node.names List of node names or SUIDs. Default is NULL for all nodes.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

Named list of property values

Examples

getNodeColor()

134 getNodeHeight

getNodeCount

Get Node Count

Description

Reports the number of nodes in the network.

Usage

```
getNodeCount(network = NULL, base.url = .defaultBaseUrl)
```

Arguments

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

numeric

Author(s)

Alexander Pico, Tanja Muetze, Georgi Kolishovski, Paul Shannon

Examples

getNodeCount()

getNodeHeight

Get Node Height

Description

Retrieve the actual height of specified nodes.

```
getNodeHeight(node.names = NULL, network = NULL, base.url = .defaultBaseUrl)
```

getNodeLabelPosition 135

Arguments

node.names List of node names or SUIDs. Default is NULL for all nodes.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

Named list of property values

Examples

```
getNodeHeight()
```

getNodeLabelPosition Get Node Label Position

Description

Retrieve the actual label position of specified nodes.

Usage

```
getNodeLabelPosition(
  node.names = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

node.names List of node names or SUIDs. Default is NULL for all nodes.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

Named list of property values

136 getNodePosition

Examples

```
getNodeLabelPosition('Node 1')
```

getNodeLabelPositionDefault

Get Node Label Position Default

Description

Retrieve the default selection node color.

Usage

```
getNodeLabelPositionDefault(style.name = NULL, base.url = .defaultBaseUrl)
```

Arguments

style.name Name of style; default is "default" style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
getNodeLabelPositionDefault()
```

 ${\tt getNodePosition}$

Get Node Position

Description

Retrieve the actual x,y position of specified nodes.

```
getNodePosition(node.names = NULL, network = NULL, base.url = .defaultBaseUrl)
```

getNodeProperty 137

Arguments

node.names List of node names or SUIDs. Default is NULL for all nodes.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

Dataframe of x, y values

Examples

```
getNodePosition()
```

getNodeProperty

Get Node Property Values

Description

Get values for any node property of the specified nodes.

Usage

```
getNodeProperty(
  node.names = NULL,
  visual.property,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

node.names List of node names or SUIDs. Default is NULL for all nodes.

visual.property

Name of a visual property. See getVisualPropertyNames.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method retrieves the actual property of the node, given the current visual style, factoring together any default, mapping and bypass setting.

Value

Named list of property values

Examples

```
getNodeProperty(c('node 0', 'node 1'), 'NODE_SHAPE')
```

```
{\tt getNodeSelectionColorDefault}
```

Get Node Selection Color Default

Description

Retrieve the default selection node color.

Usage

```
getNodeSelectionColorDefault(style.name = NULL, base.url = .defaultBaseUrl)
```

Arguments

style.name Name of style; default is "default" style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

```
getNodeSelectionColorDefault()
```

getNodeShapes 139

	getNodeShapes	Get Node Shapes	
--	---------------	-----------------	--

Description

Retrieve the names of the currently supported node shapes, which can then be used in calls to setNodeShapeRule and setDefaultVizMapValue.

Usage

```
getNodeShapes(base.url = .defaultBaseUrl)
```

Arguments

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

A list of character strings, e.g. 'ELLIPSE', 'RECTANGLE'

Examples

```
getNodeShapes()
```

getNodeSize

Get Node Size

Description

Retrieve the actual size of specified nodes.

Usage

```
getNodeSize(node.names = NULL, network = NULL, base.url = .defaultBaseUrl)
```

Arguments

node.names List of node names or SUIDs. Default is NULL for all nodes.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

140 getNodeWidth

Value

Named list of property values

Examples

getNodeSize()

getNodeWidth

Get Node Width

Description

Retrieve the actual width of specified nodes.

Usage

```
getNodeWidth(node.names = NULL, network = NULL, base.url = .defaultBaseUrl)
```

Arguments

node.names List of node names or SUIDs. Default is NULL for all nodes.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

Named list of property values

Examples

getNodeWidth()

getNotebookIsRunning 141

getNotebookIsRunning getNotebookIsRunning

Description

getNotebook Is Running

Usage

getNotebookIsRunning()

Value

None

Examples

getNotebookIsRunning()

 ${\tt getSandboxReinitialize}$

 ${\it getSandbox Reinitialize}$

Description

Return flag indicating that next command should reinitialize the sandbox according to the default_sandbox.

Usage

```
getSandboxReinitialize()
```

Value

sandbox reinitialize

```
getSandboxReinitialize()
```

142 getSelectedEdges

```
getSelectedEdgeCount Get Selected Edge Count
```

Description

Returns the number of edges currently selected in the network.

Usage

```
getSelectedEdgeCount(network = NULL, base.url = .defaultBaseUrl)
```

Arguments

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

numeric

Author(s)

AlexanderPico, Tanja Muetze, Georgi Kolishovski, Paul Shannon

Examples

```
getSelectedEdgeCount()
```

getSelectedEdges

Get Selected Edges

Description

Retrieve the names of all the edges selected in the network.

```
getSelectedEdges(
  edge.suids = FALSE,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

getSelectedNodeCount 143

Arguments

edge.suids Whether to return edge SUIDs. Default is FALSE to return edge names.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

list of selected edge names

Examples

getSelectedEdges()

getSelectedNodeCount Get Selected Node Count

Description

Returns the number of nodes currently selected in the network.

Usage

```
getSelectedNodeCount(network = NULL, base.url = .defaultBaseUrl)
```

Arguments

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

numeric

Author(s)

AlexanderPico, Tanja Muetze, Georgi Kolishovski, Paul Shannon

Examples

getSelectedNodeCount()

144 getSelectedNodes

getSelectedNodes

Get Selected Nodes

Description

Retrieve the names of all the nodes selected in the network.

Usage

```
getSelectedNodes(
  node.suids = FALSE,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

node.suids Whether to return node SUIDs. Default is FALSE to return node names.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

list of selected node names

Author(s)

AlexanderPico, Tanja Muetze, Georgi Kolishovski, Paul Shannon

```
getSelectedNodes()
```

getStyleDependencies 145

getStyleDependencies Get the values of dependencies in a style

Description

Retrieves style dependency settings.

Usage

```
getStyleDependencies(style.name = NULL, base.url = .defaultBaseUrl)
```

Arguments

style.name Name of style; default is "default" style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

server response

Available Dependencies

 $arrow Color Matches Edge\ node Custom Graphics Size Sync\ node Size Locked$

Examples

```
getStyleDependencies("myStyle")
```

getStyleMapping

Get Style Mapping

Description

Retrieve the values the define the mappings for a given visual property in a style.

```
getStyleMapping(visual.prop, style.name = NULL, base.url = .defaultBaseUrl)
```

Arguments

visual.prop Name of the visual property, e.g., NODE_FILL_COLOR

style.name Name for style; default is the 'default' style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

List of named values defining the visual property mappings

See Also

get Visual Property Names

Examples

```
getStyleMapping()
```

 ${\tt getTableColumnNames}$

Get Table Column Names

Description

Retrieve the names of all columns in a table

Usage

```
getTableColumnNames(
  table = "node",
  namespace = "default",
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

table name of table, e.g., node, edge, network; default is "node"

namespace of table, e.g., default

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

getTableColumns 147

Value

list of column names

Examples

```
getTableColumnNames()
getTableColumnNames('edge')
getTableColumnNames('network')
```

getTableColumns

Get table column values

Description

Retrieve one or more columns of data from node, edge or network tables.

Usage

```
getTableColumns(
  table = "node",
  columns = NULL,
  namespace = "default",
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

table name of table, e.g., node (default), edge, network

columns names of columns to retrieve values from as list object or comma-separated list;

default is all columns

namespace of table; default is "default"

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

The 'SUID' column is always retrieved along with specified columns. The 'SUID' values are used as row, names in the returned data, frame.

Value

A data.frame of column values

Examples

```
getTableColumns()
getTableColumns('node','group')
```

getTableColumnTypes

Get Table Column Types

Description

Retrieve the types of all columns in a table

Usage

```
getTableColumnTypes(
  table = "node",
  namespace = "default",
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

table name of table, e.g., node, edge, network; default is "node"

namespace of table, e.g., default

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

a named list of column types

Examples

```
getTableColumnTypes()
getTableColumnTypes('edge')
getTableColumnTypes('network')
```

getTableValue 149

getTableValue	Get table cell value
---------------	----------------------

Description

Retrieve the value from a specific row and column from node, edge or network tables.

Usage

```
getTableValue(
  table,
  row.name,
  column,
  namespace = "default",
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

table	name of table, e.g., node, edge, network
row.name	Node, edge or network name, i.e., the value in the "name" column
column	name of column to retrieve values from
namespace	namespace of table; default is "default"
network	(optional) Name or SUID of the network. Default is the "current" network active in Cytoscape.
base.url	(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

A data.frame of column values

Examples

```
getTableValue('node','node 1', 'score')
```

getUninstalledApps

List Uninstalled Apps

Description

Retrieve list of apps not currently installed in Cytoscape.

Usage

```
getUninstalledApps(base.url = .defaultBaseUrl)
```

Arguments

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

A list of uninstalled app names, versions and statuses

Examples

```
getUninstalledApps()
```

```
getVisualPropertyDefault
```

Get Visual Property Default

Description

Retrieve the default value for a visual property.

```
getVisualPropertyDefault(
  property,
  style.name = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

property Name of property, e.g., NODE_FILL_COLOR (see getVisualPropertyNames)

style.name Name of style; default is "default" style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
getVisualPropertyDefault('NODE_SIZE')
```

getVisualPropertyNames

Get Visual Property Names

Description

Retrieve the names of all possible visual properties.

Usage

```
getVisualPropertyNames(base.url = .defaultBaseUrl)
```

Arguments

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

List of names

Examples

```
getVisualPropertyNames()
```

152 getVisualStyleNames

getVisualStyleJSON Get Visual Style JSON

Description

Get all defaults and mappings for a visual style

Usage

```
getVisualStyleJSON(styleName, css = FALSE, base.url = .defaultBaseUrl)
```

Arguments

styleName name of style

css TRUE to create a CytoscapeJS CSS style, FALSE to create a generic JSON

version. Default is FALSE.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

List of visual style properties

Examples

getVisualStyleJSON()

getVisualStyleNames Get Visual Style Names

Description

Retrieve a list of all visual style names.

Usage

```
getVisualStyleNames(base.url = .defaultBaseUrl)
```

Arguments

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

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Value

A list of names

Examples

```
getVisualStyleNames()
```

groupAnnotation

Group Annotation

Description

Group annotation from the network view in Cytoscape

Usage

```
groupAnnotation(names = NULL, network = NULL, base.url = .defaultBaseUrl)
```

Arguments

names Name of annotation by UUID or Name

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

You can obtain a list of UUIDs by applying a subset function like so: sapply(getAnnotationList(), '[[', 'uuid')

Value

UUID of group annotation

Examples

```
\label{lem:groupAnnotation} $$ groupAnnotation(c("29ac8349-7be4-404e-8363-9537cc39d1ad","3846e949-3130-4362-83de-d02f5368e3ad")) $$ groupAnnotation(c("annotation1","annotation2", "annotation3")) $$ groupAnnotation("annotation1") $$ groupAnnotation(sapply(getAnnotationList(), '[[', 'uuid'))) $$
```

154 hideEdges

hideAllPanels

Hide All Panels

Description

Hide control, table, tool and results panels.

Usage

```
hideAllPanels(base.url = .defaultBaseUrl)
```

Arguments

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

None

Examples

hideAllPanels()

hideEdges

Hide Edges

Description

Hide (but do not delete) the specified edge or edges, by setting the Visible property bypass value to false.

Usage

```
hideEdges(edge.names, network = NULL, base.url = .defaultBaseUrl)
```

Arguments

edge.names List of edge names or SUIDs

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

hideNodes 155

Details

This method permanently overrides any default values or mappings defined for this visual property of the edge or edges specified. This method ultimately calls the generic function, setEdgePropertyBypass, which can be used to set any visual property. To restore defaults and mappings, use unhideEdges or unhideAll.

Value

None

See Also

setEdgePropertyBypass, hideSelectedEdges, unhideEdges, unhideAll

Examples

hideEdges()

hideNodes

Hide Nodes

Description

Hide (but do not delete) the specified node or nodes, by setting the Visible property bypass value to false.

Usage

```
hideNodes(node.names, network = NULL, base.url = .defaultBaseUrl)
```

Arguments

node.names List of node names or SUIDs

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values or mappings defined for this visual property of the node or nodes specified. This method ultimately calls the generic function, setNodePropertyBypass, which can be used to set any visual property. To restore defaults and mappings, use unhideNodes or unhideAll.

156 hidePanel

Value

None

See Also

set Node Property Bypass, hide Selected Nodes, unhide Nodes, unhide All

Examples

hideNodes()

hidePanel

Hide Panel

Description

Hide a panel in the UI of Cytoscape. Other panels will expand into the space.

Usage

```
hidePanel(panel.name, base.url = .defaultBaseUrl)
```

Arguments

panel.name Name of the panel. Multiple ways of referencing panels is supported:

WEST, control panel, control, c SOUTH, table panel, table, ta SOUTH_WEST, tool panel, tool, to EAST, results panel, results, r

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
hidePanel('table')
```

hideSelectedEdges 157

 $\verb|hideSelectedEdges|$

Hide Selected Edges

Description

Hide (but do not delete) the currently selected edges, by setting the Visible property bypass value to false.

Usage

```
hideSelectedEdges(network = NULL, base.url = .defaultBaseUrl)
```

Arguments

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values or mappings defined for this visual property of the edge or edges specified. This method ultimately calls the generic function, setEdgePropertyBypass, which can be used to set any visual property. To restore defaults and mappings, use unhideEdges or unhideAll.

Value

None

See Also

setEdgePropertyBypass, hideEdges, unhideEdges, unhideAll

Examples

hideSelectedEdges()

158 hideSelectedNodes

hideSelectedNodes

Hide Selected Nodes

Description

Hide (but do not delete) the currently selected nodes, by setting the Visible property bypass value to false.

Usage

```
hideSelectedNodes(network = NULL, base.url = .defaultBaseUrl)
```

Arguments

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values or mappings defined for this visual property of the node or nodes specified. This method ultimately calls the generic function, setNodePropertyBypass, which can be used to set any visual property. To restore defaults and mappings, use unhideNodes or unhideAll.

Value

None

See Also

setNodePropertyBypass, hideNodes, unhideNodes, unhideAll

Examples

hideSelectedNodes()

importFileFromUrl 159

importFileFromUrl

Description

The source URL identifies a file to be transferred from a cloud resource to either the to the current Cytoscape directory (if executing on the Cytoscape workstation) or sandbox (if executing on a remote server or a sandbox was explicitly created). If the destination file already exists, it is overwritten. The 'destFile' can be an absolute path if the workflow is executing on the local Cytoscape workstation. Supported URLs include: Raw URL: URL directly references the file to download (e.g., http://tpsoft.com/museum_images/IBM Dropbox: Use the standard Dropbox 'Get Link' feature to create the 'sourceUrl' link in the clipboard (e.g., https://www.dropbox.com/s/r15azh0xb53smu1/GDS112_full.soft?dl=0) GDrive: Use the standard Google Drive 'Get Link' feature to create the 'sourceUrl' link in the clipboard (e.g., https://drive.google.com/file/d/12sJaKQQbesF10xsrbgiNtUcqCQYY1YI3/view?usp=sharing) OneDrive: Use the OneDrive web site to right click on the file, choose the 'Embed' menu option, then copy the URL in the iframe's "src" parameter into the clipboard (e.g., https://onedrive.live.com/embed?cid=C357475E90 GitHub: Use the GitHub web site to show the file or a link to it, and capture the URL in the clipboard (e.g., https://github.com/cytoscape/file-transfer-app/blob/master/test_data/GDS112_full.soft) Note that GitHub enforces a limit on the size of a file that can be stored there. We advise that you take this into account when choosing a cloud service for your files. When you capture a URL in the clipboard, you should copy it into your program for use with this function. This function is most useful for Notebooks running on the local Cytoscape workstation. For Notebooks that could run on a remote server, consider using sandboxUrlTo() and related sandbox functions.

Usage

```
importFileFromUrl(
  sourceURL,
  destFile,
  overwrite = TRUE,
  base.url = .defaultBaseUrl
)
```

Arguments

sourceURL URL addressing cloud file to download

destFile Name of file in the R workflow's file system ... if None, use file name in

source_file

overwrite Name of sandbox containing file. None means "the current sandbox".

base.url Ignore unless you need to specify a custom domain, port or version to connect

to the CyREST API. Default is http://127.0.0.1:1234 and the latest version of

the CyREST API supported by this version of RCy3.

Value

dict: 'filePath': <new file's absolute path in Cytoscape workstation>, 'fileByteCount': number of bytes read

Examples

```
importFileFromUrl()
```

importFilters

Import Filters

Description

Loads filters from a file in JSON format.

Usage

```
importFilters(filename, base.url = .defaultBaseUrl)
```

Arguments

filename (char) Path and name of the filters file to load.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

importFilters()

importNetworkFromFile Import Network From File

Description

Loads a network from specified file

```
importNetworkFromFile(file = NULL, base.url = .defaultBaseUrl)
```

Arguments

file Name of file in any of the supported formats (e.g., SIF, GML, xGMML, etc). If

NULL, a demo network file in SIF format is loaded.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

```
(int) network SUID
```

Examples

```
importNetworkFromFile()
```

importNetworkFromNDEx Import Network From NDEx

Description

Import a network from the NDEx database into Cytoscape.

Usage

```
importNetworkFromNDEx(
  ndex.id,
  username = NULL,
  password = NULL,
  accessKey = NULL,
  ndex.url = "http://ndexbio.org",
  ndex.version = "v2",
  base.url = .defaultBaseUrl
)
```

Arguments

ndex.id Network externalId provided by NDEx. This is not the same as a Cytoscape

SUID.

username (optional) NDEx account username; required for private content optional) NDEx account password; required for private content accessKey (optional) NDEx accessKey; alternate access to private content

ndex.url (optional) For alternative instances or deployments of NDEx; default is "http://ndexbio.org"

ndex.version (optional) For alternative versions of the NDEx API; default is "v2"

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

importVisualStyles

Value

```
(integer) SUID of imported network
```

Examples

```
importNetworkFromNDEx(ndex.id)
```

 $import \verb|VisualStyles|$

Import Visual Styles

Description

Loads styles from an XML file and returns the names of the loaded styles.

Usage

```
importVisualStyles(filename = "styles.xml", base.url = .defaultBaseUrl)
```

Arguments

filename (char) Name of the style file to load. Only reads XML files. Default is "styles.xml".

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

(list) Names of styles loaded

See Also

exportVisualStyles

Examples

```
importVisualStyles()
```

installApp 163

installApp Install App

Description

Installs an app in Cytoscape.

Usage

```
installApp(app, base.url = .defaultBaseUrl)
```

Arguments

app Name of app

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

installApp()

Description

Select all edges that were not selected and deselect all edges that were selected.

Usage

```
invertEdgeSelection(network = NULL, base.url = .defaultBaseUrl)
```

Arguments

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

164 invertNodeSelection

Value

list of newly selected edge SUIDs

Author(s)

AlexanderPico, Tanja Muetze, Georgi Kolishovski, Paul Shannon

Examples

```
invertEdgeSelection()
```

invertNodeSelection

Invert Node Selection

Description

Select all nodes that were not selected and deselect all nodes that were selected.

Usage

```
invertNodeSelection(network = NULL, base.url = .defaultBaseUrl)
```

Arguments

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

list of newly selected node SUIDs

Author(s)

AlexanderPico, Tanja Muetze, Georgi Kolishovski, Paul Shannon

Examples

invertNodeSelection()

layoutCopycat 165

layoutCopycat	Copy a layout from one network to another	

Description

Sets the coordinates for each node in the target network to the coordinates of a matching node in the source network.

Usage

```
layoutCopycat(
  sourceNetwork,
  targetNetwork,
  sourceColumn = "name",
  targetColumn = "name",
  gridUnmapped = TRUE,
  selectUnmapped = TRUE,
  base.url = .defaultBaseUrl
)
```

Arguments

sourceNetwork	(character) The name of network to get node coordinates from
targetNetwork	(character) The name of the network to apply coordinates to
sourceColumn	(optional character) The name of column in the sourceNetwork node table used to match nodes; default is 'name'
targetColumn	(optional character) The name of column in the targetNetwork node table used to match nodes; default is 'name'
gridUnmapped	(optional character) If this is set to true, any nodes in the target network that could not be matched to a node in the source network will be laid out in a grid; default is TRUE
selectUnmapped	optional character) If this is set to true, any nodes in the target network that could not be matched to a node in the source network will be selected in the target network; default is TRUE
base.url	(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Details

Optional parameters such as gridUnmapped and selectUnmapped determine the behavior of target network nodes that could not be matched.

