# Package 'seleniumPipes'

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<b>Description</b> The W3C WebDriver specification defines a way for out-of-process programs to remotely instruct the behaviour of web browsers. It is detailed at <a href="https://w3c.github.io/webdriver/webdriver-spec.html">https://w3c.github.io/webdriver/webdriver-spec.html</a> . This package provides an R client implementing the W3C specification.
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# Description

acceptAlert accept a JavaScript alert

# Usage

```
acceptAlert(remDr, ...)
```

# **Arguments**

remDr An object of class "rDriver". A remote driver object see remoteDr.
... Additional function arguments - Currently passes the retry argument.

# Value

invisible(remDr): An object of class "rDriver" is invisibly returned. A remote driver object see remoteDr. This allows for chaining from this function to other functions that take such an object as an argument. See examples for further details.

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### See Also

Other userPrompts functions: dismissAlert, getAlertText, sendAlertText

### **Examples**

```
## Not run:
 remDr <- remoteDr()</pre>
 remDr %>% go("https://www.google.com/ncr") %>%
 sScript <- "setTimeout(function(){alert('HELLO')},1000); return 'DONE';"</pre>
 remDr %>% executeScript(sScript, args = list())
 remDr %>% dismissAlert()
 sScript <- "setTimeout(function(){confirm('Press a button')},1000); return 'DONE';"</pre>
 remDr %>% executeScript(sScript, args = list())
 remDr %>% acceptAlert()
 sScript <- "setTimeout(function(){confirm('Press a button')},1000); return 'DONE';"</pre>
 remDr %>% executeScript(sScript, args = list())
 remDr %>% getAlertText()
 remDr %>% dismissAlert()
 sScript <- "setTimeout(function(){prompt('Please enter your name', '')},1000); return 'DONE';"</pre>
 remDr %>% executeScript(sScript, args = list())
 remDr %>% getAlertText()
 remDr %>% sendAlertText("Buck Rogers?")
 remDr %>% deleteSession()
## End(Not run)
```

acceptAlertOld

Accept alert

# **Description**

acceptAlertOld accept a JavaScript alert This uses the old JSONwireprotocol endpoints.

### Usage

```
acceptAlertOld(remDr, ...)
```

### **Arguments**

remDr An object of class "rDriver". A remote driver object see remoteDr.

... Additional function arguments - Currently passes the retry argument.

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# Value

invisible(remDr): An object of class "rDriver" is invisibly returned. A remote driver object see remoteDr. This allows for chaining from this function to other functions that take such an object as an argument. See examples for further details.

#### See Also

Other oldMethods functions: dismissAlertOld, executeAsyncScriptOld, executeScriptOld, getWindowHandleOld, getWindowHandleSOld, getWindowPositionOld, getWindowSizeOld, maximizeWindowOld, sendAlertTextOld, setWindowPositionOld, setWindowSizeOld

# **Examples**

```
## Not run:
# functions in this group are using the old JSONwireprotocol end points
## End(Not run)
```

addCookie

Add a specific cookie.

# **Description**

addCookie Add a specific cookie.

#### Usage

```
addCookie(remDr, name, value, path = NULL, domain = NULL, secure = FALSE,
httpOnly = NULL, expiry = NULL, ...)
```

# Arguments

remDr	An object of class "rDriver". A remote driver object see remoteDr.
name	character: The name of the cookie; may not be null or an empty string
value	character: The cookie value; may not be null.
path	character: The path the cookie is visible to. If left blank or set to null, will be set to "/".
domain	character: The domain the cookie is visible to. It should be null or the same as the domain of the current URL.
secure	logical: Whether this cookie requires a secure connection(https?). It should be null or equal to the security of the current URL.
httpOnly	logical: Whether the cookie is an httpOnly cookie.
expiry	The cookie's expiration date; may be null.
	Additional function arguments - Currently passes the retry argument.

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### Value

invisible(remDr): An object of class "rDriver" is invisibly returned. A remote driver object see remoteDr. This allows for chaining from this function to other functions that take such an object as an argument. See examples for further details.

### See Also

Other cookies functions: deleteAllCookies, deleteCookie, getAllCookies, getNamedCookie

### **Examples**

```
## Not run:
# assume a server is running at default location
remDr <- remoteDr()</pre>
remDr %>% go("https://www.google.com/ncr") %>%
 getTitle()
# get the cookies
remDr %>% getCookie()
# get a named cookie
remDr %>% getCookie("NID")
# add our own cookie
remDr %>% addCookie(name = "myCookie", value = "12")
# check its value
remDr %>% getCookie("myCookie")
# delete our cookie
remDr %>% deleteCookie("myCookie")
# check its deleted
remDr %>% getCookie("myCookie")
# delete all cookies
remDr %>% getCookie()
remDr %>% deleteAllCookies() %>%
 getCookie()
remDr %>% deleteSession()
## End(Not run)
```

back

Navigate backwards

### **Description**

back Navigate backwards in the browser history, if possible.

### Usage

```
back(remDr, ...)
```

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# Arguments

remDr An object of class "rDriver". A remote driver object see remoteDr.

... Additional function arguments - Currently passes the retry argument.

#### Value

invisible(remDr): An object of class "rDriver" is invisibly returned. A remote driver object see remoteDr. This allows for chaining from this function to other functions that take such an object as an argument. See examples for further details.

### See Also

Other navigation functions: forward, getCurrentUrl, getTitle, go, refresh

```
## Not run:
 remDr <- remoteDr()</pre>
 remDr %>% go("http://www.google.com/ncr")
 # get the title
 remDr %>% getTitle
 # get the current page url
 remDr %>% getCurrentUrl
 # navigate
 remDr %>% go("http://www.bbc.co.uk")
 # go back
 remDr %>% (seleniumPipes::back)
 # go forward
 remDr %>% forward
 # refresh page
 remDr %>% refresh
 # close browser
 remDr %>% deleteSession
## End(Not run)
```

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### **Description**

checkResponse checks the response from a remote web driver and checks against known errors.

# Usage

```
checkResponse(response)
```

### **Arguments**

response

The value returned by a http method from httr see VERB

### Value

Stops with appropriate error if any found. On error errorResponse and errorContent may provide additional detail.

# **Examples**

```
## Not run:
# internal method
## End(Not run)
```

closeWindow

Close the current window.

# **Description**

closeWindow Close the current window.

# Usage

```
closeWindow(remDr, ...)
```

# **Arguments**

remDr An object of class "rDriver". A remote driver object see remoteDr.

... Additional function arguments - Currently passes the retry argument.

### Value

invisible(remDr): An object of class "rDriver" is invisibly returned. A remote driver object see remoteDr. This allows for chaining from this function to other functions that take such an object as an argument. See examples for further details.

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#### See Also

Other commandContexts functions: fullscreenWindow, getWindowHandles, getWindowHandle, getWindowPosition, getWindowSize, maximizeWindow, setWindowPosition, setWindowSize, switchToFrame, switchToParentFrame, switchToWindow

```
## Not run:
 remDr <- remoteDr()</pre>
 remDr %>% getWindowHandle() # The current window handle
 remDr %>% getWindowHandles() # All windows in the session
 # Get the window position
 remDr %>% getWindowPosition
 # Some browsers are still using the old JSON wire end points
 remDr %>% getWindowPositionOld
 # Get the size of the window
 remDr %>% getWindowSize
 # Some browsers are still using the old JSON wire end points
 # remDr %>% getWindowSizeOld
 # Set the window size
 remDr %>% setWindowSize(500, 500)
 # Some browsers are still using the old JSON wire end points
 remDr %>% setWindowSizeOld(500, 500)
 # Set the position of the window
 remDr %>% setWindowPositionOld(400, 100)
 # Some browsers are still using the old JSON wire end points
 # remDr %>% setWindowPositionOld(400, 100)
 # Maximise the window
 remDr %>% maximizeWindow
 # Some browsers are still using the old JSON wire end points
 # remDr %>% maximizeWindowold()
 remDr %>% go("http://www.google.com/ncr")
 # search for the "R project"
 remDr %>% findElement("name", "q") %>% elementSendKeys("R project", key = "enter")
 webElem <- remDr %>% findElement("css", "h3.r a")
  remDr %>% deleteSession
## End(Not run)
```

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deleteAllCookies

Delete all the cookies.

# Description

deleteAllCookies Delete all the cookies that are currently visible.

### Usage

```
deleteAllCookies(remDr, ...)
```

# **Arguments**

remDr An object of class "rDriver". A remote driver object see remoteDr.

... Additional function arguments - Currently passes the retry argument.

### Value

invisible(remDr): An object of class "rDriver" is invisibly returned. A remote driver object see remoteDr. This allows for chaining from this function to other functions that take such an object as an argument. See examples for further details.

### See Also

Other cookies functions: addCookie, deleteCookie, getAllCookies, getNamedCookie

```
## Not run:
# assume a server is running at default location
remDr <- remoteDr()</pre>
remDr %>% go("https://www.google.com/ncr") %>%
 getTitle()
# get the cookies
remDr %>% getCookie()
# get a named cookie
remDr %>% getCookie("NID")
# add our own cookie
remDr %>% addCookie(name = "myCookie", value = "12")
# check its value
remDr %>% getCookie("myCookie")
# delete our cookie
remDr %>% deleteCookie("myCookie")
# check its deleted
remDr %>% getCookie("myCookie")
# delete all cookies
remDr %>% getCookie()
remDr %>% deleteAllCookies() %>%
```

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```
getCookie()
remDr %>% deleteSession()
## End(Not run)
```

deleteCookie

Delete a given cookie.

# Description

deleteCookie Delete the cookie with the give name.

# Usage

```
deleteCookie(remDr, name = NULL, ...)
```

### **Arguments**

remDr An object of class "rDriver". A remote driver object see remoteDr.

name character: The name of the cookie; may not be null or an empty string

Additional function arguments - Currently passes the retry argument.

### Value

invisible(remDr): An object of class "rDriver" is invisibly returned. A remote driver object see remoteDr. This allows for chaining from this function to other functions that take such an object as an argument. See examples for further details.

### See Also

Other cookies functions: addCookie, deleteAllCookies, getAllCookies, getNamedCookie

```
## Not run:
# assume a server is running at default location
remDr <- remoteDr()
remDr %>% go("https://www.google.com/ncr") %>%
    getTitle()
# get the cookies
remDr %>% getCookie()
# get a named cookie
remDr %>% getCookie("NID")
# add our own cookie
remDr %>% addCookie(name = "myCookie", value = "12")
# check its value
remDr %>% getCookie("myCookie")
# delete our cookie
```

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```
remDr %>% deleteCookie("myCookie")
# check its deleted
remDr %>% getCookie("myCookie")

# delete all cookies
remDr %>% getCookie()
remDr %>% deleteAllCookies() %>%
  getCookie()

remDr %>% deleteSession()

## End(Not run)
```

deleteSession

Delete the session.

# Description

deleteSession Delete the session.

# Usage

```
deleteSession(remDr, ...)
```

# **Arguments**

remDr An object of class "rDriver". A remote driver object see remoteDr.
... Additional function arguments - Currently passes the retry argument.

### Value

Returns an object of class "rDriver". The sessionId associated with this driver has been removed however and the associated browser should be closed by the server.

### See Also

Other sessions functions: newSession, setTimeout

```
## Not run:
    # start a driver without opening a browser
    remDr <- remoteDr(newSession = FALSE)

# open a broswer
    remDr %>% newSession

# set timeout on waiting for elements
    remDr %>% setTimeout(type = "implicit", 5000)
```

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```
# close Session
remDr %>% deleteSession
## End(Not run)
```

dismissAlert

Dismiss Alert

# **Description**

dismissAlert dismiss a JavaScript alert

### Usage

```
dismissAlert(remDr, ...)
```

### **Arguments**

remDr An object of class "rDriver". A remote driver object see remoteDr.

... Additional function arguments - Currently passes the retry argument.

### Value

invisible(remDr): An object of class "rDriver" is invisibly returned. A remote driver object see remoteDr. This allows for chaining from this function to other functions that take such an object as an argument. See examples for further details.

### See Also

Other userPrompts functions: acceptAlert, getAlertText, sendAlertText

```
## Not run:
    remDr <- remoteDr()
    remDr %>% go("https://www.google.com/ncr") %>%
        getTitle()
    sScript <- "setTimeout(function(){alert('HELLO')},1000); return 'DONE';"
    remDr %>% executeScript(sScript, args = list())
    remDr %>% dismissAlert()

    sScript <- "setTimeout(function(){confirm('Press a button')},1000); return 'DONE';"
    remDr %>% executeScript(sScript, args = list())
    remDr %>% acceptAlert()

    sScript <- "setTimeout(function(){confirm('Press a button')},1000); return 'DONE';"</pre>
```

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```
remDr %>% executeScript(sScript, args = list())
remDr %>% getAlertText()
remDr %>% dismissAlert()

sScript <- "setTimeout(function(){prompt('Please enter your name', '')},1000); return 'DONE';"
remDr %>% executeScript(sScript, args = list())
remDr %>% getAlertText()
remDr %>% sendAlertText("Buck Rogers?")

remDr %>% deleteSession()

## End(Not run)
```

dismissAlertOld

Dismiss Alert

### **Description**

dismissAlertOld dismiss a JavaScript alert. This uses the old JSONwireprotocol endpoints.

### Usage

```
dismissAlertOld(remDr, ...)
```

### **Arguments**

remDr An object of class "rDriver". A remote driver object see remoteDr.
... Additional function arguments - Currently passes the retry argument.

### Value

invisible(remDr): An object of class "rDriver" is invisibly returned. A remote driver object see remoteDr. This allows for chaining from this function to other functions that take such an object as an argument. See examples for further details.

# See Also

Other oldMethods functions: acceptAlertOld, executeAsyncScriptOld, executeScriptOld, getWindowHandleOld, getWindowHandleSOld, getWindowPositionOld, getWindowSizeOld, maximizeWindowOld, sendAlertTextOld, setWindowPositionOld, setWindowSizeOld

```
## Not run:
# functions in this group are using the old JSONwireprotocol end points
## End(Not run)
```

elementClear 15

elementClear

Clear an elements text value.

### **Description**

elementClear Clear a TEXTAREA or text INPUT element's value.

### Usage

```
elementClear(webElem, ...)
```

# **Arguments**

```
webElem An object of class "wElement". A web Element object see wbElement.

Additional function arguments - Currently passes the retry argument.
```

### Value

invisible(webElem): An object of class "wElement" is invisibly returned. A webElement object see wbElement. This allows for chaining from this function to other functions that take such an object as an argument. See examples for further details.