Value

None

166 layoutNetwork

Examples

```
layoutCopycat('network1', 'network2')
```

layoutNetwork

Apply a layout to a network

Description

Apply a layout to a network

Usage

```
layoutNetwork(layout.name = NULL, network = NULL, base.url = .defaultBaseUrl)
```

Arguments

layout.name (character) Name of the layout (with optional parameters). If not specified,

then the preferred layout set in the Cytoscape UI is applied.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

Run getLayoutNames to list available layouts.

Value

None

Examples

```
layoutNetwork()
```

layoutNetwork('force-directed')

 $layout Network ('force-directed \ default Spring Coefficient = .00006 \ default Spring Length = 80')$

listGroups 167

listGroups

List Groups

Description

Retrieve a list of all group SUIDs in a network.

Usage

```
listGroups(network = NULL, base.url = .defaultBaseUrl)
```

Arguments

network (optional) Name

(optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

List of group SUIDs

Examples

listGroups()

loadTableData

Loads data into Cytoscape tables keyed by row

Description

This function loads data into Cytoscape node/edge/network tables provided a common key, e.g., name. Data.frame column names will be used to set Cytoscape table column names.

```
loadTableData(
  data,
  data.key.column = "row.names",
  table = "node",
  table.key.column = "name",
  namespace = "default",
  network = NULL,
  base.url = .defaultBaseUrl
)
```

168 lockNodeDimensions

Arguments

data (data.frame) each row is a node and columns contain node attributes

data.key.column

(char) name of data.frame column to use as key; default is "row.names"

table (char) name of Cytoscape table to load data into, e.g., node, edge or network;

default is "node"

table.key.column

(char) name of Cytoscape table column to use as key; default is "name"

namespace of table, e.g., default

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

Numeric values will be stored as Doubles in Cytoscape tables. Integer values will be stored as Integers. Character or mixed values will be stored as Strings. Logical values will be stored as Boolean. Lists are stored as Lists by CyREST v3.9+. Existing columns with the same names will keep original type but values will be overwritten.

Value

server response

lockNodeDimensions Lock Node Dimensions

Description

Set a boolean value to have node width and height fixed to a single size value.

Usage

lockNodeDimensions(new.state, style.name = NULL, base.url = .defaultBaseUrl)

Arguments

new.state (Boolean) Whether to lock node width and height

style.name Name of style; default is "default" style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

makeSimpleGraph 169

Value

None

Examples

lockNodeDimensions(TRUE)

makeSimpleGraph

Make Simple Graph

Description

This function creates a simple graphNEL object with various node and edge attribute types to help demonstrate round trip conversion with Cytoscape networks via RCy3.

Usage

```
makeSimpleGraph()
```

Value

A graphNEL object with a few nodes, edges and attributes

See Also

 $createNetworkFromGraph,\,createGraphFromNetwork,\,makeSimpleIgraph$

Examples

```
{
makeSimpleGraph()
}
```

 ${\tt makeSimpleIgraph}$

Make Simple Igraph

Description

This function creates a simple iGraph object with various node and edge attribute types to help demonstrate round trip conversion with Cytoscape networks via RCy3.

```
makeSimpleIgraph()
```

mapTableColumn

Value

A igraph object with a few nodes, edges and attributes

See Also

 $create Network From I graph, \, create I graph From Network, \, make Simple Graph \,$

Examples

```
{
makeSimpleIgraph()
}
```

mapTableColumn

Map Table Column

Description

Perform identifier mapping using an existing column of supported identifiers to populate a new column with identifiers mapped to the originals.

Usage

```
mapTableColumn(
  column,
  species,
  map.from,
  map.to,
  force.single = TRUE,
  table = "node",
  namespace = "default",
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

column	Name of column containing identifiers of type specified by map. from.
species	Common name for species associated with identifiers, e.g., Human. See details.
map.from	Type of identifier found in specified column. See details.
map.to	Type of identifier to populate in new column. See details.
force.single	(optional) Whether to return only first result in cases of one-to-many mappings; otherwise the new column will hold lists of identifiers. Default is TRUE.
table	(optional) Name of table, e.g., node (default), edge or network
namespace	(optional) Namespace of table, e.g., default (default), shared or hidden

map Visual Property 171

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

Supported species: Human, Mouse, Rat, Frog, Zebrafish, Fruit fly, Mosquito, Worm, Arabidopsis thaliana, Yeast, E. coli, Tuberculosis.

Supported identifier types (depending on species): Ensembl, Entrez Gene, Uniprot-TrEMBL, miR-Base, UniGene, HGNC (symbols), MGI, RGD, SGD, ZFIN, FlyBase, WormBase, TAIR.

Value

dataframe with map.from and map.to columns. Beware: if map.to is not unique, it will be suffixed with an incrementing number in parentheses, e.g., if mapIdentifiers is repeated on the same network. However, the original map.to column will be returned regardless.

Examples

mapVisualProperty

Creates a mapping between an attribute and a visual property

Description

Generates the appropriate data structure for the "mapping" parameter in updateStyleMapping.

```
mapVisualProperty(
  visual.prop,
  table.column,
  mapping.type,
  table.column.values,
  visual.prop.values,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

172 mapVisualProperty

Arguments

visual.prop (char) name of visual property to map table.column (char) name of table column to map

mapping.type (char) continuous, discrete or passthrough (c,d,p)

table.column.values

(list) list of values paired with visual.prop.values; skip for passthrough mapping

visual.prop.values

(list) list of values paired with table.column.values; skip for passthrough map-

ping

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

The paired list of values must be of the same length or mapping will fail. For gradient mapping, you may include two additional visual.prop.values in the first and last positions to map respectively to values less than and greater than those specified in table.column.values. Mapping will also fail if the data type of table.column.values does not match that of the existing table.column. Note that all imported numeric data are stored as Integers or Doubles in Cytosacpe tables; and character or mixed data are stored as Strings.

Value

(network=network, base.url=base.url) ready to convert into JSON by style mapping operations

List of visual properties

Node Border Stroke	Edge Bend	Network Background Paint
Node Border Paint	Edge Curved	Network Center X Location
Node Border Transparency	Edge Label	Network Center Y Location
Node Border Width	Edge Label Color	Network Center Z Location

Node CustomGraphics 1-9 Edge Label Font Face Network Depth

Node CustomGraphics Position 1-9 Edge Label Font Size Network Edge Selection

Node CustomGraphics Size 1-9 Edge Label Transparency Network Height

Node CustomPaint 1-9Edge Label WidthNetwork Node SelectionNode DepthEdge Line TypeNetwork Scale Factor

Node Fill ColorEdge PaintNetwork SizeNode HeightEdge SelectedNetwork TitleNode LabelEdge Selected PaintNetwork Width

Node Label Color Edge Source Arrow Selected Paint

Node Label Font Face Edge Source Arrow Shape Node Label Font Size Edge Source Arrow Size

Node Label Position Edge Source Arrow Unselected Paint

Node Label Transparency
Node Label Width
Edge Stroke Selected Paint
Edge Stroke Unselected Paint
Edge Target Arrow Selected Paint
Edge Target Arrow Selected Paint

Node Paint Edge Target Arrow Shape Node Selected Edge Target Arrow Size

Node Selected Paint Edge Target Arrow Unselected Paint

Node ShapeEdge TooltipNode SizeEdge TransparencyNode TooltipEdge Unselected Paint

Node Transparency Edge Visible

Node Visible Edge Visual Property

Node Width Edge Width

Node X Location Node Y Location Node Z Location

See Also

updateStyleMapping getVisualPropertyNames

Examples

```
mapVisualProperty('node fill color','score','c',c(-4.0,0.0,9.0),c('#99CCFF','#FFFFFF','#FF7777'))
mapVisualProperty('node shape','type','d',c('protein','metabolite'),c('ellipse','rectangle'))
mapVisualProperty('node label','alias','p')
```

matchArrowColorToEdge Match Arrow Color To Edge

Description

Set a boolean value to have arrow shapes share the same color as the edge.

Usage

```
matchArrowColorToEdge(new.state, style.name = NULL, base.url = .defaultBaseUrl)
```

Arguments

new. state (Boolean) Whether to match arrow color to edge.

style.name Name of style; default is "default" style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

174 mergeNetworks

Value

None

Examples

matchArrowColorToEdge(TRUE)

mergeNetworks

Merge Networks

Description

Combine networks via union, intersection, or difference operations. Lots of optional parameters choose from!

Usage

```
mergeNetworks(
   sources = NULL,
   title = NULL,
   operation = "union",
   nodeKeys = NULL,
   nodeMergeMap = NULL,
   nodesOnly = FALSE,
   edgeKeys = NULL,
   edgeMergeMap = NULL,
   networkMergeMap = NULL,
   inNetworkMerge = TRUE,
   base.url = .defaultBaseUrl
)
```

Arguments

sources List of network names (max:2) to be merged.

title (optional) Title of the resulting merged network. Default is a concatentation of

operation and source network titles.

operation (optional) Type of merge: union (default), intersection or difference.

nodeKeys (optional) An order-dependent list of columns to match nodes across source

networks. Default is "name" column for all sources.

nodeMergeMap (optional) A list of column merge records specifying how to merge node table

data. Each record should be of the form: c("network1 column", "network2 column", "merged column", "type"), where column names are provided and type is

String, Integer, Double or List.

nodesOnly (optional) If TRUE, this will merge the node tables and ignore edge and network

table data. Default is FALSE.

edgeKeys (optional) An order-dependent list of columns to match edges across source net-

works. Default is "name" column for all sources.

edgeMergeMap (optional) A list of column merge records specifying how to merge edge table

data. Each record should be of the form: $c("network1\ column", "network2\ column", "merged\ column", "type")$, where column names are provided and type is

String, Integer, Double or List.

networkMergeMap

(optional) A list of column merge records specifying how to merge network table data. Each record should be of the form: c("network1 column", "network2 column", "merged column", "type"), where column names are provided and type

is String, Integer, Double or List.

inNetworkMerge (optional) If TRUE (default), nodes and edges with matching attributes in the

same network will be merged.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

SUID of resulting merged network

Examples

notebookExportShowImage

notebookExportShowImage

Description

Show network view in notebook output.

```
notebookExportShowImage(
  filename = "image",
  type = "PNG",
  resolution = NULL,
  units = NULL,
  height = NULL,
  width = NULL,
  zoom = NULL,
```

```
sandboxName = NULL,
network = NULL,
base.url = .defaultBaseUrl,
overwriteFile = TRUE
)
```

Arguments

filename (character) Full path or path relative to current working directory, in addition

to the name of the file. Extension is automatically added based on the type

argument. If blank, the current network name will be used.

type (character) Type of image to export, e.g., PNG (default), JPEG, PDF, SVG.

resolution (numeric) The resolution of the exported image, in DPI. Valid only for bitmap

formats, when the selected width and height 'units' is inches. The possible

values are: 72 (default), 100, 150, 300, 600.

units (character) The units for the 'width' and 'height' values. Valid only for bitmap

formats, such as PNG and JPEG. The possible values are: pixels (default),

inches

height (numeric) The height of the exported image. Valid only for bitmap formats,

such as PNG and JPEG.

width (numeric) The width of the exported image. Valid only for bitmap formats, such

as PNG and JPEG.

zoom (numeric) The zoom value to proportionally scale the image. The default value

is 100.0. Valid only for bitmap formats, such as PNG and JPEG

sandboxName Name of sandbox containing file. None means "the current sandbox".

network (optional) Name or SUID of a network or view. Default is the "current" network

active in Cytoscape. The first (presummably only) view associated a network is

used if a specific view SUID is not provided.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

overwriteFile (optional) FALSE allows Cytoscape show a message box before overwriting the

file if the file already exists; TRUE allows Cytoscape to overwrite it without

asking. Default value is TRUE.

Details

Show network view in notebook output.

Value

display image

Examples

notebookExportShowImage()

notebookShowImage 177

 ${\tt notebookShowImage}$

notebook Show Image

Description

Show network view in notebook output.

Usage

```
notebookShowImage(
  filename = "image",
  type = "PNG",
  resolution = NULL,
  units = NULL,
  height = NULL,
  width = NULL,
  zoom = NULL,
  sandboxName = NULL,
  network = NULL,
  base.url = .defaultBaseUrl,
  overwriteFile = TRUE
)
```

Arguments

filename	(character) Full path or path relative to current working directory, in addition to the name of the file. Extension is automatically added based on the type argument. If blank, the current network name will be used.
type	(character) Type of image to export, e.g., PNG (default), JPEG, PDF, SVG.
resolution	(numeric) The resolution of the exported image, in DPI. Valid only for bitmap formats, when the selected width and height 'units' is inches. The possible values are: 72 (default), 100, 150, 300, 600.
units	(character) The units for the 'width' and 'height' values. Valid only for bitmap formats, such as PNG and JPEG. The possible values are: pixels (default), inches.
height	(numeric) The height of the exported image. Valid only for bitmap formats, such as PNG and JPEG.
width	(numeric) The width of the exported image. Valid only for bitmap formats, such as PNG and JPEG.
ZOOM	(numeric) The zoom value to proportionally scale the image. The default value is 100.0. Valid only for bitmap formats, such as PNG and JPEG
sandboxName	Name of sandbox containing file. None means "the current sandbox".
network	(optional) Name or SUID of a network or view. Default is the "current" network active in Cytoscape. The first (presummably only) view associated a network is used if a specific view SUID is not provided.

178 openAppStore

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

overwriteFile (optional) FALSE allows Cytoscape show a message box before overwriting the

file if the file already exists; TRUE allows Cytoscape to overwrite it without

asking. Default value is TRUE.

Details

Show network view in notebook output.

Value

display image

Examples

notebookShowImage()

openAppStore

Open App Store Page

Description

Opens the Cytoscape App Store in a new tab in your default browser.

Usage

```
openAppStore(app, base.url = .defaultBaseUrl)
```

Arguments

app Name of app

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

openAppStore()

openSession 179

openSession

Open Session File or URL

Description

Open a session file or URL. This will clear all networks, tables and styles associated with current session. Be sure to saveSession first.

Usage

```
openSession(file.location = NULL, base.url = .defaultBaseUrl)
```

Arguments

file.location File

File path or URL (with 'http' or 'https' prefix). Default is a sample session file.

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

None

See Also

saveSession

Examples

```
openSession('/fullpath/mySession.CYS')
```

```
paletteColorBrewerAccent
```

paletteColorBrewerAccent Qualitative

Description

Generate a qualitative Accent Brewer palette of a given size

```
paletteColorBrewerAccent(value.count = 3)
```

Arguments

value.count Number of colors to generate; min is 3 (default); max is 8. See RColor-

Brewer::display.brewer.all()

Value

List of palette colors

Examples

```
paletteColorBrewerAccent()
```

paletteColorBrewerBlues

paletteColorBrewerBlues Sequential

Description

Generate a sequential Blues Brewer palette of a given size

Usage

```
paletteColorBrewerBlues(value.count = 3)
```

Arguments

value.count

Number of colors to generate; min is 3 (default); max is 9. See RColor-Brewer::display.brewer.all()

Value

List of palette colors

Examples

```
paletteColorBrewerBlues()
```

paletteColorBrewerBrBG

paletteColorBrewerBrBG Divergent

Description

Generate a divergent BrBG Brewer palette of a given size

Usage

```
paletteColorBrewerBrBG(value.count = 3)
```

Arguments

value.count

Number of colors to generate; min is 3 (default); max is 9 . See RColor-Brewer::display.brewer.all()

Value

List of palette colors

Examples

```
paletteColorBrewerBrBG()
```

paletteColorBrewerBuGn

paletteColorBrewerBuGn Sequential

Description

Generate a sequential BuGn Brewer palette of a given size

Usage

```
paletteColorBrewerBuGn(value.count = 3)
```

Arguments

value.count

Number of colors to generate; min is 3 (default); max is 9. See RColor-Brewer::display.brewer.all()

Value

List of palette colors

Examples

```
paletteColorBrewerBuGn()
```

paletteColorBrewerBuPu

paletteColorBrewerBuPu Sequential

Description

Generate a sequential BuPu Brewer palette of a given size

Usage

```
paletteColorBrewerBuPu(value.count = 3)
```

Arguments

value.count

Number of colors to generate; min is 3 (default); max is 9. See RColor-Brewer::display.brewer.all()

Value

List of palette colors

Examples

```
paletteColorBrewerBuPu()
```

paletteColorBrewerDark2

paletteColorBrewerDark2 Qualitative

Description

Generate a qualitative Dark2 Brewer palette of a given size

Usage

```
paletteColorBrewerDark2(value.count = 3)
```

Arguments

value.count

Number of colors to generate; min is 3 (default); max is 8. See RColor-Brewer::display.brewer.all()

Value

List of palette colors

Examples

```
paletteColorBrewerDark2()
```

paletteColorBrewerGnBu

paletteColorBrewerGnBu Sequential

Description

Generate a sequential GnBu Brewer palette of a given size

Usage

```
paletteColorBrewerGnBu(value.count = 3)
```

Arguments

value.count

Number of colors to generate; min is 3 (default); max is 9. See RColor-Brewer::display.brewer.all()

Value

List of palette colors

Examples

```
paletteColorBrewerGnBu()
```

paletteColorBrewerGreens

 $palette Color Brewer Greens\ Sequential$

Description

Generate a sequential Greens Brewer palette of a given size

```
paletteColorBrewerGreens(value.count = 3)
```

Arguments

value.count Number of colors to generate; min is 3 (default); max is 9. See RColor-

Brewer::display.brewer.all()

Value

List of palette colors

Examples

```
paletteColorBrewerGreens()
```

paletteColorBrewerGreys

paletteColorBrewerGreys Sequential

Description

Generate a sequential Greys Brewer palette of a given size

Usage

```
paletteColorBrewerGreys(value.count = 3)
```

Arguments

value.count

Number of colors to generate; min is 3 (default); max is 9. See RColor-Brewer::display.brewer.all()

Value

List of palette colors

Examples

paletteColorBrewerGreys()

paletteColorBrewerOranges

paletteColorBrewerOranges Sequential

Description

Generate a sequential Oranges Brewer palette of a given size

Usage

```
paletteColorBrewerOranges(value.count = 3)
```

Arguments

value.count

Number of colors to generate; min is 3 (default); max is 9. See RColor-Brewer::display.brewer.all()

Value

List of palette colors

Examples

```
paletteColorBrewerOranges()
```

paletteColorBrewerOrRd

paletteColorBrewerOrRd Sequential

Description

Generate a sequential OrRd Brewer palette of a given size

Usage

```
paletteColorBrewerOrRd(value.count = 3)
```

Arguments

value.count

Number of colors to generate; min is 3 (default); max is 9. See RColor-Brewer::display.brewer.all()

Value

List of palette colors

Examples

```
paletteColorBrewerOrRd()
```

paletteColorBrewerPaired

paletteColorBrewerPaired Qualitative

Description

Generate a qualitative Paired Brewer palette of a given size

Usage

```
paletteColorBrewerPaired(value.count = 3)
```

Arguments

value.count

Number of colors to generate; min is 3 (default); max is 12. See RColor-Brewer::display.brewer.all()

Value

List of palette colors

Examples

```
paletteColorBrewerPaired()
```

paletteColorBrewerPastel1

paletteColorBrewerPastel1 Qualitative

Description

Generate a qualitative Pastell Brewer palette of a given size

Usage

```
paletteColorBrewerPastel1(value.count = 3)
```

Arguments

value.count

Number of colors to generate; min is 3 (default); max is 9. See RColor-Brewer::display.brewer.all()

Value

List of palette colors

Examples

```
paletteColorBrewerPastel1()
```

```
paletteColorBrewerPastel2
```

paletteColorBrewerPastel2 Qualitative

Description

Generate a qualitative Pastel2 Brewer palette of a given size

Usage

```
paletteColorBrewerPastel2(value.count = 3)
```

Arguments

value.count

Number of colors to generate; min is 3 (default); max is 8 . See RColor-Brewer::display.brewer.all()

Value

List of palette colors

Examples

```
paletteColorBrewerPastel2()
```

paletteColorBrewerPiYG

paletteColorBrewerPiYG Divergent

Description

Generate a divergent PiYG Brewer palette of a given size

```
paletteColorBrewerPiYG(value.count = 3)
```

Arguments

value.count Number of colors to generate; min is 3 (default); max is 9. See RColor-

Brewer::display.brewer.all()

Value

List of palette colors

Examples

```
paletteColorBrewerPiYG()
```

paletteColorBrewerPRGn

paletteColorBrewerPRGn Divergent

Description

Generate a divergent PRGn Brewer palette of a given size

Usage

```
paletteColorBrewerPRGn(value.count = 3)
```

Arguments

value.count

Number of colors to generate; min is 3 (default); max is 9. See RColor-Brewer::display.brewer.all()