#### See Also

Other elementInteraction functions: elementClick, elementSendKeys

```
## Not run:
    # start a brower
    remDr <- remoteDr()
    remDr %>% go("http://www.google.com/ncr")

queryBox <- remDr %>% findElement("name", "q")

# send text to the query box
    queryBox %>% elementSendKeys("Some ", "text")

# clear the query box
    queryBox %>% elementClear

# get the search button
    searchBtn <- remDr %>% findElement("name", "btnG")
# send text to query box
    queryBox %>% elementSendKeys("R project")

# click the search button
    searchBtn %>% elementClick
```

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```
# close browser
remDr %>% deleteSession
## End(Not run)
```

elementClick

Click on an element.

# **Description**

elementClick The elementClick function scrolls into view the element and clicks the in-view centre point. If the element is not pointer-interactable, an element not interactable error is returned.

# Usage

```
elementClick(webElem, ...)
```

# **Arguments**

webElem An object of class "wElement". A web Element object see wbElement.

Additional function arguments - Currently passes the retry argument.

#### Value

invisible(webElem): An object of class "wElement" is invisibly returned. A webElement object see wbElement. This allows for chaining from this function to other functions that take such an object as an argument. See examples for further details.

### See Also

Other elementInteraction functions: elementClear, elementSendKeys

```
## Not run:
    # start a brower
    remDr <- remoteDr()
    remDr %>% go("http://www.google.com/ncr")

queryBox <- remDr %>% findElement("name", "q")

# send text to the query box
    queryBox %>% elementSendKeys("Some ", "text")

# clear the query box
    queryBox %>% elementClear

# get the search button
    searchBtn <- remDr %>% findElement("name", "btnG")
```

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```
# send text to query box
queryBox %>% elementSendKeys("R project")

# click the search button
searchBtn %>% elementClick

# close browser
remDr %>% deleteSession

## End(Not run)
```

elementSendKeys

Send a sequence of key strokes to an element.

# **Description**

elementSendKeys The elementSendKeys function scrolls into view the form control element and then sends the provided keys to the element. In case the element is not keyboard interactable, an element not interactable error is returned.

### Usage

```
elementSendKeys(webElem, ...)
```

### **Arguments**

webElem An object of class "wElement". A web Element object see wbElement.

keys to send the element. seleniumPipes includes mappings to unicode keys see selKeys. To use one of this name the string using key. See examples.

# Value

invisible(webElem): An object of class "wElement" is invisibly returned. A webElement object see wbElement. This allows for chaining from this function to other functions that take such an object as an argument. See examples for further details.

### See Also

Other elementInteraction functions: elementClear, elementClick

```
## Not run:
    # start a brower
    remDr <- remoteDr()
    remDr %>% go("http://www.google.com/ncr")

queryBox <- remDr %>% findElement("name", "q")
```

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```
# send text to the query box
queryBox %>% elementSendKeys("Some ", "text")

# clear the query box
queryBox %>% elementClear

# get the search button
searchBtn <- remDr %>% findElement("name", "btnG")

# send text to query box
queryBox %>% elementSendKeys("R project")

# click the search button
searchBtn %>% elementClick

# close browser
remDr %>% deleteSession

## End(Not run)
```

errorContent

Returns the content from remote webdriver

# **Description**

errorContent returns the content from the remote webdriver on an error.

# Usage

```
errorContent()
```

# Value

returns content see content

```
## Not run:
remDr <- remoteDr()
remDr %>% findElement("name", "sdofnsdofk")
errorContent()
## End(Not run)
```

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errorResponse	Return the response from remote webdriver	

# **Description**

errorResponse returns the response from the remote webdriver on an error.

# Usage

```
errorResponse()
```

### Value

returns response see VERB. Headers, request etc. can be examined from this object.

# **Examples**

```
## Not run:
remDr <- remoteDr()
remDr %>% findElement("name", "sdofnsdofk")
errorResponse()
## End(Not run)
```

executeAsyncScript

Execute JavaScript asynchronously on browser.

# Description

 ${\tt executeAsyncScript\ Inject\ a\ snippet\ of\ JavaScript\ into\ the\ page\ for\ asynchronous\ execution\ in\ the\ context\ of\ the\ currently\ selected\ frame.}$ 

# Usage

```
executeAsyncScript(remDr, script, args = list(), replace = TRUE, ...)
```

# Arguments

remDr	An object of class "rDriver". A remote driver object see remoteDr.
script	character: The script to inject.
args	The arguments of the script as a list.
replace	logical: If TRUE any elements identify as web Elements are converted to such.
	Additional function arguments - Currently passes the retry argument.

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#### **Details**

The driver will pass a callback as the last argument to the snippet, and block until the callback is invoked.

#### Value

If replace is TRUE parses the response from the server for web Elements and converts as such. Otherwise the content returned is assummed to be a simple list.

#### See Also

Other documentHandling functions: executeScript, getPageSource

```
## Not run:
remDr <- remoteDr()</pre>
# Get the page source
remDr %>% go("https://www.google.com/ncr") %>%
  getPageSource
remDr %>% getTitle()
webElem <- remDr %>% findElement("css", "img#hplogo")
# check if the logo is hidden
remDr %>% executeScript("return document.getElementById('hplogo').hidden;", args = list())
# [1] FALSE
# hide the logo
remDr %>% executeScript("document.getElementById('hplogo').hidden = true;", args = list())
# Make the logo visible this time passing a web Element as an argument
remDr %>% executeScript(script = "return arguments[0].hidden = false;", args = list(webElem))
# Pass arguments
remDr %>% executeScript(script = "return argument[1] + argument[2];"
                        , args = list(1, 2)
# Return a web Element
remDr %>% executeScript(script = "return document.getElementById('hplogo');", args = list())
# ElementId: 0
# Remote Driver:
   Remote Ip Address: http://localhost:4444/wd/hub
# Remote sessionId: 9a83672a-d72b-4873-aa7d-96f7f1f80fa0
# Return a web Element in a more complex object
script <- "var test ={num:1, str:'a', el:document.getElementById('hplogo')};return test;"</pre>
remDr %>% executeScript(script = script
                        , args = list())
# $str
# [1] "a"
# $num
# [1] 1
```

```
# $el
# ElementId: 0
# Remote Driver:
   Remote Ip Address: http://localhost:4444/wd/hub
# Remote sessionId: 9a83672a-d72b-4873-aa7d-96f7f1f80fa0
# Run with replace = FALSE
remDr %>% executeScript(script = script
                         , args = list(), replace = FALSE)
# $str
# [1] "a"
# $num
# [1] 1
# $el
# $el$ELEMENT
# [1] "0"
remDr %>% setTimeout("script")
asScript <- "cb = arguments[0];setTimeout(function(){cb('DONE');},5000); "</pre>
system.time(test1 <- remDr %>% executeAsyncScript(asScript, args = list()))
sScript <- "setTimeout(function(){},5000); return 'DONE';"</pre>
system.time(test2 <- remDr %>% executeScript(sScript, args = list()))
remDr %>% deleteSession()
## End(Not run)
```

executeAsyncScriptOld executeAsyncScriptOld

### **Description**

executeAsyncScriptOld This function uses the old JSONwireprotocol end points. Inject a snippet of JavaScript into the page for asynchronous execution in the context of the currently selected frame.

### Usage

```
executeAsyncScriptOld(remDr, script, args = list(), replace = TRUE, ...)
```

# Arguments