Value

List of palette colors

```
paletteColorBrewerPRGn()
```

paletteColorBrewerPuBu

paletteColorBrewerPuBu Sequential

Description

Generate a sequential PuBu Brewer palette of a given size

Usage

```
paletteColorBrewerPuBu(value.count = 3)
```

Arguments

value.count

Number of colors to generate; min is 3 (default); max is 9 . See RColor-Brewer::display.brewer.all()

Value

List of palette colors

Examples

```
paletteColorBrewerPuBu()
```

paletteColorBrewerPuBuGn

paletteColorBrewerPuBuGn Sequential

Description

Generate a sequential PuBuGn Brewer palette of a given size

Usage

```
paletteColorBrewerPuBuGn(value.count = 3)
```

Arguments

value.count

Number of colors to generate; min is 3 (default); max is 9. See RColor-Brewer::display.brewer.all()

Value

List of palette colors

Examples

```
paletteColorBrewerPuBuGn()
```

paletteColorBrewerPuOr

paletteColorBrewerPuOr Divergent

Description

Generate a divergent PuOr Brewer palette of a given size

Usage

```
paletteColorBrewerPuOr(value.count = 3)
```

Arguments

value.count

Number of colors to generate; min is 3 (default); max is 9. See RColor-Brewer::display.brewer.all()

Value

List of palette colors

Examples

```
paletteColorBrewerPuOr()
```

 $\verb"paletteColorBrewerPuRd"$

paletteColorBrewerPuRd Sequential

Description

Generate a sequential PuRd Brewer palette of a given size

Usage

```
paletteColorBrewerPuRd(value.count = 3)
```

Arguments

value.count

Number of colors to generate; min is 3 (default); max is 9. See RColor-Brewer::display.brewer.all()

Value

List of palette colors

Examples

```
paletteColorBrewerPuRd()
```

paletteColorBrewerPurples

paletteColorBrewerPurples Sequential

Description

Generate a sequential Purples Brewer palette of a given size

Usage

```
paletteColorBrewerPurples(value.count = 3)
```

Arguments

value.count

Number of colors to generate; min is 3 (default); max is 9. See RColor-Brewer::display.brewer.all()

Value

List of palette colors

Examples

```
paletteColorBrewerPurples()
```

paletteColorBrewerRdBu

paletteColorBrewerRdBu Divergent

Description

Generate a divergent RdBu Brewer palette of a given size

```
paletteColorBrewerRdBu(value.count = 3)
```

Arguments

value.count Number of colors to generate; min is 3 (default); max is 9. See RColor-

Brewer::display.brewer.all()

Value

List of palette colors

Examples

```
paletteColorBrewerRdBu()
```

paletteColorBrewerRdPu

paletteColorBrewerRdPu Sequential

Description

Generate a sequential RdPu Brewer palette of a given size

Usage

```
paletteColorBrewerRdPu(value.count = 3)
```

Arguments

value.count

Number of colors to generate; min is 3 (default); max is 9. See RColor-Brewer::display.brewer.all()

Value

List of palette colors

```
paletteColorBrewerRdPu()
```

paletteColorBrewerRdYlBu

paletteColorBrewerRdYlBu Divergent

Description

Generate a divergent RdYlBu Brewer palette of a given size

Usage

```
paletteColorBrewerRdYlBu(value.count = 3)
```

Arguments

value.count

Number of colors to generate; min is 3 (default); max is 9 . See RColor-Brewer::display.brewer.all()

Value

List of palette colors

Examples

```
paletteColorBrewerRdYlBu()
```

paletteColorBrewerReds

paletteColorBrewerReds Sequential

Description

Generate a sequential Reds Brewer palette of a given size

Usage

```
paletteColorBrewerReds(value.count = 3)
```

Arguments

value.count

Number of colors to generate; min is 3 (default); max is 9. See RColor-Brewer::display.brewer.all()

Value

List of palette colors

Examples

```
paletteColorBrewerReds()
```

paletteColorBrewerSet1

paletteColorBrewerSet1 Qualitative

Description

Generate a qualitative Set1 Brewer palette of a given size

Usage

```
paletteColorBrewerSet1(value.count = 3)
```

Arguments

value.count

Number of colors to generate; min is 3 (default); max is 9. See RColor-Brewer::display.brewer.all()

Value

List of palette colors

Examples

```
paletteColorBrewerSet1()
```

 $\verb"paletteColorBrewerSet2"$

paletteColorBrewerSet2 Qualitative

Description

Generate a qualitative Set2 Brewer palette of a given size

Usage

```
paletteColorBrewerSet2(value.count = 3)
```

Arguments

value.count

Number of colors to generate; min is 3 (default); max is 8 . See RColor-Brewer::display.brewer.all()

paletteColorBrewerSet3 195

Value

List of palette colors

Examples

```
paletteColorBrewerSet2()
```

paletteColorBrewerSet3

paletteColorBrewerSet3 Qualitative

Description

Generate a qualitative Set3 Brewer palette of a given size

Usage

```
paletteColorBrewerSet3(value.count = 3)
```

Arguments

value.count

Number of colors to generate; min is 3 (default); max is 12. See RColor-Brewer::display.brewer.all()

Value

List of palette colors

Examples

```
paletteColorBrewerSet3()
```

paletteColorBrewerYlGn

 $palette Color BrewerYl Gn\ Sequential$

Description

Generate a sequential YlGn Brewer palette of a given size

```
paletteColorBrewerYlGn(value.count = 3)
```

Arguments

value.count Number of colors to generate; min is 3 (default); max is 9. See RColor-

Brewer::display.brewer.all()

Value

List of palette colors

Examples

```
paletteColorBrewerYlGn()
```

paletteColorBrewerYlGnBu

paletteColorBrewerYlGnBu Sequential

Description

Generate a sequential YlGnBu Brewer palette of a given size

Usage

```
paletteColorBrewerYlGnBu(value.count = 3)
```

Arguments

value.count

Number of colors to generate; min is 3 (default); max is 9 . See RColor-Brewer::display.brewer.all()

Value

List of palette colors

Examples

paletteColorBrewerYlGnBu()

paletteColorBrewerYlOrBr

 $palette Color Brewer Yl Or Br\ Sequential$

Description

Generate a sequential YlOrBr Brewer palette of a given size

Usage

```
paletteColorBrewerYlOrBr(value.count = 3)
```

Arguments

value.count

Number of colors to generate; min is 3 (default); max is 9 . See RColor-Brewer::display.brewer.all()

Value

List of palette colors

Examples

```
paletteColorBrewerYlOrBr()
```

paletteColorBrewerYlOrRd

paletteColorBrewerYlOrRd Sequential

Description

Generate a sequential YlOrRd Brewer palette of a given size

Usage

```
paletteColorBrewerYlOrRd(value.count = 3)
```

Arguments

value.count

Number of colors to generate; min is 3 (default); max is 9 . See RColor-Brewer::display.brewer.all()

Value

List of palette colors

198 *RCy3*

Examples

```
paletteColorBrewerYlOrRd()
```

paletteColorRandom

paletteColorRandom Qualitative

Description

Generate a qualitative random color map of a given size

Usage

```
paletteColorRandom(value.count = 1)
```

Arguments

value.count

Number of colors to generate; default is 1

Value

List of random colors

See Also

genNodeColorMap genEdgeColorMap

Examples

paletteColorRandom()

RCy3

RCy3: Functions to Access and Control Cytoscape

Description

Vizualize, analyze and explore networks using Cytoscape via R.

Details

To learn more about RCy3, start with the vignettes: browseVignettes("RCy3")

RemoveFromGroup 199

RemoveFromGroup Remove from Group	emoveFromGroup	Group I
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Description

Removes the specified nodes and edges from the specified group.

Usage

```
RemoveFromGroup(
  group.name,
  nodes = NULL,
  nodes.by.col = "SUID",
  edges = NULL,
  edges.by.col = "SUID",
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

group.name	Specifies the name used to identify the group
nodes	List of node SUIDs, names, other column values, or keyword: selected, unselected or all. Default is currently selected nodes.
nodes.by.col	name of node table column corresponding to provided nodes list. Default is 'SUID'.
edges	List of edge SUIDs, names, other column values, or keyword: selected, unselected or all. Default is currently selected edges.
edges.by.col	name of edge table column corresponding to provided edges list. Default is 'SUID'.
network	(optional) Name or SUID of the network. Default is the "current" network active in Cytoscape.
base.url	(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

None

```
RemoveFromGroup('myGroup')
```

200 renameNetwork

 ${\tt removeNodeCustomGraphics}$

Remove Node Custom Graphics

Description

Remove the default custom charts, images and gradients.

Usage

```
removeNodeCustomGraphics(
  slot = 1,
  style.name = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

slot (optional) Which custom graphics slot to modify. Slots 1-9 are available for

independent charts, gradients and images. Default is 1.

style.name (optional) Name of style; default is "default" style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

removeNodeCustomGraphics()

renameNetwork

Rename a network

Description

Sets a new name for this network

```
renameNetwork(title, network = NULL, base.url = .defaultBaseUrl)
```

renameTableColumn 201

Arguments

title New name for the network

network (optional) Name or suid of the network that you want to rename; default is

"current" network

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

Duplicate network names are not allowed

Value

None

Author(s)

Alexander Pico, Julia Gustavsen

Examples

```
renameNetwork("renamed network")
```

renameTableColumn

Rename Table Column

Description

Sets a new name for a column.

```
renameTableColumn(
  column,
  new.name,
  table = "node",
  namespace = "default",
  network = NULL,
  base.url = .defaultBaseUrl
)
```

202 resetDefaultSandbox

Arguments

column Name of the column to rename

new.name New name for the specified column

table (optional) Name of table, e.g., node (default), edge or network

namespace (optional) Namespace of table, e.g., default (default), shared or hidden

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
renameTableColumn('exp','log2FC')
```

resetDefaultSandbox resetDefaultSandbox

Description

Reset the entire state of the sandbox system.

Usage

resetDefaultSandbox()

Value

None

Examples

resetDefaultSandbox()

rotateLayout 203

rotateLayout

Rotate Layout

Description

Rotate the layout.

Usage

```
rotateLayout(
  angle,
  selected.only = FALSE,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

angle The angle (in degrees) to rotate the network. From -180 to 180

selected.only (Boolean) Whether to rotate only current selection. Default is false.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Author(s)

Yihang Xin

```
rotateLayout(90, 'current', selected.only=FALSE)
```

204 sandboxGetFileInfo

runningRemoteCheck

runningRmoteCheck

Description

runningRmoteCheck

Usage

```
runningRemoteCheck(base.url = .defaultBaseUrl, newState = NULL)
```

Arguments

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

newState new state of running remote

Value

oldState

Examples

runningRmoteCheck()

sandboxGetFileInfo

sandboxGetFileInfo

Description

Get metadata on file in sandbox (or entire sandbox). If the current sandbox is the entire file system on a Cytoscape workstation, trying to delete it is an error. Otherwise, deleting the current sandbox results in the default sandbox becoming the new current sandbox. When running standalone on the same workstation as Cytoscape, the default sandbox is the entire file system on the Cytoscape workstation. When running in a Notebook or remote server, the default sandbox is the 'default_sandbox' created automatically under the under the filetransfer directory in the CytoscapeConfiguration directory. If that sandbox is deleted, it will be re-created so that subsequent file operations can complete successfully. Note that this function can be used to query either a file or a directory.

```
sandboxGetFileInfo(fileName, sandboxName = NULL, base.url = .defaultBaseUrl)
```

sandboxGetFrom 205

Arguments

fileName Name of file whose metadata to return ... can be sandbox-relative path ... "."

returns metadata on sandbox itself

sandboxName Name of sandbox containing file. None means "the current sandbox".

base.url Ignore unless you need to specify a custom domain, port or version to connect

to the CyREST API. Default is http://127.0.0.1:1234 and the latest version of

the CyREST API supported by this version of RCy3.

Value

dict: 'filePath': <full path on Cytoscape workstation>, 'modifiedTime': <last changed time, "if file doesn't exist>, 'isFile': <True if file, False if directory>

Examples

```
sandboxGetFileInfo()
```

sandboxGetFrom

sandboxGetFrom

Description

Transfer a file from a sandbox. The source file is transferred from the named (or current) sandbox to the R workflow's file system, overwriting an existing file if one already exists. The sourceFile can be an absolute path if the sandbox is the entire file system (i.e., for standalone R execution) or a path relative to the sandbox (i.e., for Notebook or remote execution or if a sandbox was explicitly created).

Usage

```
sandboxGetFrom(
  sourceFile,
  destFile = NULL,
  overwrite = TRUE,
  sandboxName = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

sourceFile Name of file to read (as absolute path or sandbox-relative path)

destFile Name of file in the R workflow's file system ... if None, use file name in

source_file

overwrite Name of sandbox containing file. None means "the current sandbox".

Name of sandbox containing file. None means "the current sandbox".

206 sandboxInitializer

base.url

Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://127.0.0.1:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

sandbox Get From

Examples

```
sandboxGetFrom()
```

sandboxInitializer

sandboxInitializer

Description

Start with a sandbox template and update properties using whatever is found in the new_sandbox.

Usage

```
sandboxInitializer(newSandbox = NULL, ...)
```

Arguments

```
newSandbox newSandbox
```

Value

sandbox

```
sandboxInitializer()
```

sandboxRemove 207

|--|

Description

Delete sandbox contents and remove its directory. If the current sandbox is the entire file system on a Cytoscape workstation, trying to delete it is an error. Otherwise, deleting the current sandbox results in the default sandbox becoming the new current sandbox. When running standalone on the same workstation as Cytoscape, the default sandbox is the entire file system on the Cytoscape workstation. When running in a Notebook or remote server, the default sandbox is the 'default_sandbox' created automatically under the under the filetransfer directory in the CytoscapeConfiguration directory. If that sandbox is deleted, it will be re-created so that subsequent file operations can complete successfully.

Usage

```
sandboxRemove(sandboxName = NULL, base.url = .defaultBaseUrl)
```

Arguments

sandboxName Name of sandbox to delete. None means to delete the current sandbox. If that

sandbox is the default sandbox, it is automatically re-created.

base.url Ignore unless you need to specify a custom domain, port or version to connect

to the CyREST API. Default is http://127.0.0.1:1234 and the latest version of

the CyREST API supported by this version of RCy3.

Value

dict: 'sandboxPath': <directory on Cytoscape workstation>, 'existed': <True if sandbox existed>

Examples

sandboxRemove()

sandboxRemoveFile

sandboxRemoveFile

Description

Remove a file from a sandbox. The named file is removed from the named sandbox. If the sandbox is the entire file system (i.e., for standalone R execution), the file name can be an absolute path. Otherwise, it is a path relative to the named sandbox. Note that there is no function that deletes a directory, except for sandboxRemove(), which deletes a sandbox and all of its contents.

208 sandboxSendTo

Usage

```
sandboxRemoveFile(fileName, sandboxName = NULL, base.url = .defaultBaseUrl)
```

Arguments

fileName Name of file to delete (as absolute path or sandbox-relative path)
sandboxName Name of sandbox containing file. None means "the current sandbox".

base.url Ignore unless you need to specify a custom domain, port or version to connect

to the CyREST API. Default is http://127.0.0.1:1234 and the latest version of

the CyREST API supported by this version of RCy3.

Value

dict: 'filePath': <file's absolute path in Cytoscape workstation>, 'existed': True if file existed before being deleted

Examples

```
sandboxRemoveFile()
```

sandboxSendTo

sandboxSendTo

Description

Transfer a file to a sandbox. The source file is transferred to the named (or current) sandbox, overwriting an existing file if one already exists. The destFile can be an absolute path if the sandbox is the entire file system (i.e., for standalone R execution) or a path relative to the sandbox (i.e., for Notebook or remote execution or if a sandbox was explicitly created). Note that there is no function that transfers an entire directory. Note, though, that when using sandboxSet() to make a sandbox current, it is possible to copy the Cytoscape sample data directories into to the sandbox at the same time.

```
sandboxSendTo(
  sourceFile,
  destFile = NULL,
  overwrite = TRUE,
  sandboxName = NULL,
  base.url = .defaultBaseUrl
)
```

sandboxSet 209

Arguments

sourceFile Name of file to read (as absolute path or sandbox-relative path)

destFile Name of file in the R workflow's file system ... if None, use file name in

source_file

overwrite Name of sandbox containing file. None means "the current sandbox".

sandboxName Name of sandbox containing file. None means "the current sandbox".

base.url Ignore unless you need to specify a custom domain, port or version to connect

to the CyREST API. Default is http://127.0.0.1:1234 and the latest version of

the CyREST API supported by this version of RCy3.

Value

sandboxSendTo

Examples

sandboxSendTo()

sandboxSet sandboxSet

Description

Set a new default sandbox, creating it if necessary. A sandbox is the root for the file system used for all file operations. When running standalone on the same workstation as Cytoscape, the default sandbox is the directory that's current for the R kernel. When running in a Notebook or remote server, the default sandbox is the 'default_sandbox' created automatically under the under the filetransfer directory in the CytoscapeConfiguration directory. Naming a sandbox with this function creates a new sub-directory as a sibling to 'default_sandbox' and uses it for subsequent file operations. Setting a None sandbox uses the default sandbox instead. Sandboxes are highly recommended as an aid to creating workflows that can be shared with others.

```
sandboxSet(
  sandboxName,
  copySamples = TRUE,
  reinitialize = TRUE,
  base.url = .defaultBaseUrl
)
```

210 sandboxUrlTo

Arguments

sandboxName Name of new default sandbox. None means to use the original default sandbox copySamples True to copy the Cytoscape sampleData into the sandbox reinitialize True to delete sandbox contents (if any) if sandbox already exists base.url Ignore unless you need to specify a custom domain, port or version to connect

to the CyREST API. Default is http://127.0.0.1:1234 and the latest version of

the CyREST API supported by this version of RCy3.

Value

sandbox path in Cytoscape workstation's file system

Examples

```
sandboxSet()
```

sandboxUrlTo

sandboxUrlTo

Description

Transfer a cloud-based file to a sandbox. The source URL identifies a file to be transferred to the named (or current) sandbox, overwriting an existing file if one already exists. The destFile can be an absolute path if the sandbox is the entire file system (i.e., for standalone R execution), or it can be a path relative to the sandbox (i.e., for Notebook or remote execution or if a sandbox was explicitly created).

Usage

```
sandboxUrlTo(
  sourceURL,
  destFile,
  overwrite = TRUE,
  sandboxName = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

base.url

sourceURL URL addressing cloud file to download

destFile Name of file in the R workflow's file system ... if None, use file name in

source_file

overwrite Name of sandbox containing file. None means "the current sandbox".

Name of sandbox containing file. None means "the current sandbox".

Ignore unless you need to specify a custom domain, port or version to connect

to the CyREST API. Default is http://127.0.0.1:1234 and the latest version of

the CyREST API supported by this version of RCy3.

saveSession 211

Value

dict: 'filePath': <new file's absolute path in Cytoscape workstation>, 'fileByteCount': number of bytes read

Examples

sandboxUrlTo()

saveSession

Save Session to File

Description

Saves the current Cytoscape session as a CYS file.

Usage

```
saveSession(filename = NULL, base.url = .defaultBaseUrl, overwriteFile = TRUE)
```

Arguments

of the file. The .cys extension is automatically added. Leave blank to update

previously saved session file.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

overwriteFile (optional) FALSE allows an error to be generated if the file already exists; TRUE

allows Cytoscape to overwrite it without asking. Default value is TRUE.

Details

If no filename is provided, then it attempts to save to an existing CYS file associated with the session. If filename already exists, then it is overwritten.

Unlike most export functions in RCy3, Cytoscape will automatically overwrite CYS session files with the same name. You will not be prompted to confirm or reject overwrite. Use carefully!

Value

server response

```
saveSession('/fullpath/mySession')
saveSession()
```

212 scaleLayout

scaleLayout

Scale Layout

Description

Scale the layout in either the X, Y, or both directions.