```
remDr An object of class "rDriver". A remote driver object see remoteDr.
script character: The script to inject.
args The arguments of the script as a list.
```

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replace logical: If TRUE any elements identify as web Elements are converted to such.
... Additional function arguments - Currently passes the retry argument.

#### **Details**

The driver will pass a callback as the last argument to the snippet, and block until the callback is invoked.

#### Value

If replace is TRUE parses the response from the server for web Elements and converts as such. Otherwise the content returned is assummed to be a simple list.

#### See Also

Other oldMethods functions: acceptAlertOld, dismissAlertOld, executeScriptOld, getAlertTextOld, getWindowHandleOld, getWindowHandlesOld, getWindowPositionOld, getWindowSizeOld, maximizeWindowOld, sendAlertTextOld, setWindowPositionOld, setWindowSizeOld

# **Examples**

```
## Not run:
# functions in this group are using the old JSONwireprotocol end points
## End(Not run)
```

executeScript

Execute JavaScript on browser.

# **Description**

executeScript Inject a snippet of JavaScript into the page for execution in the context of the currently selected frame. The executed script is assumed to be synchronous and the result of evaluating the script will be returned.

### Usage

```
executeScript(remDr, script, args = list(), replace = TRUE, ...)
```

# **Arguments**

remDr	An object of class "rDriver". A remote driver object see remoteDr.
script	character: The script to inject.
args	The arguments of the script as a list.
replace	logical: If TRUE any elements identify as web Elements are converted to such.
	Additional function arguments - Currently passes the retry argument.

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#### Value

If replace is TRUE parses the response from the server for web Elements and converts as such. Otherwise the content returned is assummed to be a simple list.

#### See Also

Other documentHandling functions: executeAsyncScript, getPageSource

```
## Not run:
remDr <- remoteDr()</pre>
# Get the page source
remDr %>% go("https://www.google.com/ncr") %>%
  getPageSource
remDr %>% getTitle()
webElem <- remDr %>% findElement("css", "img#hplogo")
# check if the logo is hidden
remDr %>% executeScript("return document.getElementById('hplogo').hidden;", args = list())
# [1] FALSE
# hide the logo
remDr %>% executeScript("document.getElementById('hplogo').hidden = true;", args = list())
# Make the logo visible this time passing a web Element as an argument
remDr %>% executeScript(script = "return arguments[0].hidden = false;", args = list(webElem))
# Pass arguments
remDr %>% executeScript(script = "return argument[1] + argument[2];"
                        , args = list(1, 2)
# Return a web Element
remDr %>% executeScript(script = "return document.getElementById('hplogo');", args = list())
# ElementId: 0
# Remote Driver:
   Remote Ip Address: http://localhost:4444/wd/hub
# Remote sessionId: 9a83672a-d72b-4873-aa7d-96f7f1f80fa0
# Return a web Element in a more complex object
script <- "var test ={num:1, str:'a', el:document.getElementById('hplogo')};return test;"</pre>
remDr %>% executeScript(script = script
                        , args = list())
# $str
# [1] "a"
# $num
# [1] 1
# $el
# ElementId: 0
# Remote Driver:
   Remote Ip Address: http://localhost:4444/wd/hub
# Remote sessionId: 9a83672a-d72b-4873-aa7d-96f7f1f80fa0
```

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```
# Run with replace = FALSE
remDr %>% executeScript(script = script
                        , args = list(), replace = FALSE)
# $str
# [1] "a"
# $num
# [1] 1
# $el
# $el$ELEMENT
# [1] "0"
remDr %>% setTimeout("script")
asScript <- "cb = arguments[0];setTimeout(function(){cb('DONE');},5000); "</pre>
system.time(test1 <- remDr %>% executeAsyncScript(asScript, args = list()))
sScript <- "setTimeout(function(){},5000); return 'DONE';"</pre>
system.time(test2 <- remDr %>% executeScript(sScript, args = list()))
remDr %>% deleteSession()
## End(Not run)
```

executeScriptOld

Execute JavaScript asynchronously on browser.

# Description

executeScriptOld This function uses the old JSONwireprotocol end points. Inject a snippet of JavaScript into the page for execution in the context of the currently selected frame. The executed script is assumed to be synchronous and the result of evaluating the script will be returned.

# Usage

```
executeScriptOld(remDr, script, args = list(), replace = TRUE, ...)
```

### **Arguments**

remDr	An object of class "rDriver". A remote driver object see remoteDr.
script	character: The script to inject.
args	The arguments of the script as a list.
replace	logical: If TRUE any elements identify as web Elements are converted to such.
	Additional function arguments - Currently passes the retry argument.

findElement 25

### Value

If replace is TRUE parses the response from the server for web Elements and converts as such. Otherwise the content returned is assummed to be a simple list.

#### See Also

Other oldMethods functions: acceptAlertOld, dismissAlertOld, executeAsyncScriptOld, getAlertTextOld, getWindowHandleOld, getWindowHandlesOld, getWindowPositionOld, getWindowSizeOld, maximizeWindowOld, sendAlertTextOld, setWindowPositionOld, setWindowSizeOld

# Examples

```
## Not run:
# functions in this group are using the old JSONwireprotocol end points
## End(Not run)
```

findElement

Search for an element on the page

### **Description**

findElement Search for an element on the page, starting from the document root. The located element will be returned as an object of "wElement" class

### Usage

```
findElement(remDr, using = c("xpath", "css selector", "id", "name",
    "tag name", "class name", "link text", "partial link text"), value, ...)
```

# Arguments

remDr	An object of class "rDriver". A remote driver object see remoteDr.
using	Locator scheme to use to search the element, available schemes: "class name", "css selector", "id", "name", "link text", "partial link text", "tag name", "xpath". Defaults to 'xpath'. Partial string matching is accepted.
value	The search target. See examples.
	Additional function arguments - Currently passes the retry argument.

# **Details**

Details of possible locator schemes

<sup>&</sup>quot;class name": Returns an element whose class name contains the search value; compound class names are not permitted.

<sup>&</sup>quot;css selector": Returns an element matching a CSS selector.

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- "id": Returns an element whose ID attribute matches the search value.
- "name": Returns an element whose NAME attribute matches the search value.
- "link text": Returns an anchor element whose visible text matches the search value.
- "partial link text": Returns an anchor element whose visible text partially matches the search value.
- "tag name": Returns an element whose tag name matches the search value.
- "xpath": Returns an element matching an XPath expression.

#### Value

invisible(wbElement(res\$value, remDr)): An object of class "wElement" is invisibly returned. A webElement object see wbElement. This allows for chaining from this function to other functions that take such an object as an argument. See examples for further details.

#### See Also

 $Other\ element Retrieval\ functions:\ find Element\ From Element,\ find Element\ From Element\$ 

```
## Not run:
 remDr <- remoteDr()</pre>
 remDr %>% go("http://www.google.com/ncr")
 # find the search form query box and search for "R project"
 webElem <- remDr %>% findElement("name", "q") %>%
   elementSendKeys("R project", key = "enter")
 # click the first link hopefully should be www.r-project.org
 remDr %>% findElement("css", "h3.r a") %>% elementClick
 # get the navigation div
 navElem <- remDr %>% findElement("css", "div[role='navigation']")
 # find all the links in this div
 navLinks <- navElem %>% findElementsFromElement("css", "a")
 # check the links
 nLinks <- sapply(navLinks, function(x) x %>% getElementText)
 # compare with all links
 allLinks <- remDr %>% findElements("css", "a")
 aLinks <- sapply(allLinks, function(x) x %>% getElementText)
 # show the effect of searching for elements from element
 aLinks %in% nLinks
 remDr %>% deleteSession
## End(Not run)
```

findElementFromElement 27

findElementFromElement

Search for an element on the page, starting from another element

### **Description**

findElementFromElement Search for an element on the page, starting from the node defined by the parent webElement. The located element will be returned as an object of wElement class.

### Usage

```
findElementFromElement(webElem, using = c("xpath", "css selector", "id",
   "name", "tag name", "class name", "link text", "partial link text"), value,
   ...)
```

# **Arguments**

webElem	An object of class "wElement". A web Element object see wbElement.
using	Locator scheme to use to search the element, available schemes: "class name", "css selector", "id", "name", "link text", "partial link text", "tag name", "xpath". Defaults to 'xpath'. Partial string matching is accepted.
value	The search target. See examples.
	Additional function arguments - Currently passes the retry argument.

### **Details**

Details of possible locator schemes

"class name": Returns an element whose class name contains the search value; compound class names are not permitted.

### Value

invisible(wbElement(res\$value, webElem\$remDr)): An object of class "wElement" is invisibly returned. A webElement object see wbElement. This allows for chaining from this function to other functions that take such an object as an argument. See examples for further details.

<sup>&</sup>quot;css selector": Returns an element matching a CSS selector.

<sup>&</sup>quot;id": Returns an element whose ID attribute matches the search value.

<sup>&</sup>quot;name": Returns an element whose NAME attribute matches the search value.

<sup>&</sup>quot;link text": Returns an anchor element whose visible text matches the search value.

<sup>&</sup>quot;partial link text": Returns an anchor element whose visible text partially matches the search value.

<sup>&</sup>quot;tag name": Returns an element whose tag name matches the search value.

<sup>&</sup>quot;xpath": Returns an element matching an XPath expression.

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### See Also

Other elementRetrieval functions: findElementsFromElement, findElements, findElement, getActiveElement

### **Examples**

```
## Not run:
 remDr <- remoteDr()</pre>
 remDr %>% go("http://www.google.com/ncr")
 # find the search form query box and search for "R project"
 webElem <- remDr %>% findElement("name", "q") %>%
   elementSendKeys("R project", key = "enter")
 # click the first link hopefully should be www.r-project.org
 remDr %>% findElement("css", "h3.r a") %>% elementClick
 # get the navigation div
 navElem <- remDr %>% findElement("css", "div[role='navigation']")
 # find all the links in this div
 navLinks <- navElem %>% findElementsFromElement("css", "a")
 # check the links
 nLinks <- sapply(navLinks, function(x) x %>% getElementText)
 # compare with all links
 allLinks <- remDr %>% findElements("css", "a")
 aLinks <- sapply(allLinks, function(x) x %>% getElementText)
 # show the effect of searching for elements from element
 aLinks %in% nLinks
 remDr %>% deleteSession
## End(Not run)
```

findElements

Search for multiple elements on the page

### **Description**

findElements Search for multiple elements on the page, starting from the document root. The located elements will be returned as a list of objects of class wElement.

### Usage

```
findElements(remDr, using = c("xpath", "css selector", "id", "name",
    "tag name", "class name", "link text", "partial link text"), value, ...)
```

findElements 29

# **Arguments**

remDr	An object of class "rDriver". A remote driver object see remoteDr.
using	Locator scheme to use to search the element, available schemes: "class name", "css selector", "id", "name", "link text", "partial link text", "tag name", "xpath" . Defaults to 'xpath'. Partial string matching is accepted.
value	The search target. See examples.
	Additional function arguments - Currently passes the retry argument.

#### **Details**

Details of possible locator schemes

"class name": Returns an element whose class name contains the search value; compound class names are not permitted.

### Value

invisible(lapply(res\$value, wbElement, remDr = remDr)): A list of objects of class "wElement" is invisibly returned. A webElement object see wbElement. This allows for chaining from this function to other functions that take such an object as an argument. See examples for further details.

### See Also

 $Other\ element Retrieval\ functions:\ find Element From Element,\ find Elements From Element,\ find Element,\ get Active Element$ 

```
## Not run:
    remDr <- remoteDr()
    remDr %>% go("http://www.google.com/ncr")

# find the search form query box and search for "R project"
    webElem <- remDr %>% findElement("name", "q") %>%
        elementSendKeys("R project", key = "enter")
# click the first link hopefully should be www.r-project.org
    remDr %>% findElement("css", "h3.r a") %>% elementClick

# get the navigation div
```

<sup>&</sup>quot;css selector": Returns an element matching a CSS selector.

<sup>&</sup>quot;id": Returns an element whose ID attribute matches the search value.

<sup>&</sup>quot;name": Returns an element whose NAME attribute matches the search value.

<sup>&</sup>quot;link text": Returns an anchor element whose visible text matches the search value.

<sup>&</sup>quot;partial link text": Returns an anchor element whose visible text partially matches the search value.

<sup>&</sup>quot;tag name": Returns an element whose tag name matches the search value.

<sup>&</sup>quot;xpath": Returns an element matching an XPath expression.

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```
navElem <- remDr %>% findElement("css", "div[role='navigation']")
# find all the links in this div
navLinks <- navElem %>% findElementsFromElement("css", "a")
# check the links
nLinks <- sapply(navLinks, function(x) x %>% getElementText)
# compare with all links
allLinks <- remDr %>% findElements("css", "a")
aLinks <- sapply(allLinks, function(x) x %>% getElementText)
# show the effect of searching for elements from element
aLinks %in% nLinks
remDr %>% deleteSession
## End(Not run)
```

findElementsFromElement

Search for multiple elements on the page, starting from another element.

# **Description**

findElementsFromElement Search for multiple elements on the page, starting from the node defined by the parent webElement. The located elements will be returned as an list of objects of class wElement.

# Usage

```
findElementsFromElement(webElem, using = c("xpath", "css selector", "id",
   "name", "tag name", "class name", "link text", "partial link text"), value,
   ...)
```

### **Arguments**

webElem	An object of class "wElement". A web Element object see wbElement.
using	Locator scheme to use to search the element, available schemes: "class name", "css selector", "id", "name", "link text", "partial link text", "tag name", "xpath". Defaults to 'xpath'. Partial string matching is accepted.
value	The search target. See examples.
	Additional function arguments - Currently passes the retry argument.

findElementsFromElement 31

#### **Details**

Details of possible locator schemes

"class name": Returns an element whose class name contains the search value; compound class names are not permitted.

"css selector": Returns an element matching a CSS selector.

"id": Returns an element whose ID attribute matches the search value.

"name": Returns an element whose NAME attribute matches the search value.

"link text": Returns an anchor element whose visible text matches the search value.

"partial link text": Returns an anchor element whose visible text partially matches the search value.

"tag name": Returns an element whose tag name matches the search value.

"xpath": Returns an element matching an XPath expression.

#### Value

invisible(lapply(res\$value, wbElement, remDr = webElem\$remDr)): A list of objects of class "wElement" is invisibly returned. A webElement object see wbElement. This allows for chaining from this function to other functions that take such an object as an argument. See examples for further details.

#### See Also

 $Other element Retrieval \ functions: \ find Element From Element, \ find Elements, \ find Element, \ get Active Element \ find Element, \ fi$ 