Usage

```
scaleLayout(
  axis,
  scaleFactor,
  selected.only = FALSE,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

axis The axis to scale. Options: "X Axis", "Y Axis", "Both Axes".

scaleFactor The axis The scale factor to apply to the network.

selected.only (Boolean) Whether to rotate only current selection. Default is false.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Author(s)

Yihang Xin

```
scaleLayout('X Axis', 2, 'current', selected.only=FALSE)
```

selectAll 213

selectAll

Select all nodes and edges

Description

Selects all nodes and edges in a Cytoscape Network

Usage

```
selectAll(network = NULL, base.url = .defaultBaseUrl)
```

Arguments

network (optional) Name or SUID of the network into which you want to select; default

is "current" network

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

Selects all nodes and edges in a specified network.

Author(s)

Alexander Pico, Julia Gustavsen

See Also

selectNodes

Examples

selectAllNodes()

selectAllEdges

Select all edges

Description

Selects all edges in a Cytoscape Network

```
selectAllEdges(network = NULL, base.url = .defaultBaseUrl)
```

214 selectAllNodes

Arguments

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

Selects all edges in a specified network.

Author(s)

Alexander Pico, Julia Gustavsen

Examples

```
cw <- CytoscapeWindow('new.demo', new('graphNEL'))
selectAllEdges(cw)</pre>
```

selectAllNodes

Select all nodes

Description

Selects all nodes in a Cytoscape Network

Usage

```
selectAllNodes(network = NULL, base.url = .defaultBaseUrl)
```

Arguments

network (optional) Name or SUID of the network into which you want to select; default

is "current" network

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

Selects all nodes in a specified network.

Author(s)

Alexander Pico, Julia Gustavsen

selectEdges 215

See Also

```
selectNodes
```

Examples

```
selectAllNodes()
```

selectEdges

Select Edges

Description

Select edges in the network by SUID, name or other column values.

Usage

```
selectEdges(
  edges,
  by.col = "SUID",
  preserve.current.selection = TRUE,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

edges List of edge SUIDs, names or other column values

by.col Edge table column to lookup up provide edge values. Default is 'SUID'.

preserve.current.selection

boolean Whether to maintain previously selected edges.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

list of newly selected edge SUIDs

Author(s)

AlexanderPico, Tanja Muetze, Georgi Kolishovski, Paul Shannon

Examples

```
selectEdges()
```

selectEdgesAdjacentToNodes

Select Edges Adjacent To Nodes

Description

Takes list of node SUIDs, names or other column values and adds to the selection all edges connected to those nodes, regardless of directionality.

Usage

```
selectEdgesAdjacentToNodes(
  nodes,
  by.col = "name",
  selectNodes = TRUE,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

nodes List of node SUIDs, names or other column values

by.col Node table column to lookup up provide node values. Default is 'name'.

selectNodes The default is TRUE. If TRUE, nodes will also be selected.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

Lists of SUIDs for selected nodes and edges

```
selectEdgesAdjacentToNodes()
```

select Edges Adjacent To Selected Nodes

Select Edges Adjacent To Selected Nodes

Description

Takes currently selected nodes and adds to the selection all edges connected to those nodes, regardless of directionality.

Usage

selectEdgesAdjacentToSelectedNodes(network = NULL, base.url = .defaultBaseUrl)

Arguments

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

Lists of SUIDs for selected nodes and edges

Examples

selectEdgesAdjacentToSelectedNodes()

selectEdgesConnectingSelectedNodes

Select the edges connecting selected nodes in Cytoscape Network

Description

Selects edges in a Cytoscape Network connecting the selected nodes, including self loops connecting single nodes.

Usage

selectEdgesConnectingSelectedNodes(network = NULL, base.url = .defaultBaseUrl)

218 selectFirstNeighbors

Arguments

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

Lists of SUIDs for selected nodes and edges

Author(s)

Alexander Pico, Julia Gustavsen

Examples

```
{\tt selectEdgesConnectingSelectedNodes()}
```

```
selectFirstNeighbors Select first neighbor nodes
```

Description

Select nodes directly connected to currently selected nodes. Can specify connection directionality using the direction param.

Usage

```
selectFirstNeighbors(
  direction = "any",
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

direction direction of connections to neighbors to follow, e.g., incoming, outgoing, undi-

rected, or any (default)

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

selectNodes 219

Value

list of suids of selected nodes, including original selection

Examples

```
selectFirstNeighbors()
selectFirstNeighors('outgoing')
selectFirstNeighors('incoming')
```

selectNodes

Select Nodes

Description

Select nodes in the network by SUID, name or other column values.

Usage

```
selectNodes(
  nodes,
  by.col = "SUID",
  preserve.current.selection = TRUE,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

nodes List of node SUIDs, names or other column values

by.col Node table column to lookup up provide node values. Default is 'SUID'.

preserve.current.selection

boolean Whether to maintain previously selected nodes.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

list of newly selected node SUIDs

Author(s)

AlexanderPico, Tanja Muetze, Georgi Kolishovski, Paul Shannon

selectNodes()

 ${\tt selectNodesConnectedBySelectedEdges}$

Select Nodes Connected By Selected Edges

Description

Takes currently selected edges and extends the selection to connected nodes, regardless of directionality.

Usage

selectNodesConnectedBySelectedEdges(network = NULL, base.url = .defaultBaseUrl)

Arguments

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

Lists of SUIDs for currently selected nodes and edges

Examples

selectNodesConnectedBySelectedEdges()

 ${\tt setBackgroundColorDefault}$

Set Background Color Default

Description

Set the default background color.

setCatchupFilterSecs 221

Usage

```
setBackgroundColorDefault(
  new.color,
  style.name = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

new.color Color as hex code, e.g., #FD5903 style.name Name of style; default is "default" style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setBackgroundColorDefault('#888888')
```

```
setCatchupFilterSecs Set Catchup Filter Delay
```

Description

This function sets an internal delay variable that allows Cytoscape to "catchup" prior to subsequent functions. Call without specifying secs to restore default value.

Usage

```
setCatchupFilterSecs(secs = 1)
```

Arguments

secs

Number of seconds to delay.

Details

This delay is only necessary while concurrency bugs exist in the Cytoscape application. This delay may need to be increased from the default value in certain use cases, e.g., larger networks.

Value

See Also

 $set Model Propagation Secs, \, set Catchup Network Secs \,$

Examples

```
{
setCatchupFilterSecs(2)
setCatchupFilterSecs() #restores default delay
}
```

setCatchupNetworkSecs Set Catchup Network Delay

Description

This function sets an internal delay variable that allows Cytoscape to "catchup" prior to subsequent functions. Call without specifying secs to restore default value.

Usage

```
setCatchupNetworkSecs(secs = 2)
```

Arguments

secs

Number of seconds to delay.

Details

This delay is only necessary while concurrency bugs exist in the Cytoscape application. This delay may need to be increased from the default value in certain use cases, e.g., larger networks.

Value

None

See Also

 $set Model Propagation Secs, \, set Catchup Filter Secs \,$

Examples

```
{
setCatchupNetworkSecs(2)
setCatchupNetworkSecs() #restores default delay
}
```

setCurrentNetwork 223

setCurrentNetwork

Set current network

Description

Selects the given network as "current"

Usage

```
setCurrentNetwork(network = NULL, base.url = .defaultBaseUrl)
```

Arguments

network (optional) Name or suid of the network that you want set as current

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

server response

Examples

setCurrentNetwork('MyNetwork')

setCurrentSandbox

setCurrentSandbox

Description

Set and return the current sandbox name and path.

Usage

```
setCurrentSandbox(sandboxName, sandboxPath)
```

Arguments

sandboxName sandboxPath sandboxPath

Value

current sandbox

224 setCurrentView

Examples

setCurrentSandbox()

setCurrentView

Set Current View

Description

Set which network view is "current".

Usage

```
setCurrentView(network = NULL, base.url = .defaultBaseUrl)
```

Arguments

network (optional) Name or SUID of a network or view. The first (presummably only)

view associated a network is used if a specific view SUID is not provided.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

Takes first (presumably only) view associated with provided network

Value

None

Examples

setCurrentView()

setDefaultSandbox 225

setDefaultSandbox

setDefaultSandbox

Description

Set and return the sandbox properties to be used as a default, probably based on whether running remote.

Usage

```
setDefaultSandbox(newSandbox = NULL, ...)
```

Arguments

```
newSandbox newSandbox
```

Value

default sandbox

Examples

```
setDefaultSandbox()
```

```
{\tt setDefaultSandboxPath} \ \ \textit{setDefaultSandboxPath}
```

Description

Set and return the default path, which isn't one of the properties tracked in the default_sandbox.

Usage

```
setDefaultSandboxPath(newPath)
```

Arguments

newPath new path of default sandbox

Value

default sandbox path

Examples

```
setDefaultSandboxPath()
```

226 setEdgeColorBypass

setEdgeColorBypass

Set Edge Color Bypass

Description

Override the color for particular edges.

Usage

```
setEdgeColorBypass(
  edge.names,
  new.colors,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

edge.names List of edge names or SUIDs
new.colors List of hex colors, or single value

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values or mappings defined for this visual property of the edge or edges specified. This method ultimately calls the generic function, setEdgePropertyBypass, which can be used to set any visual property. To restore defaults and mappings, use clearEdgePropertyBypass.

Value

None

See Also

setEdgePropertyBypass, clearEdgePropertyBypass

Examples

```
setEdgeColorBypass()
```

setEdgeColorDefault 227

```
setEdgeColorDefault Set Edge Color Default
```

Description

Set the default edge color.

Usage

```
setEdgeColorDefault(new.color, style.name = NULL, base.url = .defaultBaseUrl)
```

Arguments

new.color Color as hex code, e.g., #FD5903 style.name Name of style; default is "default" style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setEdgeColorDefault('#FD5903')
```

```
setEdgeColorMapping Set Edge Color Mapping
```

Description

Map table column values to colors to set the edge color.

```
setEdgeColorMapping(
  table.column,
  table.column.values = NULL,
  colors = NULL,
  mapping.type = "c",
  default.color = NULL,
  style.name = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

table.column Name of Cytoscape table column to map values from

table.column.values

List of values from Cytoscape table to be used in mapping. Leave NULL to

perform an automatic mapping to all column values.

colors List of hex colors to map to table.column.values or a color palette function, e.g.,

 $palette Color Brewer Set 3\ (without\ quotes).\ See\ RColor Brewer:: display.brewer.all()$

mapping.type (char) continuous, discrete or passthrough (c,d,p); default is continuous

default.color Hex color to set as default

style.name Name of style; default is "default" style

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setEdgeColorMapping('score', c(0,5), c('#FFFFFF','#FF7755'))
setEdgeColorMapping('score', colors=paletteColorBrewerRdBu)
setEdgeColorMapping('score', colors=paletteColorBrewerSet3, mapping.type='d')
```

 ${\tt setEdgeFontFaceBypass} \ \ \textit{SetEdgeFontFaceBypass}$

Description

Override the font face for particular edges.

```
setEdgeFontFaceBypass(
  edge.names,
  new.fonts,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

edge.names List of edge names or SUIDs

new.fonts List of font faces, or single value

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values or mappings defined for this visual property of the edge or edges specified. This method ultimately calls the generic function, setEdgePropertyBypass, which can be used to set any visual property. To restore defaults and mappings, use clearEdgePropertyBypass.

Value

None

See Also

setEdgePropertyBypass, clearEdgePropertyBypass

Examples

setEdgeFontFaceBypass()

setEdgeFontFaceDefault

Set Edge Font Face Default

Description

Set the default edge font.

```
setEdgeFontFaceDefault(new.font, style.name = NULL, base.url = .defaultBaseUrl)
```

new. font String specification of font face, style and size, e.g., "SansSerif,plain,12" or "Di-

alog,plain,10"

style.name Name of style; default is "default" style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setEdgeFontFaceDefault("Dialog,plain,10")
```

setEdgeFontFaceMapping

Set Edge Font Face Mapping

Description

Sets font face for edge labels.

Usage

```
setEdgeFontFaceMapping(
  table.column,
  table.column.values,
  fonts,
  mapping.type = "d",
  default.font = NULL,
  style.name = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

table.column Name of Cytoscape table column to map values from

table.column.values

List of values from Cytoscape table to be used in mapping

fonts List of string specifications of font face, style and size, e.g., c("SansSerif,plain,12",

"Dialog,plain,10")

mapping.type (char) discrete or passthrough (d,p); default is discrete

default.font String specification of font face, style and size, e.g., "SansSerif, plain, 12" or "Di-

alog,plain,10"

style.name Name of style; default is "default" style

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setEdgeFontFaceMapping("myfonts", c("normal","small"),
c("SansSerif,plain,12", "Dialog,plain,10"))
```

setEdgeFontSizeBypass Set Edge Font Size Bypass

Description

Override the font size for particular edges.

Usage

```
setEdgeFontSizeBypass(
  edge.names,
  new.sizes,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

edge.names List of edge names or SUIDs

new.sizes List of size values, or single value

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values or mappings defined for this visual property of the edge or edges specified. This method ultimately calls the generic function, setEdgePropertyBypass, which can be used to set any visual property. To restore defaults and mappings, use clearEdgePropertyBypass.

Value

None

See Also

setEdgePropertyBypass, clearEdgePropertyBypass

Examples

```
setEdgeFontSizeBypass()
```

setEdgeFontSizeDefault

Set Edge Font Size Default

Description

Set the default edge font size.

Usage

```
setEdgeFontSizeDefault(new.size, style.name = NULL, base.url = .defaultBaseUrl)
```

Arguments

new.size Numeric value for size

style.name Name of style; default is "default" style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

setEdgeFontSizeDefault(12)

```
{\tt setEdgeFontSizeMapping}
```

Set Edge Font Size Mapping

Description

Map table column values to sizes to set the edge size.

Usage

```
setEdgeFontSizeMapping(
  table.column,
  table.column.values = NULL,
  sizes = NULL,
  mapping.type = "c",
  default.size = NULL,
  style.name = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

table.column	Name of Cytoscape table column to map values from	
table.column.values		
	List of values from Cytoscape table to be used in mapping. Leave NULL to perform an automatic mapping to all column values.	
sizes	List of sizes to map to table.column.values. A range of 10 to 100 is used by default for automatic mapping.	
mapping.type	(char) continuous, discrete or passthrough (c,d,p); default is continuous	
default.size	Size value to set as default	
style.name	Name of style; default is "default" style	
network	(optional) Name or SUID of the network. Default is the "current" network active in Cytoscape.	
base.url	(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.	

Value

234 setEdgeLabelBypass

Examples

```
setEdgeFontSizeMapping('score')
setEdgeFontSizeMapping('score', sizes=c(6,24))
setEdgeFontSizeMapping('score', c(0,30), c(35,55))
```

setEdgeLabelBypass

Set Edge Label Bypass

Description

Override the label for particular edges.

Usage

```
setEdgeLabelBypass(
  edge.names,
  new.labels,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

edge.names List of edge names or SUIDs new.labels List of labels, or single value

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values or mappings defined for this visual property of the edge or edges specified. This method ultimately calls the generic function, setEdgePropertyBypass, which can be used to set any visual property. To restore defaults and mappings, use clearEdgePropertyBypass.

Value

None

See Also

setEdgePropertyBypass, clearEdgePropertyBypass

```
setEdgeLabelBypass()
```

setEdgeLabelColorBypass

Set Edge Label Color Bypass

Description

Override the label color for particular edges.

Usage

```
setEdgeLabelColorBypass(
  edge.names,
  new.colors,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

edge.names List of edge names or SUIDs
new.colors List of hex colors, or single value

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values or mappings defined for this visual property of the edge or edges specified. This method ultimately calls the generic function, setEdgePropertyBypass, which can be used to set any visual property. To restore defaults and mappings, use clearEdgePropertyBypass.

Value

None

See Also

setEdgePropertyBypass, clearEdgePropertyBypass

```
setEdgeLabelColorBypass()
```

setEdgeLabelColorDefault

Set Edge Label Color Default

Description

Set the default edge label color.

Usage

```
setEdgeLabelColorDefault(
  new.color,
  style.name = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

new.color Color as hex code, e.g., #FD5903

style.name Name of style; default is "default" style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setEdgeLabelColorDefault("#FD5903")
```

```
setEdgeLabelColorMapping
```

Set Edge Label Color Mapping

Description

Map table column values to colors to set the edge border color.

Usage

```
setEdgeLabelColorMapping(
  table.column,
  table.column.values = NULL,
  colors = NULL,
  mapping.type = "c",
  default.color = NULL,
  style.name = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

table.column Name of Cytoscape table column to map values from table.column.values List of values from Cytoscape table to be used in mapping. Leave NULL to perform an automatic mapping to all column values. colors List of hex colors to map to table.column.values or a color palette function, e.g., paletteColorBrewerSet3 (without quotes). See RColorBrewer::display.brewer.all() mapping.type (char) continuous, discrete or passthrough (c,d,p); default is continuous default.color Hex color to set as default Name of style; default is "default" style style.name network (optional) Name or SUID of the network. Default is the "current" network active in Cytoscape. base.url (optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

```
setEdgeLabelColorMapping('score', c(0,5), c('\#FFFFFF','\#FF7755')) \\ setEdgeLabelColorMapping('score', colors=paletteColorBrewerRdBu) \\ setEdgeLabelColorMapping('score', colors=paletteColorBrewerSet3, mapping.type='d') \\
```

setEdgeLabelDefault

Set Edge Label Default

Description

Set the default edge label.

Usage

```
setEdgeLabelDefault(new.label, style.name = NULL, base.url = .defaultBaseUrl)
```

Arguments

new.label String label for unmapped edges.

style.name Name of style; default is "default" style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setEdgeLabelDefault('unknown')
```

setEdgeLabelMapping

Set Edge Label Mapping

Description

Pass the values from a table column to display as edge labels.

Usage

```
setEdgeLabelMapping(
  table.column,
  style.name = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

table.column Name of Cytoscape table column to map values from

style.name Name of style; default is "default" style

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setEdgeLabelMapping('label')
```

```
setEdgeLabelOpacityBypass
```

Set Edge Label Opacity Bypass

Description

Override the label opacity for particular edges.

```
setEdgeLabelOpacityBypass(
  edge.names,
  new.value,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

edge.names List of edge names or SUIDs

new. value List of opacity values, or single value

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values or mappings defined for this visual property of the edge or edges specified. This method ultimately calls the generic function, setEdgePropertyBypass, which can be used to set any visual property. To restore defaults and mappings, use clearEdgePropertyBypass.

Value

None

See Also

setEdgePropertyBypass, clearEdgePropertyBypass

Examples

```
setEdgeLabelOpacityBypass()
```

```
setEdgeLabelOpacityDefault
```

Set Edge Label Opacity Default

Description

Set default opacity value for all unmapped edge labels.

```
setEdgeLabelOpacityDefault(
  new.opacity,
  style.name = NULL,
  base.url = .defaultBaseUrl
)
```

new.opacity Numeric values between 0 and 255; 0 is invisible.

style.name Name of style; default is "default" style.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setEdgeLabelOpacityDefault(50)
```

```
setEdgeLabelOpacityMapping
```

Set Edge Label Opacity Mapping

Description

Sets opacity for edge label only.

Usage

```
setEdgeLabelOpacityMapping(
  table.column,
  table.column.values = NULL,
  opacities = NULL,
  mapping.type = "c",
  default.opacity = NULL,
  style.name = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

 $table.column \qquad Name \ of \ Cytoscape \ table \ column \ to \ map \ values \ from$

table.column.values

List of values from Cytoscape table to be used in mapping. Leave NULL to

perform an automatic mapping to all column values.

opacities (integer) values between 0 and 255; 0 is invisible. A range of 50 to 255 is used

by default for automatic mapping.

mapping.type (char) continuous, discrete or passthrough (c,d,p); default is continuous

default.opacity

Opacity value to set as default for all unmapped values

style.name Name of style; default is "default" style

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setEdgeLabelOpacityMapping('weight')
setEdgeLabelOpacityMapping('weight', opacities=c(0,100))
setEdgeLabelOpacityMapping('weight', c(1,10), c(50,255))
```

setEdgeLineStyleBypass

Set Edge Line Style Bypass

Description

Override the style for particular edges.

Usage

```
setEdgeLineStyleBypass(
  edge.names,
  new.styles,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

edge.names List of edge names or SUIDs

new.styles List of style values, or single value

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values or mappings defined for this visual property of the edge or edges specified. This method ultimately calls the generic function, setEdgePropertyBypass, which can be used to set any visual property. To restore defaults and mappings, use clearEdgePropertyBypass.

Value

None

See Also

setEdgePropertyBypass, clearEdgePropertyBypass

Examples

```
setEdgeLineStyleBypass()
```

```
setEdgeLineStyleDefault
```

Set Edge Line Style Default

Description

Set the default edge style.

Usage

```
setEdgeLineStyleDefault(
  new.line.style,
  style.name = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

```
new.line.style Name of line style, e.g., SOLID, LONG_DASH, etc (see getLineStyles)
```

style.name Name of style; default is "default" style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

```
setEdgeLineStyleDefault('LONG_DASH')
```

```
setEdgeLineStyleMapping
```

Set Edge Line Style Mapping

Description

Map table column values to styles to set the edge style.

Usage

```
setEdgeLineStyleMapping(
  table.column,
  table.column.values = NULL,
  line.styles = NULL,
  default.line.style = "SOLID",
  style.name = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

table.column Name of Cytoscape table column to map values from

table.column.values

List of values from Cytoscape table to be used in mapping. Leave NULL to

perform an automatic mapping to all column values.

line.styles List of line styles. Leave NULL to perform an automatic mapping to available

line styles. See getLineStyles.

default.line.style

Style to set as default. See getLineStyles.

style.name Name of style; default is "default" style

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

```
setEdgeLineStyleMapping('type')
setEdgeLineStyleMapping('type',c('pp','pd'),c('SOLID','LONG_DASH'))
```

setEdgeLineWidthBypass

Set Edge Line Width Bypass

Description

Override the width for particular edges.

Usage

```
setEdgeLineWidthBypass(
  edge.names,
  new.widths,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

edge.names List of edge names or SUIDs
new.widths List of width values, or single

new.widths List of width values, or single value

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values or mappings defined for this visual property of the edge or edges specified. This method ultimately calls the generic function, setEdgePropertyBypass, which can be used to set any visual property. To restore defaults and mappings, use clearEdgePropertyBypass.

Value

None

See Also

setEdgePropertyBypass, clearEdgePropertyBypass

```
setEdgeLineWidthBypass()
```

setEdgeLineWidthDefault

Set Edge Line Width Default

Description

Set the default edge width.

Usage

```
setEdgeLineWidthDefault(
  new.width,
  style.name = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

new.width Numeric value for width

style.name Name of style; default is "default" style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setEdgeLineWidthDefault(3)
```

```
setEdgeLineWidthMapping
```

Set Edge Line Width Mapping

Description

Map table column values to widths to set the edge line width.

Usage

```
setEdgeLineWidthMapping(
  table.column,
  table.column.values = NULL,
  widths = NULL,
  mapping.type = "c",
  default.width = NULL,
  style.name = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

table.column	Name of Cytoscape table column to map values from	
table.column.values		
	List of values from Cytoscape table to be used in mapping. Leave NULL to perform an automatic mapping to all column values.	
widths	List of width values to map to table.column.values. A range of 10 to 100 is used by default for automatic mapping.	
mapping.type	(char) continuous, discrete or passthrough (c,d,p); default is continuous	
default.width	Width value to set as default for all unmapped values for all unmapped values.	
style.name	Name of style; default is "default" style	
network	(optional) Name or SUID of the network. Default is the "current" network active in Cytoscape.	
base.url	(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.	

Value

```
setEdgeLineWidthMapping('score')
setEdgeLineWidthMapping('score', widths=c(1,10))
setEdgeLineWidthMapping('score', c(0,30), c(1,5))
```

setEdgeOpacityBypass Set Edge Opacity Bypass

Description

Override the opacity for particular edges.

Usage

```
setEdgeOpacityBypass(
  edge.names,
  new.values,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

edge.names List of edge names or SUIDs

new.values List of values to set, or single value

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values or mappings defined for this visual property of the edge or edges specified. This method ultimately calls the generic function, setEdgePropertyBypass, which can be used to set any visual property. To restore defaults and mappings, use clearEdgePropertyBypass.

Value

None

See Also

setEdgePropertyBypass, clearEdgePropertyBypass

setEdgeOpacityDefault 249

Examples

```
setEdgeOpacityBypass()
```

```
{\tt setEdgeOpacityDefault} \ \ \textit{SetEdgeOpacityDefault}
```

Description

Set default opacity value for all unmapped edges.

Usage

```
setEdgeOpacityDefault(
  new.opacity,
  style.name = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

new.opacity Numeric values between 0 and 255; 0 is invisible.

style.name Name of style; default is "default" style.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setEdgeOpacityDefault(50)
```

```
setEdgeOpacityMapping Set Edge Opacity Mapping
```

Description

Map table column values to opacities to set the edge opacity.

Usage

```
setEdgeOpacityMapping(
  table.column,
  table.column.values = NULL,
  opacities = NULL,
  mapping.type = "c",
  default.opacity = NULL,
  style.name = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

table.column Name of Cytoscape table column to map values from table.column.values List of values from Cytoscape table to be used in mapping. Leave NULL to perform an automatic mapping to all column values. opacities (integer) values between 0 and 255; 0 is invisible. A range of 50 to 255 is used by default for automatic mapping. mapping.type (char) continuous, discrete or passthrough (c,d,p); default is continuous default.opacity Opacity value to set as default for all unmapped values style.name Name of style; default is "default" style network (optional) Name or SUID of the network. Default is the "current" network active in Cytoscape. base.url (optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

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Examples

```
setEdgeOpacityMapping('weight')
setEdgeOpacityMapping('weight', opacities=c(0,100))
setEdgeOpacityMapping('weight', c(1,10), c(50,255))
```

```
setEdgePropertyBypass Set Edge Property Bypass
```

Description

Set bypass values for any edge property of the specified edges, overriding default values and mappings defined by any visual style.

Usage

```
setEdgePropertyBypass(
  edge.names,
  new.values,
  visual.property,
  bypass = TRUE,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

edge.names List of edge names or SUIDs
new.values List of values to set, or single value

visual.property

Name of a visual property. See getVisualPropertyNames.

bypass Whether to set permanent bypass value. Default is TRUE.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values or mappings defined for the visual properties of the edge or edges specified. To restore defaults and mappings, use clearEdgePropertyBypass.

Value

See Also

clear Edge Property By pass

Examples

```
setEdgePropertyBypass()
```

 ${\tt setEdgeSelectionColorDefault}$

Set Edge Selection Color Default

Description

Set the default selected edge color.

Usage

```
setEdgeSelectionColorDefault(
  new.color,
  style.name = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

new.color Color as hex code, e.g., #FD5903

style.name Name of style; default is "default" style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setEdgeSelectionColorDefault('#FD5903')
```

```
setEdgeSourceArrowColorBypass
```

Set Edge Source Arrow Color Bypass

Description

Override the source arrow color for particular edges.

Usage

```
setEdgeSourceArrowColorBypass(
  edge.names,
  new.colors,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

edge.names List of edge names or SUIDs
new.colors List of hex colors, or single value

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values or mappings defined for this visual property of the edge or edges specified. This method ultimately calls the generic function, setEdgePropertyBypass, which can be used to set any visual property. To restore defaults and mappings, use clearEdgePropertyBypass.

Value

None

See Also

set Edge Property Bypass, clear Edge Property Bypass

```
setEdgeSourceArrowColorBypass()
```

```
{\tt setEdgeSourceArrowColorDefault}
```

Set Edge Source Arrow Color Default

Description

Set the default edge source arrow color.

Usage

```
setEdgeSourceArrowColorDefault(
  new.color,
  style.name = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

new.color Color as hex code, e.g., #FD5903

style.name Name of style; default is "default" style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setEdgeSourceArrowColorDefault('#FD5903')
```

```
{\tt setEdgeSourceArrowColorMapping}
```

Set Edge Source Arrow Color Mapping

Description

Map table column values to colors to set the source arrow color.

```
setEdgeSourceArrowColorMapping(
  table.column,
  table.column.values = NULL,
  colors = NULL,
  mapping.type = "c",
  default.color = NULL,
  style.name = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

table.column Name of Cytoscape table column to map values from

table.column.values

List of values from Cytoscape table to be used in mapping. Leave NULL to

perform an automatic mapping to all column values.

colors List of hex colors to map to table.column.values or a color palette function, e.g.,

paletteColorBrewerSet3 (without quotes). See RColorBrewer::display.brewer.all()

mapping.type (char) continuous, discrete or passthrough (c,d,p); default is continuous

default.color Hex color to set as default

style.name Name of style; default is "default" style

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

```
setEdgeSourceArrowColorMapping('score', c(0,5), c('#FFFFFF','#FF7755'))
setEdgeSourceArrowColorMapping('score', colors=paletteColorBrewerRdBu)
setEdgeSourceArrowColorMapping('score', colors=paletteColorBrewerSet3, mapping.type='d')
```

```
setEdgeSourceArrowMapping
```

Set Edge Source Arrow Mapping

Description

Map table column values to shapes to set the source arrow shape.

Usage

```
setEdgeSourceArrowMapping(
  table.column,
  table.column.values = NULL,
  shapes = NULL,
  default.shape = "ARROW",
  style.name = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

table.column Name of Cytoscape table column to map values from

table.column.values

List of values from Cytoscape table to be used in mapping. Leave NULL to

perform an automatic mapping to all column values.

shapes List of shapes to map to table.column.values. Leave NULL to perform an auto-

matic mapping to available shapes. See getArrowShapes

default.shape Shape to set as default. See getArrowShapes style.name Name of style; default is "default" style

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

```
setEdgeSourceArrowMapping('type')
setEdgeSourceArrowMapping('type',c('activation','inhibition'),c('ARROW','T'))
```

```
setEdgeSourceArrowShapeBypass
```

Set Edge Source Arrow Shape Bypass

Description

Override the source arrow shape for particular edges.

Usage

```
setEdgeSourceArrowShapeBypass(
  edge.names,
  new.shapes,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

edge.names List of edge names or SUIDs

new. shapes List of shapes, or single value. See getArrowShapes.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values or mappings defined for this visual property of the edge or edges specified. This method ultimately calls the generic function, setEdgePropertyBypass, which can be used to set any visual property. To restore defaults and mappings, use clearEdgePropertyBypass.

Value

None

See Also

set Edge Property Bypass, clear Edge Property Bypass

```
setEdgeSourceArrowShapeBypass()
```

```
setEdgeSourceArrowShapeDefault
```

Set Edge Source Arrow Shape Default

Description

Set the default edge source arrow shape.

Usage

```
setEdgeSourceArrowShapeDefault(
  new.shape,
  style.name = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

new. shape Name of shape, e.g., ARROW, T, etc (see getArrowShapes)

style.name Name of style; default is "default" style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setEdgeSourceArrowShapeDefault('ARROW')
```

```
setEdgeSourceArrowShapeMapping
```

Set Edge Source Arrow Shape Mapping

Description

Map table column values to shapes to set the source arrow shape.

```
setEdgeSourceArrowShapeMapping(
  table.column,
  table.column.values = NULL,
  shapes = NULL,
  default.shape = NULL,
  style.name = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

table.column Name of Cytoscape table column to map values from

table.column.values

List of values from Cytoscape table to be used in mapping. Leave NULL to

perform an automatic mapping to all column values.

shapes List of shapes to map to table.column.values. Leave NULL to perform an auto-

matic mapping to available shapes. See getArrowShapes

default. shape Shape to set as default. See getArrowShapes

style.name Name of style; default is "default" style

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setEdgeSourceArrowShapeMapping('type')
setEdgeSourceArrowShapeMapping('type',c('activation','inhibition'),
        c('ARROW','T'))
```

```
setEdgeTargetArrowColorBypass
```

Set Edge Target Arrow Color Bypass

Description

Override the target arrow color for particular edges.

```
setEdgeTargetArrowColorBypass(
  edge.names,
  new.colors,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

edge.names List of edge names or SUIDs
new.colors List of hex colors, or single value

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values or mappings defined for this visual property of the edge or edges specified. This method ultimately calls the generic function, setEdgePropertyBypass, which can be used to set any visual property. To restore defaults and mappings, use clearEdgePropertyBypass.

Value

None

See Also

setEdgePropertyBypass, clearEdgePropertyBypass

Examples

```
setEdgeTargetArrowColorBypass()
```

```
{\tt setEdgeTargetArrowColorDefault}
```

Set Edge Target Arrow Color Default

Description

Set the default edge target arrow color.

```
setEdgeTargetArrowColorDefault(
  new.color,
  style.name = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

new.color Color as hex code, e.g., #FD5903 style.name Name of style; default is "default"

style.name Name of style; default is "default" style
base.url (optional) Ignore unless you need to specify

(optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setEdgeTargetArrowColorDefault('#FD5903')
```

```
setEdgeTargetArrowColorMapping
```

Set Edge Target Arrow Color Mapping

Description

Map table column values to colors to set the target arrow color.

```
setEdgeTargetArrowColorMapping(
  table.column,
  table.column.values = NULL,
  colors = NULL,
  mapping.type = "c",
  default.color = NULL,
  style.name = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

table.column Name of Cytoscape table column to map values from

table.column.values

List of values from Cytoscape table to be used in mapping. Leave NULL to

perform an automatic mapping to all column values.

colors List of hex colors to map to table.column.values or a color palette function, e.g.,

paletteColorBrewerSet3 (without quotes). See RColorBrewer::display.brewer.all()

mapping.type (char) continuous, discrete or passthrough (c,d,p); default is continuous

default.color Hex color to set as default

style.name Name of style; default is "default" style

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setEdgeTargetArrowColorMapping('score', c(0,5), c('#FFFFFF','#FF7755'))
setEdgeTargetArrowColorMapping('score', colors=paletteColorBrewerRdBu)
setEdgeTargetArrowColorMapping('score', colors=paletteColorBrewerSet3, mapping.type='d')
```

setEdgeTargetArrowMapping

Set Edge Target Arrow Mapping

Description

Map table column values to shapes to set the target arrow shape.

```
setEdgeTargetArrowMapping(
  table.column,
  table.column.values = NULL,
  shapes = NULL,
  default.shape = "ARROW",
   style.name = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

table.column Name of Cytoscape table column to map values from

table.column.values

List of values from Cytoscape table to be used in mapping. Leave NULL to

perform an automatic mapping to all column values.

shapes List of shapes to map to table.column.values. Leave NULL to perform an auto-

matic mapping to available shapes. See getArrowShapes

default. shape Shape to set as default. See getArrowShapes

style.name Name of style; default is "default" style

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setEdgeTargetArrowMapping('type')
setEdgeTargetArrowMapping('type',c('activation','inhibition'),c('ARROW','T'))
```

setEdgeTargetArrowShapeBypass

Set Edge Target Arrow Shape Bypass

Description

Override the target arrow shape for particular edges.

```
setEdgeTargetArrowShapeBypass(
  edge.names,
  new.shapes,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

edge.names List of edge names or SUIDs

new. shapes List of values to set, or single value. See getArrowShapes.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values or mappings defined for this visual property of the edge or edges specified. This method ultimately calls the generic function, setEdgePropertyBypass, which can be used to set any visual property. To restore defaults and mappings, use clearEdgePropertyBypass.

Value

None

See Also

setEdgePropertyBypass, clearEdgePropertyBypass

Examples

```
setEdgeTargetArrowShapeBypass()
```

```
setEdgeTargetArrowShapeDefault
```

Set Edge Target Arrow Shape Default

Description

Set the default edge target arrow shape.

```
setEdgeTargetArrowShapeDefault(
  new.shape,
  style.name = NULL,
  base.url = .defaultBaseUrl
)
```

new. shape Name of shape, e.g., ARROW, T, etc (see getArrowShapes)

style.name Name of style; default is "default" style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setEdgeTargetArrowShapeDefault('ARROW')
```

```
setEdgeTargetArrowShapeMapping
```

Set Edge Target Arrow Shape Mapping

Description

Map table column values to shapes to set the target arrow shape.

Usage

```
setEdgeTargetArrowShapeMapping(
  table.column,
  table.column.values = NULL,
  shapes = NULL,
  default.shape = NULL,
  style.name = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

table.column Name of Cytoscape table column to map values from

table.column.values

List of values from Cytoscape table to be used in mapping. Leave NULL to

perform an automatic mapping to all column values.

shapes List of shapes to map to table.column.values. Leave NULL to perform an auto-

matic mapping to available shapes. See getArrowShapes

default. shape Shape to set as default. See getArrowShapes

style.name Name of style; default is "default" style

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setEdgeTargetArrowShapeMapping('type')
setEdgeTargetArrowShapeMapping('type',c('activation','inhibition'),
    c('ARROW','T'))
```

setEdgeTooltipBypass Set Edge Tooltip Bypass

Description

Override the tooltip for particular edges.

Usage

```
setEdgeTooltipBypass(
  edge.names,
  new.values,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

edge.names List of edge names or SUIDs

new.values List of tooltip values, or single value

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

setEdgeTooltipDefault 267

Details

This method permanently overrides any default values or mappings defined for this visual property of the edge or edges specified. This method ultimately calls the generic function, setEdgePropertyBypass, which can be used to set any visual property. To restore defaults and mappings, use clearEdgePropertyBypass.

Value

None

See Also

set Edge Property Bypass, clear Edge Property Bypass

Examples

```
setEdgeTooltipBypass()
```

```
setEdgeTooltipDefault Set Edge Tooltip Default
```

Description

Set the default edge tooltip

Usage

```
setEdgeTooltipDefault(
  new.tooltip,
  style.name = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

new.tooltip String tooltip for unmapped edges. style.name Name of style; default is "default" style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setEdgeTooltipDefault('unknown')
```

setEdgeTooltipMapping Set Edge Tooltip Mapping

Description

Pass the values from a table column to display as edge tooltips.

Usage

```
setEdgeTooltipMapping(
  table.column,
  style.name = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

table.column Name of Cytoscape table column to map values from

style.name Name of style; default is "default" style

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

```
setEdgeTooltipMapping('description')
```

setLayoutProperties 269

setLayoutProperties Set Layout Properties

Description

Sets the specified properties for the specified layout. Unmentioned properties are left unchanged.

Usage

```
setLayoutProperties(layout.name, properties.list, base.url = .defaultBaseUrl)
```

Arguments

layout.name (character) Name of the layout

properties.list

(list) List of one or more property=value pairs

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Details

 $Run\ get Layout Names\ to\ list\ available\ layouts.\ Run\ get Layout Property Names\ to\ list\ properties\ per\ layout.$

Value

None

Author(s)

Alexander Pico, Tanja Muetze, Georgi Kolishovski, Paul Shannon

```
setLayoutProperties('force-directed', list(defaultSpringLength=50, defaultSpringCoefficient=6E-04))
# Successfully updated the property 'defaultSpringLength'.
# Successfully updated the property 'defaultSpringCoefficient'.
```

set Model Propagation Secs

Set Model Propagation Delay

Description

This function sets an internal delay variable that allows Cytoscape to "catchup" prior to subsequent functions. Call without specifying secs to restore default value.

Usage

```
setModelPropagationSecs(secs = 5)
```

Arguments

secs

Number of seconds to delay.

Details

This delay is only necessary while concurrency bugs exist in the Cytoscape application. This delay may need to be increased from the default value in certain use cases, e.g., larger networks.

Value

None

See Also

 $set Catchup Filter Secs, \, set Catchup Network Secs \,$

```
{
setModelPropagationSecs(2)
setModelPropagationSecs() #restores default delay
}
```

```
{\tt setNetworkCenterBypass}
```

Set Network Center Bypass

Description

Set the bypass value for center x and y for the network. This function could be used to pan and scroll the Cytoscape canvas.

Usage

```
setNetworkCenterBypass(
    x,
    y,
    bypass = FALSE,
    network = NULL,
    base.url = .defaultBaseUrl
)
```

Arguments

x	Coordinate value, increases going to the right.
У	Coordinate value, increase going down.
bypass	Whether to set permanent bypass value. Default is FALSE per common use of temporary center settings.
network	(optional) Name or SUID of the network. Default is the "current" network active in Cytoscape.
base.url	(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values for this visual property. This method ultimately calls the generic function, setNetworkPropertyBypass, which can be used to set any visual property. To restore defaults, use clearNetworkPropertyBypass.

Value

None

See Also

setNetworkPropertyBypass, clearNetworkPropertyBypass

Examples

```
setNetworkCenterBypass()
```

setNetworkPropertyBypass

Set Network Property Bypass

Description

Set bypass values for any network property, overriding default values defined by any visual style.

Usage

```
setNetworkPropertyBypass(
  new.value,
  visual.property,
  bypass = TRUE,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

new.value Value to set visual.property

Name of a visual property. See getVisualPropertyNames.

bypass Whether to set permanent bypass value. Default is TRUE.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values or mappings defined for the visual properties of the node or nodes specified. To restore defaults and mappings, use clearNodePropertyBypass.

Value

None

See Also

clear Network Property Bypass

Examples

```
setNetworkPropertyBypass()
```

setNetworkZoomBypass Set Network Zoom Bypass

Description

Set the bypass value for scale factor for the network.

Usage

```
setNetworkZoomBypass(
  new.value,
  bypass = FALSE,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

new.value Zoom factor

bypass Whether to set permanent bypass value. Default is FALSE per common use of temporary zoom settings.

network (optional) Name or SUID of the network. Default is the "current" network active in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values for this visual property. This method ultimately calls the generic function, setNetworkPropertyBypass, which can be used to set any visual property. To restore defaults, use clearNetworkPropertyBypass.