```
## Not run:
 remDr <- remoteDr()</pre>
 remDr %>% go("http://www.google.com/ncr")
 # find the search form query box and search for "R project"
 webElem <- remDr %>% findElement("name", "q") %>%
   elementSendKeys("R project", key = "enter")
 # click the first link hopefully should be www.r-project.org
 remDr %>% findElement("css", "h3.r a") %>% elementClick
 # get the navigation div
 navElem <- remDr %>% findElement("css", "div[role='navigation']")
 # find all the links in this div
 navLinks <- navElem %>% findElementsFromElement("css", "a")
 # check the links
 nLinks <- sapply(navLinks, function(x) x %>% getElementText)
 # compare with all links
 allLinks <- remDr %>% findElements("css", "a")
 aLinks <- sapply(allLinks, function(x) x %>% getElementText)
```

32 forward

```
# show the effect of searching for elements from element
aLinks %in% nLinks
remDr %>% deleteSession
## End(Not run)
```

forward

Navigate forwards

# **Description**

forward Navigate forwards in the browser history, if possible.

### Usage

```
forward(remDr, ...)
```

# **Arguments**

remDr An object of class "rDriver". A remote driver object see remoteDr.

... Additional function arguments - Currently passes the retry argument.

# Value

invisible(remDr): An object of class "rDriver" is invisibly returned. A remote driver object see remoteDr. This allows for chaining from this function to other functions that take such an object as an argument. See examples for further details.

### See Also

Other navigation functions: back, getCurrentUrl, getTitle, go, refresh

```
## Not run:
    remDr <- remoteDr()
    remDr %>% go("http://www.google.com/ncr")

# get the title
    remDr %>% getTitle

# get the current page url
    remDr %>% getCurrentUrl

# navigate
    remDr %>% go("http://www.bbc.co.uk")
```

fullscreenWindow 33

```
# go back
remDr %>% (seleniumPipes::back)

# go forward
remDr %>% forward

# refresh page
remDr %>% refresh

# close browser
remDr %>% deleteSession

## End(Not run)
```

fullscreenWindow

Make current window full-screen

### **Description**

fullscreenWindow The Fullscreen Window command invokes the window manager-specific "full screen" operation, if any, on the window containing the current top-level browsing context. This typically increases the window to the size of the physical display and can hide browser UI elements such as toolbars.

# Usage

```
fullscreenWindow(remDr, ...)
```

# Arguments

remDr An object of class "rDriver". A remote driver object see remoteDr.

... Additional function arguments - Currently passes the retry argument.

### Value

invisible(remDr): An object of class "rDriver" is invisibly returned. A remote driver object see remoteDr. This allows for chaining from this function to other functions that take such an object as an argument. See examples for further details.

# See Also

Other commandContexts functions: closeWindow, getWindowHandles, getWindowHandle, getWindowPosition, getWindowSize, maximizeWindow, setWindowPosition, setWindowSize, switchToFrame, switchToParentFrame, switchToWindow

34 getActiveElement

```
## Not run:
 remDr <- remoteDr()</pre>
 remDr %>% getWindowHandle() # The current window handle
 remDr %>% getWindowHandles() # All windows in the session
 # Get the window position
 remDr %>% getWindowPosition
 # Some browsers are still using the old JSON wire end points
 remDr %>% getWindowPositionOld
 # Get the size of the window
 remDr %>% getWindowSize
 # Some browsers are still using the old JSON wire end points
 # remDr %>% getWindowSizeOld
 \# Set the window size
 remDr %>% setWindowSize(500, 500)
 # Some browsers are still using the old JSON wire end points
 remDr %>% setWindowSizeOld(500, 500)
 # Set the position of the window
 remDr %>% setWindowPositionOld(400, 100)
 # Some browsers are still using the old JSON wire end points
 # remDr %>% setWindowPositionOld(400, 100)
 # Maximise the window
 remDr %>% maximizeWindow
 # Some browsers are still using the old JSON wire end points
 # remDr %>% maximizeWindowold()
 remDr %>% go("http://www.google.com/ncr")
 # search for the "R project"
 remDr %>% findElement("name", "q") %>% elementSendKeys("R project", key = "enter")
 webElem <- remDr %>% findElement("css", "h3.r a")
 remDr %>% deleteSession
## End(Not run)
```

getActiveElement 35

### **Description**

getActiveElement Get the element on the page that currently has focus. The located element will be returned as a WebcElement object.

## Usage

```
getActiveElement(remDr, ...)
```

### Arguments

```
remDr An object of class "rDriver". A remote driver object see remoteDr.

... Additional function arguments - Currently passes the retry argument.
```

#### Value

invisible(wbElement(res\$value, remDr)): An object of class "wElement" is invisibly returned. A webElement object see wbElement. This allows for chaining from this function to other functions that take such an object as an argument. See examples for further details.

#### See Also

 $Other element Retrieval \ functions: \ find Element From Element, \ find Elements From Element, \ find Elements, \ find Element \ find Elements \ find Element \ find Elements \ find Element \ find Elements \ find Element$ 

```
## Not run:
 remDr <- remoteDr()</pre>
 remDr %>% go("http://www.google.com/ncr")
 # find the search form query box and search for "R project"
 webElem <- remDr %>% findElement("name", "q") %>%
   elementSendKeys("R project", key = "enter")
 # click the first link hopefully should be www.r-project.org
 remDr %>% findElement("css", "h3.r a") %>% elementClick
 # get the navigation div
 navElem <- remDr %>% findElement("css", "div[role='navigation']")
 # find all the links in this div
 navLinks <- navElem %>% findElementsFromElement("css", "a")
 # check the links
 nLinks <- sapply(navLinks, function(x) x %>% getElementText)
 # compare with all links
 allLinks <- remDr %>% findElements("css", "a")
 aLinks <- sapply(allLinks, function(x) x %>% getElementText)
 # show the effect of searching for elements from element
 aLinks %in% nLinks
```

36 getAlertText

```
remDr %>% deleteSession
## End(Not run)
```

getAlertText

Get alert text

# **Description**

getAlertText Get the text from a JavaScript alert.

### Usage

```
getAlertText(remDr, ...)
```

### Arguments

remDr An object of class "rDriver". A remote driver object see remoteDr.
... Additional function arguments - Currently passes the retry argument.

### Value

The text from the alert is returned.

### See Also

Other userPrompts functions: acceptAlert, dismissAlert, sendAlertText

```
## Not run:
    remDr <- remoteDr()
    remDr %>% go("https://www.google.com/ncr") %>%
        getTitle()
    sScript <- "setTimeout(function(){alert('HELLO')},1000); return 'DONE';"
    remDr %>% executeScript(sScript, args = list())
    remDr %>% dismissAlert()

    sScript <- "setTimeout(function(){confirm('Press a button')},1000); return 'DONE';"
    remDr %>% executeScript(sScript, args = list())
    remDr %>% acceptAlert()

    sScript <- "setTimeout(function(){confirm('Press a button')},1000); return 'DONE';"
    remDr %>% executeScript(sScript, args = list())
    remDr %>% getAlertText()
    remDr %>% dismissAlert()
```

getAlertTextOld 37

# Description

getAlertTextOld Get the text from a JavaScript alert. This uses the old JSONwireprotocol endpoints.

## Usage

```
getAlertTextOld(remDr, ...)
```

# **Arguments**

remDr An object of class "rDriver". A remote driver object see remoteDr.
... Additional function arguments - Currently passes the retry argument.

#### Value

The alert text is returned as a string.

#### See Also

Other oldMethods functions: acceptAlertOld, dismissAlertOld, executeAsyncScriptOld, executeScriptOld, getWindowHandleOld, getWindowPositionOld, getWindowSizeOld, maximizeWindowOld, sendAlertTextOld, setWindowPositionOld, setWindowSizeOld