Value

None

See Also

set Network Property Bypass, clear Network Property Bypass

```
setNetworkZoomBypass()
```

```
setNodeBorderColorBypass
```

Set Node Border Color Bypass

Description

Override the border color for particular nodes.

Usage

```
setNodeBorderColorBypass(
  node.names,
  new.colors,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

node.names List of node names or SUIDs new.colors List of hex colors, or single value

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values or mappings defined for this visual property of the node or nodes specified. This method ultimately calls the generic function, setNodePropertyBypass, which can be used to set any visual property. To restore defaults and mappings, use clearNodePropertyBypass, see examples.

Value

None

See Also

setNodePropertyBypass, clearNodePropertyBypass

```
setNodeBorderColorBypass('Node 1', '#FF55AA')
setNodeBorderColorBypass(c('Node 1','Node 2'), '#FF55AA')
clearNodePropertyBypass(c('Node 1','Node 2'), 'NODE_BORDER_PAINT')
```

setNodeBorderColorDefault 275

```
setNodeBorderColorDefault
```

Set Node Border Color Default

Description

Set the default node border color.

Usage

```
setNodeBorderColorDefault(
  new.color,
  style.name = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

new.color Color as hex code, e.g., #FD5903

style.name Name of style; default is "default" style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setNodeBorderColorDefault('#FD5903')
```

```
setNodeBorderColorMapping
```

Set Node Border Color Mapping

Description

Map table column values to colors to set the node border color.

```
setNodeBorderColorMapping(
  table.column,
  table.column.values = NULL,
  colors = NULL,
  mapping.type = "c",
  default.color = NULL,
  style.name = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

table.column Name of Cytoscape table column to map values from

table.column.values

List of values from Cytoscape table to be used in mapping. Leave NULL to

perform an automatic mapping to all column values.

colors List of hex colors to map to table.column.values or a color palette function, e.g.,

paletteColorBrewerSet3 (without quotes). See RColorBrewer::display.brewer.all()

mapping.type (char) continuous, discrete or passthrough (c,d,p); default is continuous

default.color Hex color to set as default

style.name Name of style; default is "default" style

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

```
setNodeBorderColorMapping('score', c(0,5), c('\#FFFFFF','\#FF7755')) \\ setNodeBorderColorMapping('score', colors=paletteColorBrewerRdBu) \\ setNodeBorderColorMapping('score', colors=paletteColorBrewerSet3, mapping.type='d') \\
```

```
setNodeBorderOpacityBypass
```

Set Node Border Opacity Bypass

Description

Override the border opacity for particular nodes.

Usage

```
setNodeBorderOpacityBypass(
  node.names,
  new.values,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

node.names List of node names or SUIDs

new. values List of values to set, or single value

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values or mappings defined for this visual property of the node or nodes specified. This method ultimately calls the generic function, setNodePropertyBypass, which can be used to set any visual property. To restore defaults and mappings, use clearNodePropertyBypass.

Value

None

See Also

set Node Property Bypass, clear Node Property Bypass

```
setNodeBorderOpacityBypass()
```

```
setNodeBorderOpacityDefault

Set Node Border Opacity Default
```

Description

Set defaults opacity value for all unmapped node borders.

Usage

```
setNodeBorderOpacityDefault(
  new.opacity,
  style.name = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

new.opacity Numeric values between 0 and 255; 0 is invisible.

style.name Name of style; default is "default" style.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setNodeBorderOpacityDefault(50)
```

```
setNodeBorderOpacityMapping
```

Set Node Border Opacity Mapping

Description

Sets opacity for node border only.

```
setNodeBorderOpacityMapping(
  table.column,
  table.column.values = NULL,
  opacities = NULL,
  mapping.type = "c",
  default.opacity = NULL,
  style.name = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

table.column Name of Cytoscape table column to map values from

table.column.values

List of values from Cytoscape table to be used in mapping. Leave NULL to

perform an automatic mapping to all column values.

opacities (integer) values between 0 and 255; 0 is invisible. A range of 50 to 255 is used

by default for automatic mapping.

mapping.type (char) continuous, discrete or passthrough (c,d,p); default is continuous

default.opacity

Opacity value to set as default for all unmapped values

style.name Name of style; default is "default" style

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

```
setNodeBorderOpacityMapping('score')
setNodeBorderOpacityMapping('score', opacities=c(0,100))
setNodeBorderOpacityMapping('score', c(-5,5), c(50,255))
```

setNodeBorderWidthBypass

Set Node Border Width Bypass

Description

Override the border width for particular nodes.

Usage

```
setNodeBorderWidthBypass(
  node.names,
  new.sizes,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

node.names List of node names or SUIDs new.sizes List of size values, or single value

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values or mappings defined for this visual property of the node or nodes specified. This method ultimately calls the generic function, setNodePropertyBypass, which can be used to set any visual property. To restore defaults and mappings, use clearNodePropertyBypass, see examples.

Value

None

See Also

setNodePropertyBypass, clearNodePropertyBypass

```
setNodeBorderWidthBypass('Node 1', 5)
setNodeBorderWidthBypass(c('Node 1','Node 2'), 5)
clearNodePropertyBypass(c('Node 1','Node 2'), 'NODE_BORDER_WIDTH')
```

setNodeBorderWidthDefault

Set Node Border Width Default

Description

Set the default node border width.

Usage

```
setNodeBorderWidthDefault(
  new.width,
  style.name = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

new.width Numeric value for width

style.name Name of style; default is "default" style.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setNodeBorderWidthDefault(2)
```

setNodeBorderWidthMapping

Set Node Border Width Mapping

Description

Map table column values to widths to set the node border width.

```
setNodeBorderWidthMapping(
  table.column,
  table.column.values = NULL,
  widths = NULL,
  mapping.type = "c",
  default.width = NULL,
  style.name = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

table.column Name of Cytoscape table column to map values from

table.column.values

List of values from Cytoscape table to be used in mapping. Leave NULL to

perform an automatic mapping to all column values.

widths List of width values to map to table.column.values. A range of 10 to 100 is used

by default for automatic mapping.

mapping.type (char) continuous, discrete or passthrough (c,d,p); default is continuous

default.width Width value to set as default for all unmapped values

style.name Name of style; default is "default" style

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

```
setNodeBorderWidthMapping('score')
setNodeBorderWidthMapping('score', widths=c(1,10))
setNodeBorderWidthMapping('score', c(0,30), c(1,5))
```

setNodeColorBypass 283

setNodeColorBypass

Set Node Color Bypass

Description

Set the bypass value for fill color for the specified node or nodes.

Usage

```
setNodeColorBypass(
  node.names,
  new.colors,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

node.names List of node names or SUIDs new.colors List of hex colors, or single value

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values or mappings defined for this visual property of the node or nodes specified. This method ultimately calls the generic function, setNodePropertyBypass, which can be used to set any visual property. To restore defaults and mappings, use clearNodePropertyBypass, see examples.

Value

None

See Also

setNodePropertyBypass, clearNodePropertyBypass

```
setNodeColorBypass ('node1', '#FF0088')
setNodeColorBypass (c('node1', 'node2'), c('#88FF88', '#FF0088'))
clearNodePropertyBypass(c('Node 1','Node 2'), 'NODE_FILL_COLOR')
```

setNodeColorDefault Set Node Color Default

Description

Set the default node color.

Usage

```
setNodeColorDefault(new.color, style.name = NULL, base.url = .defaultBaseUrl)
```

Arguments

new.color Color as hex code, e.g., #FD5903 style.name Name of style; default is "default" style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setNodeColorDefault('#FD5903')
```

setNodeColorMapping

Set Node Color Mapping

Description

Map table column values to colors to set the node fill color.

```
setNodeColorMapping(
  table.column,
  table.column.values = NULL,
  colors = NULL,
  mapping.type = "c",
  default.color = NULL,
  style.name = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

table.column Name of Cytoscape table column to map values from table.column.values

List of values from Cytoscape table to be used in mapping. Leave NULL to

perform an automatic mapping to all column values.

colors List of hex colors to map to table.column.values or a color palette function, e.g.,

paletteColorBrewerSet3 (without quotes). See RColorBrewer::display.brewer.all()

mapping.type (char) continuous, discrete or passthrough (c,d,p); default is continuous

default.color Hex color to set as default

style.name Name of style; default is "default" style

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setNodeColorMapping('score', c(-5,0,5), c('#5577FF','#FFFFFF','#FF7755'))
setNodeColorMapping('score', colors=paletteColorBrewerRdBu)
setNodeColorMapping('score', colors=paletteColorBrewerSet3, mapping.type='d')
```

setNodeComboOpacityMapping

Set Node Combo Opacity Mapping

Description

Sets opacity for node fill, border and label all together.

```
setNodeComboOpacityMapping(
  table.column,
  table.column.values = NULL,
  opacities = NULL,
  mapping.type = "c",
  default.opacity = NULL,
  style.name = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

286 setNodeCustomBarChart

Arguments

table.column Name of Cytoscape table column to map values from table.column.values

List of values from Cytoscape table to be used in mapping. Leave NULL to

perform an automatic mapping to all column values.

opacities (integer) values between 0 and 255; 0 is invisible. A range of 50 to 255 is used

by default for automatic mapping.

mapping.type (char) continuous, discrete or passthrough (c,d,p); default is continuous

default.opacity

Opacity value to set as default for all unmapped values

style.name Name of style; default is "default" style

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setNodeComboOpacityMapping('score')
setNodeComboOpacityMapping('score', opacities=c(0,100))
setNodeComboOpacityMapping('score', c(-5,5), c(50,255))
```

setNodeCustomBarChart Set Node Custom Bar Chart

Description

Makes a bar chart per node using specified node table columns by setting a default custom graphic style.

```
setNodeCustomBarChart(
  columns,
  type = "GROUPED",
  colors = NULL,
  range = NULL,
  orientation = "VERTICAL",
  colAxis = FALSE,
```

setNodeCustomBarChart 287

```
rangeAxis = FALSE,
zeroLine = FALSE,
axisWidth = 0.25,
axisColor = "#000000",
axisFontSize = 1,
separation = 0,
slot = 1,
style.name = NULL,
base.url = .defaultBaseUrl
)
```

Arguments

columns List of node column names to be displayed, in order.

type Type of bar chart: GROUPED (default), STACKED, HEAT_STRIPS, or UP_DOWN colors (optional) List of colors to be matched with columns or with range, depending

on type. Default is a set of colors from an appropriate Brewer palette.

range (optional) Min and max values of chart. Default is to use min and max from

specified data columns.

orientation (optional) HORIZONTAL or VERTICAL (default).

colAxis (optional) Show axis with column labels. Default is FALSE. rangeAxis (optional) Show axis with range of values. Default is FALSE.

zeroLine (optional) Show a line at zero. Default is FALSE.

axisWidth (optional) Width of axis lines, if shown. Default is 0.25. axisColor (optional) Color of axis lines, if shown. Default is black. axisFontSize (optional) Font size of axis labels, if shown. Default is 1.

separation (optional) Distance between bars. Default is 0.0.

slot (optional) Which custom graphics slot to modify. Slots 1-9 are available for

independent charts, gradients and images. Default is 1.

style.name (optional) Name of style; default is "default" style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

See Also

setNodeCustomPosition, removeNodeCustomGraphics

```
setNodeCustomBarChart(c("data1","data2","data3"))
```

288 setNodeCustomBoxChart

setNodeCustomBoxChart Set Node Custom Box Chart

Description

Makes a box chart per node using specified node table columns by setting a default custom graphic style.

Usage

```
setNodeCustomBoxChart(
  columns,
  colors = NULL,
  range = NULL,
  orientation = "VERTICAL",
  rangeAxis = FALSE,
  zeroLine = FALSE,
  axisWidth = 0.25,
  axisColor = "#000000",
  axisFontSize = 1,
  slot = 1,
  style.name = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

columns	List of node column names to be displayed.
colors	(optional) List of colors to be matched with columns or with range, depending on type. Default is a set of colors from an appropriate Brewer palette.
range	(optional) Min and max values of chart. Default is to use min and max from specified data columns.
orientation	(optional) HORIZONTAL or VERTICAL (default).
rangeAxis	(optional) Show axis with range of values. Default is FALSE.
zeroLine	(optional) Show a line at zero. Default is FALSE.
axisWidth	(optional) Width of axis lines, if shown. Default is 0.25.
axisColor	(optional) Color of axis lines, if shown. Default is black.
axisFontSize	(optional) Font size of axis labels, if shown. Default is 1.
slot	(optional) Which custom graphics slot to modify. Slots 1-9 are available for independent charts, gradients and images. Default is 1.
style.name	(optional) Name of style; default is "default" style
base.url	(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

None

See Also

set Node Custom Position, remove Node Custom Graphics

Examples

```
setNodeCustomBoxChart(c("data1","data2","data3"))
```

setNodeCustomHeatMapChart

Set Node Custom HeatMap Chart

Description

Makes a heatmap chart per node using specified node table columns by setting a default custom graphic style.

Usage

```
setNodeCustomHeatMapChart(
  columns,
  colors = NULL,
  range = NULL,
  orientation = "HORIZONTAL",
  rangeAxis = FALSE,
  zeroLine = FALSE,
  axisWidth = 0.25,
  axisColor = "#000000",
  axisFontSize = 1,
  slot = 1,
  style.name = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

columns List of node column names to be displayed.

colors (optional) List of colors to be matched with columns or with range, depending

on type. Default is a set of colors from an appropriate Brewer palette.

range (optional) Min and max values of chart. Default is to use min and max from

specified data columns.

orientation (optional) VERTICAL or HORIZONTAL (default).

(optional) Show axis with range of values. Default is FALSE. rangeAxis zeroLine (optional) Show a line at zero. Default is FALSE. axisWidth (optional) Width of axis lines, if shown. Default is 0.25. axisColor (optional) Color of axis lines, if shown. Default is black. axisFontSize (optional) Font size of axis labels, if shown. Default is 1. (optional) Which custom graphics slot to modify. Slots 1-9 are available for slot independent charts, gradients and images. Default is 1. style.name (optional) Name of style; default is "default" style base.url (optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

None

See Also

setNodeCustomPosition, removeNodeCustomGraphics

Examples

```
setNodeCustomHeatMapChart(c("data1","data2","data3"))
```

setNodeCustomLinearGradient

Set Node Custom Linear Gradient

Description

Makes a gradient fill per node by setting a default custom graphic style.

```
setNodeCustomLinearGradient(
  colors = c("#DDDDDD", "#888888"),
  anchors = c(0, 1),
  angle = 0,
  slot = 1,
  style.name = NULL,
  base.url = .defaultBaseUrl
)
```

setNodeCustomLineChart 291

Arguments

colors	(optional) List of colors to define gradient
anchors	(optional) Position of colors from 0.0 to 1.0.
angle	(optional) Angle of gradient. Default is 0 (left-to-right).
slot	(optional) Which custom graphics slot to modify. Slots 1-9 are available for independent charts, gradients and images. Default is 1.
style.name	(optional) Name of style; default is "default" style
base.url	(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setNodeCustomLinearGradient()
```

```
setNodeCustomLineChart
```

Set Node Custom Line Chart

Description

Makes a line chart per node using specified node table columns by setting a default custom graphic style.

```
setNodeCustomLineChart(
  columns,
  colors = NULL,
  range = NULL,
  lineWidth = 1,
  rangeAxis = FALSE,
  zeroLine = FALSE,
  axisWidth = 0.25,
  axisColor = "#000000",
  axisFontSize = 1,
  slot = 1,
  style.name = NULL,
  base.url = .defaultBaseUrl
)
```

292 setNodeCustomPieChart

Arguments

columns	List of node column names to be displayed.
colors	(optional) List of colors to be matched with columns or with range, depending on type. Default is a set of colors from an appropriate Brewer palette.
range	(optional) Min and max values of chart. Default is to use min and max from specified data columns.
lineWidth	(optional) Width of chart line. Default is 1.0.
rangeAxis	(optional) Show axis with range of values. Default is FALSE.
zeroLine	(optional) Show a line at zero. Default is FALSE.
axisWidth	(optional) Width of axis lines, if shown. Default is 0.25.
axisColor	(optional) Color of axis lines, if shown. Default is black.
axisFontSize	(optional) Font size of axis labels, if shown. Default is 1.
slot	(optional) Which custom graphics slot to modify. Slots 1-9 are available for independent charts, gradients and images. Default is 1.
style.name	(optional) Name of style; default is "default" style
base.url	(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

None

See Also

 $set Node Custom Position, \\ remove Node Custom Graphics$

Examples

```
setNodeCustomLineChart(c("data1","data2","data3"))
```

setNodeCustomPieChart Set Node Custom Pie Chart

Description

Makes a pie chart per node using specified node table columns by setting a default custom graphic style.

setNodeCustomPosition 293

Usage

```
setNodeCustomPieChart(
  columns,
  colors = NULL,
  startAngle = 0,
  slot = 1,
  style.name = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

columns List of node column names to be displayed.

colors (optional) List of colors to be matched with columns or with range, depending

on type. Default is a set of colors from an appropriate Brewer palette.

startAngle (optional) Angle to start filling pie. Default is 0.0.

slot (optional) Which custom graphics slot to modify. Slots 1-9 are available for

independent charts, gradients and images. Default is 1.

style.name (optional) Name of style; default is "default" style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

See Also

setNodeCustomPosition, removeNodeCustomGraphics

Examples

```
setNodeCustomPieChart(c("data1","data2","data3"))
```

setNodeCustomPosition Set Node Custom Position

Description

Adjust the position of a custom graphic relative to its node.

```
setNodeCustomPosition(
  nodeAnchor = "C",
  graphicAnchor = "C",
  justification = "c",
  xOffset = 0,
  yOffset = 0,
  slot = 1,
  style.name = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

nodeAnchor Position on node to place the graphic: NW,N,NE,E,SE,S,SW,W or C for center

(default)

graphicAnchor Position on graphic to place on node: NW,N,NE,E,SE,S,SW,W or C for center

(default)

justification Positioning of content within graphic: l,r,c (default)

xOffset Additional offset in the x direction yOffset Additional offset in the y direction

slot (optional) Which custom graphics slot to modify. Slots 1-9 are available for

independent charts, gradients and images. Default is 1.

style.name (optional) Name of style; default is "default" style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setNodeCustomPosition()
```

setNodeCustomRadialGradient

Set Node Custom Radial Gradient

Description

Makes a gradient fill per node by setting a default custom graphic style.

```
setNodeCustomRadialGradient(
  colors = c("#DDDDDD", "#888888"),
  anchors = c(0, 1),
  xCenter = 0.5,
  yCenter = 0.5,
  slot = 1,
  style.name = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

colors	(optional) List of colors to define gradient
anchors	(optional) Position of colors from 0.0 to 1.0.
xCenter	(optional) X position for center of radial effect from 0.0 to 1.0. Default is 0.5.
yCenter	(optional) Y position for center of radial effect from 0.0 to 1.0. Default is 0.5.
slot	(optional) Which custom graphics slot to modify. Slots 1-9 are available for independent charts, gradients and images. Default is 1 .
style.name	(optional) Name of style; default is "default" style
base.url	(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setNodeCustomRadialGradient()
```

```
{\tt setNodeCustomRingChart}
```

Set Node Custom Ring Chart

Description

Makes a ring chart per node using specified node table columns by setting a default custom graphic style.

```
setNodeCustomRingChart(
  columns,
  colors = NULL,
  startAngle = 0,
  holeSize = 0.5,
  slot = 1,
  style.name = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

columns List of node column names to be displayed.

colors (optional) List of colors to be matched with columns or with range, depending

on type. Default is a set of colors from an appropriate Brewer palette.

startAngle (optional) Angle to start filling ring Default is 0.0.

holeSize (optional) Size of hole in ring. Ranges 0-1. Default is 0.5.

slot (optional) Which custom graphics slot to modify. Slots 1-9 are available for

independent charts, gradients and images. Default is 1.

style.name (optional) Name of style; default is "default" style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

See Also

setNodeCustomPosition, removeNodeCustomGraphics

Examples

```
setNodeCustomRingChart(c("data1","data2","data3"))
```

```
setNodeFillOpacityBypass
```

Set Node Fill Opacity Bypass

Description

Override the fill opacity for particular nodes.

```
setNodeFillOpacityBypass(
  node.names,
  new.values,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

node.names List of node names or SUIDs

new.values List of values to set, or single value

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values or mappings defined for this visual property of the node or nodes specified. This method ultimately calls the generic function, setNodePropertyBypass, which can be used to set any visual property. To restore defaults and mappings, use clearNodePropertyBypass, see examples.

Value

None

See Also

set Node Property Bypass, clear Node Property Bypass

```
setNodeFillOpacityBypass('Node 1', 100)
setNodeFillOpacityBypass(c('Node 1','Node 2'), 100)
clearNodePropertyBypass(c('Node 1','Node 2'), 'NODE_TRANSPARENCY')
```

```
setNodeFillOpacityDefault

Set Node Fill Opacity Default
```

Description

Set default opacity value for all unmapped nodes.