```
## Not run:
# functions in this group are using the old JSONwireprotocol end points
## End(Not run)
```

38 getAllCookies

getAllCookies

Get all current domain cookies

## **Description**

getAllCookies Get all the cookies for the current domain.

### Usage

```
getAllCookies(remDr, ...)
```

### **Arguments**

remDr An object of class "rDriver". A remote driver object see remoteDr.

... Additional function arguments - Currently passes the retry argument.

### Value

A list of all the cookies on the current domain are returned. These cookies have values as stipulated by the arguments given in addCookie.

#### See Also

Other cookies functions: addCookie, deleteAllCookies, deleteCookie, getNamedCookie

```
## Not run:
# assume a server is running at default location
remDr <- remoteDr()</pre>
remDr %>% go("https://www.google.com/ncr") %>%
 getTitle()
# get the cookies
remDr %>% getCookie()
# get a named cookie
remDr %>% getCookie("NID")
# add our own cookie
remDr %>% addCookie(name = "myCookie", value = "12")
# check its value
remDr %>% getCookie("myCookie")
# delete our cookie
remDr %>% deleteCookie("myCookie")
# check its deleted
remDr %>% getCookie("myCookie")
# delete all cookies
remDr %>% getCookie()
remDr %>% deleteAllCookies() %>%
 getCookie()
```

getCurrentUrl 39

```
remDr %>% deleteSession()
## End(Not run)
```

getCurrentUrl

Retrieve the URL of the current page.

## **Description**

getCurrentUrl Retrieve the URL of the current page.

## Usage

```
getCurrentUrl(remDr, ...)
```

# **Arguments**

remDr An object of class "rDriver". A remote driver object see remoteDr.
... Additional function arguments - Currently passes the retry argument.

#### Value

A character string is returned giving the current page URL.

#### See Also

Other navigation functions: back, forward, getTitle, go, refresh

```
## Not run:
    remDr <- remoteDr()
    remDr %>% go("http://www.google.com/ncr")

# get the title
    remDr %>% getTitle

# get the current page url
    remDr %>% getCurrentUrl

# navigate
    remDr %>% go("http://www.bbc.co.uk")

# go back
    remDr %>% (seleniumPipes::back)

# go forward
    remDr %>% forward
```

40 getElementAttribute

```
# refresh page
remDr %>% refresh

# close browser
remDr %>% deleteSession

## End(Not run)
```

getElementAttribute

Get the value of an element's attribute.

# Description

getElementAttribute Get the value of an element's attribute.

## Usage

```
getElementAttribute(webElem, attribute, ...)
```

# **Arguments**

webElem An object of class "wElement". A web Element object see wbElement.

The attribute to query as a character string.

Additional function arguments - Currently passes the retry argument.

#### Value

The value of the attribute, or null if it is not set on the element.

### See Also

Other elementState functions: getElementCssValue, getElementProperty, getElementRect, getElementTagName, getElementText, isElementEnabled, isElementSelected

```
## Not run:
    remDr <- remoteDr()
    remDr %>% go("http://www.google.com/ncr")

# select the search box
    searchElem <- remDr %>% findElement("name", "q")

# get the name of our element
    searchElem %>% getElementAttribute("name")

# get the css background-color
```

getElementCssValue 41

```
searchElem %>% getElementCssValue("background-color")
blueScript <- "arguments[0].style.backgroundColor = 'blue';"
remDr %>% executeScript(blueScript, list(searchElem))
searchElem %>% getElementCssValue("background-color")

# get the javascript property
# searchElem %>% getElementProperty("backgroundColor")

# get dimensions
searchElem %>% getElementRect

searchElem %>% getElementTagName

# get some text and return it
remDr %>% go("http://r-project.org")
remDr %>% findElement("css", "h1") %>% getElementText

# close browser
remDr %>% deleteSession

## End(Not run)
```

getElementCssValue

Query the value of an element's computed CSS property.

## Description

getElementCssValue Query the value of an element's computed CSS property. The CSS property to query should be specified using the CSS property name, not the JavaScript property name (e.g. background-color instead of backgroundColor).

# Usage

```
getElementCssValue(webElem, propertyName, ...)
```

### **Arguments**

webElem An object of class "wElement". A web Element object see wbElement.

propertyName The property to query as a character string

Additional function arguments - Currently passes the retry argument.

## Value

The value of the specified CSS property.

### See Also

Other elementState functions: getElementAttribute, getElementProperty, getElementRect, getElementTagName, getElementText, isElementEnabled, isElementSelected

42 getElementProperty

### **Examples**

```
## Not run:
 remDr <- remoteDr()</pre>
 remDr %>% go("http://www.google.com/ncr")
 # select the search box
 searchElem <- remDr %>% findElement("name", "q")
 # get the name of our element
 searchElem %>% getElementAttribute("name")
 # get the css background-color
 searchElem %>% getElementCssValue("background-color")
 blueScript <- "arguments[0].style.backgroundColor = 'blue';"</pre>
 remDr %>% executeScript(blueScript, list(searchElem))
 searchElem %>% getElementCssValue("background-color")
 # get the javascript property
 # searchElem %>% getElementProperty("backgroundColor")
 # get dimensions
 searchElem %>% getElementRect
 searchElem %>% getElementTagName
 # get some text and return it
 remDr %>% go("http://r-project.org")
 remDr %>% findElement("css", "h1") %>% getElementText
 # close browser
 remDr %>% deleteSession
## End(Not run)
```

getElementProperty

Query the value of an elements property.

# **Description**

getElementProperty Query the value of an elements property.

# Usage

```
getElementProperty(webElem, property, ...)
```

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## **Arguments**

```
webElem An object of class "wElement". A web Element object see wbElement.

property The property to query as a character string

Additional function arguments - Currently passes the retry argument.
```

#### Value

The value of the elements specified property.

### See Also

Other elementState functions: getElementAttribute, getElementCssValue, getElementRect, getElementTagName, getElementText, isElementEnabled, isElementSelected

```
## Not run:
 remDr <- remoteDr()</pre>
 remDr %>% go("http://www.google.com/ncr")
 # select the search box
 searchElem <- remDr %>% findElement("name", "q")
 # get the name of our element
 searchElem %>% getElementAttribute("name")
 # get the css background-color
 searchElem %>% getElementCssValue("background-color")
 blueScript <- "arguments[0].style.backgroundColor = 'blue';"</pre>
 remDr %>% executeScript(blueScript, list(searchElem))
 searchElem %>% getElementCssValue("background-color")
 # get the javascript property
 # searchElem %>% getElementProperty("backgroundColor")
 # get dimensions
 searchElem %>% getElementRect
 searchElem %>% getElementTagName
 # get some text and return it
 remDr %>% go("http://r-project.org")
 remDr %>% findElement("css", "h1") %>% getElementText
 # close browser
 remDr %>% deleteSession
## End(Not run)
```

44 getElementRect

getElementRect

Return the dimensions and coordinates of an element

#### **Description**

getElementRect The getElementRect fuinction returns the dimensions and coordinates of the given web element.

### Usage

```
getElementRect(webElem, ...)
```

### **Arguments**

```
webElem An object of class "wElement". A web Element object see wbElement.