Usage

```
setNodeFillOpacityDefault(
  new.opacity,
  style.name = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

new.opacity Numeric values between 0 and 255; 0 is invisible.

style.name Name of style; default is "default" style.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setNodeFillOpacityDefault(50)
```

```
setNodeFillOpacityMapping
```

Set Node Fill Opacity Mapping

Description

Sets opacity for node fill only.

```
setNodeFillOpacityMapping(
  table.column,
  table.column.values = NULL,
  opacities = NULL,
  mapping.type = "c",
  default.opacity = NULL,
  style.name = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

table.column Name of Cytoscape table column to map values from

table.column.values

List of values from Cytoscape table to be used in mapping. Leave NULL to

perform an automatic mapping to all column values.

opacities (integer) values between 0 and 255; 0 is invisible. A range of 50 to 255 is used

by default for automatic mapping.

mapping.type (char) continuous, discrete or passthrough (c,d,p); default is continuous

default.opacity

Opacity value to set as default for all unmapped values

style.name Name of style; default is "default" style

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

```
setNodeFillOpacityMapping('score')
setNodeFillOpacityMapping('score', opacities=c(0,100))
setNodeFillOpacityMapping('score', c(-5,5), c(50,255))
```

setNodeFontFaceBypass Set Node Font Face Bypass

Description

Override the font face for particular nodes.

Usage

```
setNodeFontFaceBypass(
  node.names,
  new.fonts,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

node.names List of node names or SUIDs new.fonts List of font faces, or single value

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values or mappings defined for this visual property of the node or nodes specified. This method ultimately calls the generic function, setNodePropertyBypass, which can be used to set any visual property. To restore defaults and mappings, use clearNodePropertyBypass.

Value

None

See Also

setNodePropertyBypass, clearNodePropertyBypass

```
setNodeFontFaceBypass()
```

setNodeFontFaceDefault 301

setNodeFontFaceDefault

Set Node Font Face Default

Description

Set the default node font.

Usage

```
setNodeFontFaceDefault(new.font, style.name = NULL, base.url = .defaultBaseUrl)
```

Arguments

new. font String specification of font face, style and size, e.g., "SansSerif,plain,12" or "Di-

alog,plain,10"

style.name Name of style; default is "default" style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setNodeFontFaceDefault("Dialog,plain,10")
```

setNodeFontFaceMapping

Set Node Font Face Mapping

Description

Sets font face for node labels.

```
setNodeFontFaceMapping(
  table.column,
  table.column.values,
  fonts,
  mapping.type = "d",
  default.font = NULL,
  style.name = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

table.column Name of Cytoscape table column to map values from

table.column.values

List of values from Cytoscape table to be used in mapping

fonts List of string specifications of font face, style and size, e.g., c("SansSerif,plain,12",

"Dialog,plain,10")

mapping.type (char) discrete or passthrough (d,p); default is discrete

default.font String specification of font face, style and size, e.g., "SansSerif, plain, 12" or "Di-

alog,plain,10"

style.name Name of style; default is "default" style

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

```
setNodeFontFaceMapping("myfonts", c("normal","small"),
c("SansSerif,plain,12", "Dialog,plain,10"))
```

setNodeFontSizeBypass Set Node Font Size Bypass

Description

Override the font size for particular nodes.

Usage

```
setNodeFontSizeBypass(
  node.names,
  new.sizes,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

node.names List of node names or SUIDs
new.sizes List of size values, or single value

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values or mappings defined for this visual property of the node or nodes specified. This method ultimately calls the generic function, setNodePropertyBypass, which can be used to set any visual property. To restore defaults and mappings, use clearNodePropertyBypass, see examples.

Value

None

See Also

setNodePropertyBypass, clearNodePropertyBypass

```
setNodeFontSizeBypass('Node 1', 5)
setNodeFontSizeBypass(c('Node 1','Node 2'), 5)
clearNodePropertyBypass(c('Node 1','Node 2'), 'NODE_LABEL_FONT_SIZE')
```

setNodeFontSizeDefault

Set Node Font Size Default

Description

Set the default node font size.

Usage

```
setNodeFontSizeDefault(new.size, style.name = NULL, base.url = .defaultBaseUrl)
```

Arguments

new.size Numeric value for size

style.name Name of style; default is "default" style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

setNodeFontSizeDefault(12)

setNodeFontSizeMapping

Set Node Font Size Mapping

Description

Map table column values to sizes to set the node size.

```
setNodeFontSizeMapping(
  table.column,
  table.column.values = NULL,
  sizes = NULL,
  mapping.type = "c",
  default.size = NULL,
  style.name = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

table.column Name of Cytoscape table column to map values from

table.column.values

List of values from Cytoscape table to be used in mapping. Leave NULL to

perform an automatic mapping to all column values.

sizes List of sizes to map to table.column.values. A range of 10 to 100 is used by

default for automatic mapping.

mapping.type (char) continuous, discrete or passthrough (c,d,p); default is continuous

default.size Size value to set as default

style.name Name of style; default is "default" style

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

```
setNodeFontSizeMapping('score')
setNodeFontSizeMapping('score', sizes=c(6,24))
setNodeFontSizeMapping('score', c(0,30), c(35,55))
```

setNodeHeightBypass

Set Node Height Bypass

Description

Override the height for particular nodes.

Usage

```
setNodeHeightBypass(
  node.names,
  new.heights,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

node.names List of node names or SUIDs

new.heights List of height values, or single value

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values or mappings defined for this visual property of the node or nodes specified. This method ultimately calls the generic function, setNodePropertyBypass, which can be used to set any visual property. To restore defaults and mappings, use clearNodePropertyBypass, see examples.

Value

None

See Also

setNodePropertyBypass, clearNodePropertyBypass

```
setNodeHeightBypass('Node 1', 35)
setNodeHeightBypass(c('Node 1', 'Node 2'), 35)
clearNodePropertyBypass(c('Node 1', 'Node 2'), 'NODE_HEIGHT')
```

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```
setNodeHeightDefault Set Node Height Default
```

Description

Set the default node height.

Usage

```
setNodeHeightDefault(new.height, style.name = NULL, base.url = .defaultBaseUrl)
```

Arguments

new.height Numeric value for height.

style.name Name of style; default is "default" style.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setNodeHeightDefault(35)
```

```
setNodeHeightMapping Set Node Height Mapping
```

Description

Map table column values to the node heights.

```
setNodeHeightMapping(
  table.column,
  table.column.values = NULL,
  heights = NULL,
  mapping.type = "c",
  default.height = NULL,
  style.name = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

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Arguments

table.column Name of Cytoscape table column to map values from

table.column.values

List of values from Cytoscape table to be used in mapping. Leave NULL to

perform an automatic mapping to all column values.

heights List of height values to map to table column values. A range of 10 to 100 is used

by default for automatic mapping.

mapping.type (char) continuous, discrete or passthrough (c,d,p); default is continuous

default.height Size value to set as default

style.name Name of style; default is "default" style

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

Using this function will unlock node width and height to use separate values.

Value

None

Examples

```
setNodeHeightMapping('score')
setNodeHeightMapping('score', heights=c(30,80))
setNodeHeightMapping('score', c(0,30), c(35,55))
```

setNodeLabelBypass

Set Node Label Bypass

Description

Override the label for particular nodes.

```
setNodeLabelBypass(
  node.names,
  new.labels,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

node.names List of node names or SUIDs new.labels List of labels, or single value

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values or mappings defined for this visual property of the node or nodes specified. This method ultimately calls the generic function, setNodePropertyBypass, which can be used to set any visual property. To restore defaults and mappings, use clearNodePropertyBypass, see examples.

Value

None

See Also

setNodePropertyBypass, clearNodePropertyBypass

Examples

```
setNodeLabelBypass('Node 1', 'Custom Label')
setNodeLabelBypass(c('Node 1', 'Node 2'), 'Custom Label')
clearNodePropertyBypass(c('Node 1', 'Node 2'), 'NODE_LABEL')
```

setNodeLabelColorBypass

Set Node Label Color Bypass

Description

Override the label color for particular nodes.

```
setNodeLabelColorBypass(
  node.names,
  new.colors,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

node.names List of node names or SUIDs new.colors List of hex colors, or single value

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values or mappings defined for this visual property of the node or nodes specified. This method ultimately calls the generic function, setNodePropertyBypass, which can be used to set any visual property. To restore defaults and mappings, use clearNodePropertyBypass, see examples.

Value

None

See Also

setNodePropertyBypass, clearNodePropertyBypass

Examples

```
setNodeLabelColorBypass('Node 1', '#FF55AA')
setNodeLabelColorBypass(c('Node 1','Node 2'), '#FF55AA')
clearNodePropertyBypass(c('Node 1','Node 2'), 'NODE_LABEL_COLOR')
```

setNodeLabelColorDefault

Set Node Label Color Default

Description

Set the default node label color.

```
setNodeLabelColorDefault(
  new.color,
  style.name = NULL,
  base.url = .defaultBaseUrl
)
```

new.color Color as hex code, e.g., #FD5903 style.name Name of style; default is "default" style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setNodeLabelColorDefault('#FD5903')
```

setNodeLabelColorMapping

Set Node Label Color Mapping

Description

Map table column values to colors to set the node border color.

Usage

```
setNodeLabelColorMapping(
  table.column,
  table.column.values = NULL,
  colors = NULL,
  mapping.type = "c",
  default.color = NULL,
  style.name = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

table.column Name of Cytoscape table column to map values from

table.column.values

List of values from Cytoscape table to be used in mapping. Leave NULL to

perform an automatic mapping to all column values.

colors List of hex colors to map to table.column.values or a color palette function, e.g.,

paletteColorBrewerSet3 (without quotes). See RColorBrewer::display.brewer.all()

mapping.type (char) continuous, discrete or passthrough (c,d,p); default is continuous

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default.color Hex color to set as default

style.name Name of style; default is "default" style

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setNodeLabelColorMapping('score', c(0,5), c('\#FFFFFF','\#FF7755'))\\ setNodeLabelColorMapping('score', colors=paletteColorBrewerRdBu)\\ setNodeLabelColorMapping('score', colors=paletteColorBrewerSet3, mapping.type='d')\\
```

setNodeLabelDefault

Set Node Label Default

Description

Set the default node label.

Usage

```
setNodeLabelDefault(new.label, style.name = NULL, base.url = .defaultBaseUrl)
```

Arguments

new.label String label for unmapped nodes.

style.name Name of style; default is "default" style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

```
setNodeLabelDefault('unknown')
```

setNodeLabelMapping 313

setNodeLabelMapping

Set Node Label Mapping

Description

Pass the values from a table column to display as node labels.

Usage

```
setNodeLabelMapping(
  table.column,
  style.name = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

table.column Name of Cytoscape table column to map values from

style.name Name of style; default is "default" style

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setNodeLabelMapping('name')
```

setNodeLabelOpacityBypass

Set Node Label Opacity Bypass

Description

Override the label opacity for particular nodes.

```
setNodeLabelOpacityBypass(
  node.names,
  new.values,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

node.names List of node names or SUIDs

new. values List of values to set, or single value

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values or mappings defined for this visual property of the node or nodes specified. This method ultimately calls the generic function, setNodePropertyBypass, which can be used to set any visual property. To restore defaults and mappings, use clearNodePropertyBypass.

Value

None

See Also

set Node Property Bypass, clear Node Property Bypass

Examples

```
setNodeLabelOpacityBypass()
```

```
setNodeLabelOpacityDefault
```

Set Node Label Opacity Default

Description

Set default opacity value for all unmapped node labels.

```
setNodeLabelOpacityDefault(
  new.opacity,
  style.name = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

new.opacity Numeric values between 0 and 255; 0 is invisible.

style.name Name of style; default is "default" style.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setNodeLabelOpacityDefault(50)
```

setNodeLabelOpacityMapping

Set Node Label Opacity Mapping

Description

Sets opacity for node label only.

```
setNodeLabelOpacityMapping(
  table.column,
  table.column.values = NULL,
  opacities = NULL,
  mapping.type = "c",
  default.opacity = NULL,
  style.name = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

table.column Name of Cytoscape table column to map values from table.column.values

List of values from Cytoscape table to be used in mapping. Leave NULL to

perform an automatic mapping to all column values.

opacities (integer) values between 0 and 255; 0 is invisible. A range of 50 to 255 is used

by default for automatic mapping.

mapping.type (char) continuous, discrete or passthrough (c,d,p); default is continuous

default.opacity

Opacity value to set as default for all unmapped values

style.name Name of style; default is "default" style

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setNodeLabelOpacityMapping('score')
setNodeLabelOpacityMapping('score', opacities=c(0,100))
setNodeLabelOpacityMapping('score', c(-5,5), c(50,255))
```

setNodeLabelPositionBypass

Set Node Label Position Bypass

Description

Override the label position for particular nodes.

```
setNodeLabelPositionBypass(
  node.names,
  new.positions,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

node.names List of node names or SUIDs

new.positions List of label positions, or single value

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values or mappings defined for this visual property of the node or nodes specified. This method ultimately calls the generic function, setNodePropertyBypass, which can be used to set any visual property. To restore defaults and mappings, use clearNodePropertyBypass, see examples.

Value

None

See Also

setNodePropertyBypass, clearNodePropertyBypass

Examples

```
setNodeLabelPositionBypass('Node 1','E,S,c,0.00,0.00')
```

setNodeLabelPositionDefault

Set Node Label Position Default

Description

Set the default node label position

```
setNodeLabelPositionDefault(
  new.nodeAnchor,
  new.graphicAnchor,
  new.justification,
  new.xOffset,
  new.yOffset,
  style.name = NULL,
  base.url = .defaultBaseUrl
)
```

new.nodeAnchor New position on node to place the graphic: C,NW,N,NE,E,SE,S,SW,W new.graphicAnchor

New position on graphic to place on node: C,NW,N,NE,E,SE,S,SW,W

new.justification

New positioning of content within graphic: 1,r,c

new.xOffset New additional offset in the x direction new.yOffset New additional offset in the y direction style.name Name of style; default is "default" style.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setNodeLabelPositionDefault("S", "C", "c", 0.00, 0.00)
```

setNodeOpacityBypass Set Node Opacity Bypass

Description

Set the bypass value for node fill, label and border opacity for the specified node or nodes.

Usage

```
setNodeOpacityBypass(
  node.names,
  new.values,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

node.names List of node names or SUIDs new.values List of values to set, or single value

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values or mappings defined for this visual property of the node or nodes specified. This method ultimately calls the generic function, setNodePropertyBypass, which can be used to set any visual property. To restore defaults and mappings, use clearNodeOpacityBypass, see examples.

Value

None

See Also

setNodePropertyBypass, clearNodeOpacityBypass

Examples

```
setNodeOpacityBypass('Node 1', 100)
setNodeOpacityBypass(c('Node 1', 'Node 2'), 100)
clearNodeOpacityBypass(c('Node 1', 'Node 2'))
```

setNodePositionBypass Set Node Position Bypass

Description

Sets the bypass value of node position for one or more nodes. Only applicable if node dimensions are locked. See lockNodeDimensions.

Usage

```
setNodePositionBypass(
  node.names,
  new.x.locations = NULL,
  new.y.locations = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

```
node.names List of node names or SUIDs

new.x.locations

List of x position values, or single value, default is current x position

new.y.locations

List of y position values, or single value, default is current y position
```

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values or mappings defined for this visual property of the node or nodes specified. This method ultimately calls the generic function, setNodePropertyBypass, which can be used to set any visual property. To restore defaults and mappings, use clearNodePropertyBypass, see examples.

Value

None

See Also

setNodePropertyBypass, clearNodePropertyBypass

Examples

```
setNodePositionBypass('Node 1', 35)
```

setNodePropertyBypass Set Node Property Bypass

Description

Set bypass values for any node property of the specified nodes, overriding default values and mappings defined by any visual style.

```
setNodePropertyBypass(
  node.names,
  new.values,
  visual.property,
  bypass = TRUE,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

node.names List of node names or SUIDs

new.values List of values to set, or single value

visual.property

Name of a visual property. See getVisualPropertyNames.

bypass Whether to set permanent bypass value. Default is TRUE.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values or mappings defined for the visual properties of the node or nodes specified. To restore defaults and mappings, use clearNodePropertyBypass.

Value

None

See Also

clearNodePropertyBypass

Examples

```
setNodePropertyBypass()
```

setNodeSelectionColorDefault

Set Node Selection Color Default

Description

Set the default selection node color.

```
setNodeSelectionColorDefault(
  new.color,
  style.name = NULL,
  base.url = .defaultBaseUrl
)
```

new.color Color as hex code, e.g., #FD5903

style.name (optional) Name of style; default is "default" style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setNodeSelectionColorDefault('#FD5903')
```

setNodeShapeBypass

Set Node Shape Bypass

Description

Override the shape for particular nodes.

Usage

```
setNodeShapeBypass(
  node.names,
  new.shapes,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

node.names List of node names or SUIDs

new. shapes List of shapes, or single value. See getNodeShapes.

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values or mappings defined for this visual property of the node or nodes specified. This method ultimately calls the generic function, setNodePropertyBypass, which can be used to set any visual property. To restore defaults and mappings, use clearNodePropertyBypass, see examples.

setNodeShapeDefault 323

Value

None

See Also

set Node Property Bypass, clear Node Property Bypass

Examples

```
setNodeShapeBypass('Node 1', 'ROUND_RECTANGLE')
setNodeShapeBypass(c('Node 1','Node 2'), 'ROUND_RECTANGLE')
clearNodePropertyBypass(c('Node 1','Node 2'), 'NODE_SHAPE')
```

setNodeShapeDefault

Set Node Shape Default

Description

Set the default node shape.

Usage

```
setNodeShapeDefault(new.shape, style.name = NULL, base.url = .defaultBaseUrl)
```

Arguments

new. shape Name of shape, e.g., ELLIPSE, RECTANGLE, etc (see getNodeShapes)

style.name Name of style; default is "default" style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

```
setNodeShapeDefault('ELLIPSE')
```

setNodeShapeMapping Set No.

Set Node Shape Mapping

Description

Map table column values to shapes to set the node shape.

Usage

```
setNodeShapeMapping(
  table.column,
  table.column.values = NULL,
  shapes = NULL,
  default.shape = NULL,
  style.name = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

table.column Name of Cytoscape table column to map values from

table.column.values

List of values from Cytoscape table to be used in mapping. Leave NULL to

perform an automatic mapping to all column values.

shapes List of shapes to map to table.column.values. Leave NULL to perform an auto-

matic mapping to available shapes. See getNodeShapes

default. shape Shape to set as default. See getNodeShapes

style.name Name of style; default is "default" style

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

```
setNodeShapeMapping('type')
setNodeShapeMapping('type',c('protein','dna'),c('ELLIPSE','RECTANGLE'))
```

setNodeSizeBypass 325

setNodeSizeBypass

Set Node Size Bypass

Description

Sets the bypass value of node size for one or more nodes. Only applicable if node dimensions are locked. See lockNodeDimensions.

Usage

```
setNodeSizeBypass(
  node.names,
  new.sizes,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

node.names List of node names or SUIDs new.sizes List of size values, or single value

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values or mappings defined for this visual property of the node or nodes specified. This method ultimately calls the generic function, setNodePropertyBypass, which can be used to set any visual property. To restore defaults and mappings, use clearNodePropertyBypass, see examples.

Value

None

See Also

set Node Property Bypass, clear Node Property Bypass

```
setNodeSizeBypass('Node 1', 35)
setNodeSizeBypass(c('Node 1', 'Node 2'), 35)
clearNodePropertyBypass(c('Node 1', 'Node 2'), 'NODE_SIZE')
```

setNodeSizeDefault

Set Node Size Default

Description

Set the default node size.

Usage

```
setNodeSizeDefault(new.size, style.name = NULL, base.url = .defaultBaseUrl)
```

Arguments

new.size Numeric value for size

style.name Name of style; default is "default" style.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setNodeSizeDefault(35)
```

setNodeSizeMapping

Set Node Size Mapping

Description

Map table column values to node font sizes.

```
setNodeSizeMapping(
  table.column,
  table.column.values = NULL,
  sizes = NULL,
  mapping.type = "c",
  default.size = NULL,
  style.name = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

327 *setNodeTooltipBypass*

Arguments

table.column Name of Cytoscape table column to map values from table.column.values List of values from Cytoscape table to be used in mapping. Leave NULL to perform an automatic mapping to all column values. List of sizes to map to table.column.values. A range of 10 to 100 is used by sizes default for automatic mapping. (char) continuous, discrete or passthrough (c,d,p); default is continuous mapping.type default.size Size value to set as default style.name Name of style; default is "default" style network

(optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

Using this function will lock node width and height to use a singular "size" value.

Value

None

Examples

```
setNodeSizeMapping('score')
setNodeSizeMapping('score', sizes=c(30,80))
setNodeSizeMapping('score', c(0,30), c(35,55))
```

setNodeTooltipBypass Set Node Tooltip Bypass

Description

Sets a bypass tooltip for one or more nodes

```
setNodeTooltipBypass(
  node.names,
  new.tooltip.
 network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

node.names List of node names or SUIDs

new.tooltip List of tooltips, or a single tooltip

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values or mappings defined for this visual property of the node or nodes specified. This method ultimately calls the generic function, setNodePropertyBypass, which can be used to set any visual property. To restore defaults and mappings, use clearNodePropertyBypass, see examples.

Value

None

See Also

setNodePropertyBypass, clearNodePropertyBypass

Examples

```
setNodeTooltipBypass('Node 1', 'This is an important node.')
```

 ${\tt setNodeTooltipDefault} \ \ \textit{Set Node Tooltip Default}$

Description

Set the default node tooltip

```
setNodeTooltipDefault(
  new.tooltip,
  style.name = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

new.tooltip String tooltip for unmapped nodes. style.name Name of style; default is "default" style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setNodeTooltipDefault('unknown')
```

setNodeTooltipMapping Set Node Tooltip Mapping

Description

Pass the values from a table column to display as node tooltips.

Usage

```
setNodeTooltipMapping(
  table.column,
  style.name = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

table.column Name of Cytoscape table column to map values from

style.name Name of style; default is "default" style

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

330 setNodeWidthBypass

Examples

```
setNodeTooltipMapping('description')
```

setNodeWidthBypass

Set Node Width Bypass

Description

Override the width for particular nodes.

Usage

```
setNodeWidthBypass(
  node.names,
  new.widths,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

node.names List of node names or SUIDs

new.widths List of width values, or single value

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method permanently overrides any default values or mappings defined for this visual property of the node or nodes specified. This method ultimately calls the generic function, setNodePropertyBypass, which can be used to set any visual property. To restore defaults and mappings, use clearNodePropertyBypass, see examples.

Value

None

See Also

setNodePropertyBypass, clearNodePropertyBypass

setNodeWidthDefault 331

Examples

```
setNodeWidthBypass('Node 1', 35)
setNodeWidthBypass(c('Node 1','Node 2'), 35)
clearNodePropertyBypass(c('Node 1','Node 2'), 'NODE_WIDTH')
```

setNodeWidthDefault

Set Node Width Default

Description

Set the default node width.

Usage

```
setNodeWidthDefault(new.width, style.name = NULL, base.url = .defaultBaseUrl)
```

Arguments

new.width Numeric value for width.

style.name Name of style; default is "default" style.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

setNodeWidthDefault(35)

 ${\tt setNodeWidthMapping}$

Set Node Width Mapping

Description

Map table column values to the node widths.

Usage

```
setNodeWidthMapping(
  table.column,
  table.column.values = NULL,
  widths = NULL,
  mapping.type = "c",
  default.width = NULL,
  style.name = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

table.column Name of Cytoscape table column to map values from

table.column.values

List of values from Cytoscape table to be used in mapping. Leave NULL to

perform an automatic mapping to all column values.

widths List of width values to map to table.column.values. A range of 10 to 100 is used

by default for automatic mapping.

mapping.type (char) continuous, discrete or passthrough (c,d,p); default is continuous

default.width Size value to set as default

style.name Name of style; default is "default" style

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None #' @details Using this function will unlock node width and height to use separate values.

```
setNodeWidthMapping('score')
setNodeWidthMapping('score', widths=c(30,80))
setNodeWidthMapping('score', c(0,30), c(35,55))
```

setNotebookIsRunning 333

setNotebookIsRunning setNotebookIsRunning

Description

setNotebookIsRunning

Usage

```
setNotebookIsRunning(newState = NULL)
```

Arguments

newState

new state of running remote

Value

oldState

Examples

setNotebookIsRunning()

setSandboxReinitialize

setSandboxReinitialize

Description

Set and return flag indicating that next command should reinitialize the sandbox according to the default_sandbox.

Usage

```
setSandboxReinitialize(doReinitialize = TRUE)
```

Arguments

doReinitialize default is TRUE

Value

sandbox reinitialize

Examples

setCurrentSandbox()

```
setStyleDependencies Set Style Dependencies
```

Description

Sets the values of dependencies in a style, overriding any prior settings.

Usage

```
setStyleDependencies(
  style.name = NULL,
  dependencies,
  base.url = .defaultBaseUrl
)
```

Arguments

style.name Name of style; default is "default" style

dependencies A list of style dependencies, see Available Dependencies below. Note: each

dependency is set by a boolean, TRUE or FALSE (T or F)

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

server response

Available Dependencies

 $arrow Color Matches Edge\ node Custom Graphics Size Sync\ node Size Locked$

```
setStyleDependencies("myStyle",list(nodeSizeLocked=TRUE))
```

```
set Visual Property Default
```

Set Visual Property Default

Description

Set the default value for a visual property.

Usage

```
setVisualPropertyDefault(
  style.string,
  style.name = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

style.string A named list including "visualProperty" and "value"

style.name Name of style; default is "default" style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setVisualPropertyDefault(list(visualProperty = "NODE_SIZE", value = 35))
```

set Visual Style

Set Visual Style

Description

Apply a visual style to a network.

```
setVisualStyle(style.name, network = NULL, base.url = .defaultBaseUrl)
```

Arguments

style.name Name of a visual style

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

```
setVisualStyle()
```

spoofResponse-class spoofResponse

Description

Call CyREST as a remote service via Jupyter-bridge

 ${\tt syncNodeCustomGraphicsSize}$

Sync Node Custom Graphics Size

Description

Set a boolean value to have the size of custom graphics match that of the node.

Usage

```
syncNodeCustomGraphicsSize(
  new.state,
  style.name = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

new.state (Boolean) Whether to sync node custom graphics size

style.name Name of style; default is "default" style

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

toggleGraphicsDetails 337

Value

None

Examples

syncNodeCustomGraphicsSize(TRUE)

toggleGraphicsDetails Toggle Graphics Details

Description

Regardless of the current zoom level and network size, show (or hide) graphics details, e.g., node labels.

Usage

toggleGraphicsDetails(base.url = .defaultBaseUrl)

Arguments

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Details

Displaying graphics details on a very large network will affect pan and zoom performance, depending on your available RAM. See cytoscapeMemoryStatus.

Value

None

Examples

showGraphicsDetails(TRUE)

338 ungroupAnnotation

ungroupAnnotation

Ungroup Annotation Group

Description

Ungroup annotation group from the network view in Cytoscape

Usage

```
ungroupAnnotation(names = NULL, network = NULL, base.url = .defaultBaseUrl)
```

Arguments

names Name of annotation group by UUID or Name

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

You can obtain a list of UUIDs by applying a subset function like so: sapply(getAnnotationList(), '[[', 'uuid')

Value

None

```
\label{lem:ungroupAnnotation} ungroupAnnotation ("016a4af1-69bc-4b99-8183-d6f118847f96") \\ ungroupAnnotation (c("316869a4-39fc-4731-8f45-199dec9af10d", "c3621eb4-4687-490f-9396-b829dd8767d5")) \\ ungroupAnnotation ("Group 1") \\ ungroupAnnotation (c("Group1", "Group2", "Group3")) \\
```

unhideAll 339

Description

Unhide all previously hidden nodes and edges, by clearing the Visible property bypass value.

Usage

```
unhideAll(network = NULL, base.url = .defaultBaseUrl)
```

Arguments

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method sets node and edge visibility bypass to true, overriding any defaults or mappings. Pending CyREST updates, this method will ultimately call the generic function, clearEdgePropertyBypass, which can be used to clear any visual property.

Value

None

See Also

clearEdgePropertyBypass, unhideNodes unhideEdges

Examples

unhideAll()

340 unhideEdges

unhideEdges	Unhide Edges	

Description

Unhide specified edges that were previously hidden, by clearing the Visible property bypass value.

Usage

```
unhideEdges(edge.names, network = NULL, base.url = .defaultBaseUrl)
```

Arguments

edge.names List of edge names or SUIDs

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method ultimately calls the generic function, clearEdgePropertyBypass, which can be used to clear any visual property.

Value

None

See Also

clearEdgePropertyBypass, unhideAll

Examples

unhideEdges()

unhideNodes 341

nhideNodes Unhide Nodes
deNodes Unhide Nodes

Description

Unhide specified nodes that were previously hidden, by clearing the Node Visible property bypass value.

Usage

```
unhideNodes(node.names, network = NULL, base.url = .defaultBaseUrl)
```

Arguments

node.names List of node names or SUIDs

network (optional) Name or SUID of the network. Default is the "current" network active

in Cytoscape.

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

This method ultimately calls the generic function, clearNodePropertyBypass, which can be used to clear any visual property.

Value

None

See Also

clearNodePropertyBypass, unhideAll

Examples

unhideNodes()

uninstallApp

Uninstall App

Description

Uninstall an app from Cytoscape.

Usage

```
uninstallApp(app, base.url = .defaultBaseUrl)
```

Arguments

app Name of app

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

uninstallApp()

 ${\tt UpdateAnnotationBoundedText}$

Update Bounded Text Annotation

Description

Adds a bounded text annotation to a Cytoscape network view. The object will also be added to the Annotation Panel in the GUI.

```
UpdateAnnotationBoundedText(
   text = NULL,
   annotationName = NULL,
   x.pos = NULL,
   y.pos = NULL,
   fontSize = NULL,
   fontFamily = NULL,
   fontStyle = NULL,
```

```
color = NULL,
  angle = NULL,
  type = NULL,
  customShape = NULL,
  fillColor = NULL,
 opacity = NULL,
 borderThickness = NULL,
 borderColor = NULL,
 borderOpacity = NULL,
 height = NULL,
 width = NULL,
 name = NULL,
 canvas = NULL,
 z.order = NULL,
 network = NULL,
 base.url = .defaultBaseUrl
)
```

Arguments

text	The text to be displayed	
annotationName	Name of annotation by UUID or Name	
x.pos	(optional) X position in pixels from left; default is center of current view	
y.pos	(optional) Y position in pixels from top; default is center of current view	
fontSize	(optional) Numeric value; default is 12	
fontFamily	(optional) Font family; default is Arial	
fontStyle	(optional) Font style; default is	
color	(optional) Hexidecimal color; default is #000000 (black)	
angle	(optional) Angle of text orientation; default is 0.0 (horizontal)	
type	(optional) The type of the shape, default is RECTANGLE. See getNodeShapes() for valid options.	
customShape	(optional) If a custom shape, this is the text of the shape	
fillColor	(optional) Hexidecimal color; default is #000000 (black)	
opacity	(optional) Opacity of fill color. Must be an integer between 0 and 100; default is 100.	
borderThickness		
	(optional) Integer	
borderColor	(optional) Hexidecimal color; default is #000000 (black)	
borderOpacity	(optional) Integer between 0 and 100; default is 100.	
height	(optional) Height of bounding shape; default is based on text height.	
width	(optional) Width of bounding shape; default is based on text length.	
name	(optional) Name of annotation object; default is "Text"	
canvas	(optional) Canvas to display annotation, i.e., foreground (default) or background	

z.order	(optional) Arrangement order specified by number (larger values are in front of smaller values); default is $\boldsymbol{0}$
network	(optional) Name or SUID of the network. Default is the "current" network active in Cytoscape.
base.url	(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

A named list of annotation properties, including UUID

Examples

```
UpdateAnnotationBoundedText("test1", "annotationName")
UpdateAnnotationBoundedText("test2", "annotationName", 1000, 1000, name="B2")
UpdateAnnotationBoundedText("test3", "annotationName", 1200, 1000, 30, "Helvetica", "bold", "#990000", 40, name="B3", canvas="foreground",z=4)
```

 ${\tt updateAnnotationImage} \ \ {\it UpdateImageAnnotation}$

Description

Updates a Image annotation to a Cytoscape network view. The object will also be added to the Annotation Panel in the GUI.

```
updateAnnotationImage(
  url = NULL,
  annotationName = NULL,
  x.pos = NULL,
 y.pos = NULL,
  angle = NULL,
  opacity = NULL,
  brightness = NULL,
  contrast = NULL,
  borderThickness = NULL,
  borderColor = NULL,
  borderOpacity = NULL,
  height = NULL,
 width = NULL,
  name = NULL,
  canvas = NULL,
  z.order = NULL,
```

updateAnnotationImage 345

```
network = NULL,
base.url = .defaultBaseUrl
)
```

Arguments

url	URL or path to image file. File paths can be absolute or relative to current working directory. URLs must start with http:// or https://.
annotationName	Name of annotation by UUID or Name
x.pos	(optional) X position in pixels from left; default is center of current view
y.pos	(optional) Y position in pixels from top; default is center of current view
angle	(optional) Angle of text orientation; default is 0.0 (horizontal)
opacity	(optional) Opacity of fill color. Must be an integer between 0 and 100; default is 100.
brightness	(optional) Image brightness. Must be an integer between -100 and 100; default is θ
contrast	(optional) Image contrast. Must be an integer between -100 and 100; default is 0
borderThicknes	
	(optional) Integer
borderColor	(optional) Hexidecimal color; default is #000000 (black)
borderOpacity	(optional) Integer between 0 and 100; default is 100.
height	(optional) Height of image; default is based on text height.
width	(optional) Width of image; default is based on text length.
name	(optional) Name of annotation object; default is "Image"
canvas	(optional) Canvas to display annotation, i.e., foreground (default) or background
z.order	(optional) Arrangement order specified by number (larger values are in front of smaller values); default is $\bf 0$
network	(optional) Name or SUID of the network. Default is the "current" network active in Cytoscape.
base.url	(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

A named list of annotation properties, including UUID

 $update Annotation Shape \ \ Update \ Shape \ Annotation$

Description

Updates a shape annotation to a Cytoscape network view. The object will also be added to the Annotation Panel in the GUI.

Usage

```
updateAnnotationShape(
  type = NULL,
  customShape = NULL,
  annotationName = NULL,
  x.pos = NULL,
  y.pos = NULL,
  angle = NULL,
  fillColor = NULL,
  opacity = NULL,
  borderThickness = NULL,
  borderColor = NULL,
  borderOpacity = NULL,
  height = NULL,
 width = NULL,
  name = NULL,
  canvas = NULL,
  z.order = NULL,
 network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

	type	(optional) The type of the shape, default is RECTANGLE. See getNodeShapes() for valid options.
	customShape	(optional) If a custom shape, this is the text of the shape
	${\tt annotationName}$	Name of annotation by UUID or Name
	x.pos	(optional) X position in pixels from left; default is center of current view
	y.pos	(optional) Y position in pixels from top; default is center of current view
	angle	(optional) Angle of text orientation; default is 0.0 (horizontal)
	fillColor	(optional) Hexidecimal color; default is #000000 (black)
	opacity	(optional) Opacity of fill color. Must be an integer between 0 and 100; default is 100 .
borderThickness		
		(optional) Integer

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borderColor	(optional) Hexidecimal color; default is #000000 (black)
borderOpacity	(optional) Integer between 0 and 100; default is 100.
height	(optional) Height of shape; default is based on text height.
width	(optional) Width of shape; default is based on text length.
name	(optional) Name of annotation object; default is "Shape"
canvas	(optional) Canvas to display annotation, i.e., foreground (default) or background
z.order	(optional) Arrangement order specified by number (larger values are in front of smaller values); default is $\boldsymbol{0}$
network	(optional) Name or SUID of the network. Default is the "current" network active in Cytoscape.
base.url	(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

A named list of annotation properties, including UUID

Examples

Description

Updates a text annotation to a Cytoscape network view. The object will also be added to the Annotation Panel in the GUI.

```
updateAnnotationText(
  text = NULL,
  annotationName = NULL,
  x.pos = NULL,
  y.pos = NULL,
  fontSize = NULL,
  fontFamily = NULL,
  fontStyle = NULL,
  color = NULL,
```

```
angle = NULL,
name = NULL,
canvas = NULL,
z.order = NULL,
network = NULL,
base.url = .defaultBaseUrl
)
```

Arguments

text	The text to be displayed
${\it annotation} {\it Name}$	Name of annotation by UUID or Name
x.pos	(optional) X position in pixels from left; default is center of current view
y.pos	(optional) Y position in pixels from top; default is center of current view
fontSize	(optional) Numeric value; default is 12
fontFamily	(optional) Font family; default is Arial
fontStyle	(optional) Font style; default is
color	(optional) Hexidecimal color; default is #000000 (black)
angle	(optional) Angle of text orientation; default is 0.0 (horizontal)
name	(optional) Name of annotation object; default is "Text"
canvas	$(optional)\ Canvas\ to\ display\ annotation,\ i.e.,\ foreground\ (default)\ or\ background$
z.order	(optional) Arrangement order specified by number (larger values are in front of smaller values); default is $\boldsymbol{0}$
network	(optional) Name or SUID of the network. Default is the "current" network active in Cytoscape.
base.url	(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

A named list of annotation properties, including UUID

updateApp 349

updateApp

Update App

Description

Update a Cytoscape app to the latest available version.

Usage

```
updateApp(app, base.url = .defaultBaseUrl)
```

Arguments

app

Name of app

base.url

(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

None

Examples

updateApp()

updateGroupAnnotation Update Group Annotation

Description

Updates a group annotation, changing the given properties.

```
updateGroupAnnotation(
  name = NULL,
  annotationName = NULL,
  x.pos = NULL,
  y.pos = NULL,
  angle = NULL,
  canvas = NULL,
  z.order = NULL,
  network = NULL,
  base.url = .defaultBaseUrl
)
```

Arguments

name	(optional) Name of annotation object
${\it annotation} {\it Name}$	Name of annotation by UUID or Name
x.pos	(optional) X position in pixels from left; default is center of current view
y.pos	(optional) Y position in pixels from top; default is center of current view
angle	(optional) Angle of text orientation; default is 0.0 (horizontal)
canvas	$(optional)\ Canvas\ to\ display\ annotation,\ i.e.,\ foreground\ (default)\ or\ background$
z.order	(optional) Arrangement order specified by number (larger values are in front of smaller values); default is $\boldsymbol{0}$
network	(optional) Name or SUID of the network. Default is the "current" network active in Cytoscape.
base.url	(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

A named list of annotation properties, including UUID

Examples

```
updateGroupAnnotation("test1", "annotationName")
```

updateNetworkInNDEx Update Network In NDEx

Description

Update an existing network in NDEx, given a previously assoicaiated Cytoscape network, e.g., previously exported to NDEx or imported from NDEx.

```
updateNetworkInNDEx(
  username,
  password,
  isPublic,
  network = NULL,
  metadata = NULL,
  base.url = .defaultBaseUrl
)
```

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Arguments

username	NDEx account username
password	NDEx account password
isPublic	(Boolean) Whether to make the network publicly accessible at NDEx.
network	(optional) Name or SUID of the network. Default is the "current" network active in Cytoscape.
metadata	(optional) A list of structured information describing the network
base.url	(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest version of the CyREST API supported by this version of RCy3.

Value

NDEx identifier (externalId) for the updated submission

Examples

```
updateNetworkInNDEx("user", "pass", TRUE)
```

updateStyleDefaults Updates the default values of visual properties in a style

Description

Updates visual property defaults, overriding any prior settings. See mapVisualProperty for the list of visual properties.

Usage

```
updateStyleDefaults(style.name, defaults, base.url = .defaultBaseUrl)
```

Arguments

style.name	(char) name for style
defaults	(list) a list of visual property default settings
base.url	(optional) Ignore unless you need to specify a custom domain, port or version to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Value

server response

352 updateStyleMapping

See Also

mapVisualProperty

Examples

```
updateStyleDefaults('myStyle',list('node fill color'='#0000FF','node size'=50))
```

updateStyleMapping

Updates a visual property mapping in a style

Description

Updates the visual property mapping, overriding any prior mapping. Creates a visual property mapping if it doesn't already exist in the style.

Usage

```
updateStyleMapping(style.name, mapping, base.url = .defaultBaseUrl)
```

Arguments

style.name (char) name for style

mapping a single visual property mapping, see mapVisualProperty

base.url (optional) Ignore unless you need to specify a custom domain, port or version

to connect to the CyREST API. Default is http://localhost:1234 and the latest

version of the CyREST API supported by this version of RCy3.

Details

Requires visual property mappings to be previously created, see mapVisualProperty.

Value

server response

See Also

mapVisualProperty

```
updateStyleMapping('myStyle',mapVisualProperty('node label','name','p'))
```

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