Additional function arguments - Currently passes the retry argument.
```

#### Value

The returned value is a list including the following members:

- x X axis position of the top-left corner of the web element relative to the current browsing context's document element in CSS reference pixels.
- y Y axis position of the top-left corner of the web element relative to the current browsing context's document element in CSS reference pixels.

height Height of the web element's bounding rectangle in CSS reference pixels.

width Width of the web element's bounding rectangle in CSS reference pixels.

#### See Also

Other elementState functions: getElementAttribute, getElementCssValue, getElementProperty, getElementTagName, getElementText, isElementEnabled, isElementSelected

```
## Not run:
    remDr <- remoteDr()
    remDr %>% go("http://www.google.com/ncr")

# select the search box
    searchElem <- remDr %>% findElement("name", "q")

# get the name of our element
    searchElem %>% getElementAttribute("name")

# get the css background-color
    searchElem %>% getElementCssValue("background-color")
    blueScript <- "arguments[0].style.backgroundColor = 'blue';"</pre>
```

getElementTagName 45

```
remDr %>% executeScript(blueScript, list(searchElem))
searchElem %>% getElementCssValue("background-color")

# get the javascript property
# searchElem %>% getElementProperty("backgroundColor")

# get dimensions
searchElem %>% getElementRect

searchElem %>% getElementTagName

# get some text and return it
remDr %>% go("http://r-project.org")
remDr %>% findElement("css", "h1") %>% getElementText

# close browser
remDr %>% deleteSession

## End(Not run)
```

getElementTagName

Query for an element's tag name.

# Description

getElementTagName Query for an element's tag name.

## Usage

```
getElementTagName(webElem, ...)
```

### **Arguments**

```
webElem An object of class "wElement". A web Element object see wbElement.

Additional function arguments - Currently passes the retry argument.
```

#### Value

The element's tag name, as a lowercase character string.

# See Also

Other elementState functions: getElementAttribute, getElementCssValue, getElementProperty, getElementRect, getElementText, isElementEnabled, isElementSelected

46 getElementText

### **Examples**

```
## Not run:
 remDr <- remoteDr()</pre>
 remDr %>% go("http://www.google.com/ncr")
 # select the search box
 searchElem <- remDr %>% findElement("name", "q")
 # get the name of our element
 searchElem %>% getElementAttribute("name")
 # get the css background-color
 searchElem %>% getElementCssValue("background-color")
 blueScript <- "arguments[0].style.backgroundColor = 'blue';"</pre>
 remDr %>% executeScript(blueScript, list(searchElem))
 searchElem %>% getElementCssValue("background-color")
 # get the javascript property
 # searchElem %>% getElementProperty("backgroundColor")
 # get dimensions
 searchElem %>% getElementRect
 searchElem %>% getElementTagName
 # get some text and return it
 remDr %>% go("http://r-project.org")
 remDr %>% findElement("css", "h1") %>% getElementText
 # close browser
 remDr %>% deleteSession
## End(Not run)
```

getElementText

Returns the visible text for the element.

### Description

getElementText Returns the visible text for the element.

#### Usage

```
getElementText(webElem, ...)
```

### **Arguments**

```
webElem An object of class "wElement". A web Element object see wbElement.

Additional function arguments - Currently passes the retry argument.
```

getNamedCookie 47

#### Value

The visible text for an element is returned as a character string.

#### See Also

Other elementState functions: getElementAttribute, getElementCssValue, getElementProperty, getElementRect, getElementTagName, isElementEnabled, isElementSelected

### **Examples**

```
## Not run:
 remDr <- remoteDr()</pre>
 remDr %>% go("http://www.google.com/ncr")
 # select the search box
 searchElem <- remDr %>% findElement("name", "q")
 # get the name of our element
 searchElem %>% getElementAttribute("name")
 # get the css background-color
 searchElem %>% getElementCssValue("background-color")
 blueScript <- "arguments[0].style.backgroundColor = 'blue';"</pre>
 remDr %>% executeScript(blueScript, list(searchElem))
 searchElem %>% getElementCssValue("background-color")
 # get the javascript property
 # searchElem %>% getElementProperty("backgroundColor")
 # get dimensions
 searchElem %>% getElementRect
 searchElem %>% getElementTagName
 # get some text and return it
 remDr %>% go("http://r-project.org")
 remDr %>% findElement("css", "h1") %>% getElementText
 # close browser
 remDr %>% deleteSession
## End(Not run)
```

getNamedCookie

Get a named cookie

### **Description**

getNamedCookie Get the cookie with a given name.

48 getNamedCookie

### Usage

```
getNamedCookie(remDr, name = NULL, ...)
```

### Arguments

remDr An object of class "rDriver". A remote driver object see remoteDr.

name character: The name of the cookie; may not be null or an empty string

Additional function arguments - Currently passes the retry argument.

### Value

A named cookies from the current domain is returned if it exists. These cookies have values as stipulated by the arguments given in addCookie.

#### See Also

Other cookies functions: addCookie, deleteAllCookies, deleteCookie, getAllCookies

```
## Not run:
# assume a server is running at default location
remDr <- remoteDr()</pre>
remDr %>% go("https://www.google.com/ncr") %>%
  getTitle()
# get the cookies
remDr %>% getCookie()
# get a named cookie
remDr %>% getCookie("NID")
# add our own cookie
remDr %>% addCookie(name = "myCookie", value = "12")
# check its value
remDr %>% getCookie("myCookie")
# delete our cookie
remDr %>% deleteCookie("myCookie")
# check its deleted
remDr %>% getCookie("myCookie")
# delete all cookies
remDr %>% getCookie()
remDr %>% deleteAllCookies() %>%
  getCookie()
remDr %>% deleteSession()
## End(Not run)
```

getPageSource 49

getPageSource Get source of last page.

### **Description**

getPageSource Get the source of the last loaded page.

# Usage

```
getPageSource(remDr, ...)
```

## **Arguments**

remDr An object of class "rDriver". A remote driver object see remoteDr.

... Additional function arguments - Currently passes the retry argument.

#### Value

read\_html(res\$value): An xml document is returned. The content from the remote webdriver is parsed (see read\_html) and returned as xml.

#### See Also

Other documentHandling functions: executeAsyncScript, executeScript

```
## Not run:
remDr <- remoteDr()</pre>
# Get the page source
remDr %>% go("https://www.google.com/ncr") %>%
 getPageSource
remDr %>% getTitle()
webElem <- remDr %>% findElement("css", "img#hplogo")
# check if the logo is hidden
remDr %>% executeScript("return document.getElementById('hplogo').hidden;", args = list())
# [1] FALSE
# hide the logo
remDr %>% executeScript("document.getElementById('hplogo').hidden = true;", args = list())
# Make the logo visible this time passing a web Element as an argument
remDr %>% executeScript(script = "return arguments[0].hidden = false;", args = list(webElem))
# Pass arguments
remDr %>% executeScript(script = "return argument[1] + argument[2];"
                        , args = list(1, 2)
# Return a web Element
remDr %>% executeScript(script = "return document.getElementById('hplogo');", args = list())
```

50 getTitle

```
# ElementId: 0
# Remote Driver:
   Remote Ip Address: http://localhost:4444/wd/hub
# Remote sessionId: 9a83672a-d72b-4873-aa7d-96f7f1f80fa0
# Return a web Element in a more complex object
script <- "var test ={num:1, str:'a', el:document.getElementById('hplogo')};return test;"</pre>
remDr %>% executeScript(script = script
                        , args = list())
# $str
# [1] "a"
# $num
# [1] 1
# $el
# ElementId: 0
# Remote Driver:
   Remote Ip Address: http://localhost:4444/wd/hub
# Remote sessionId: 9a83672a-d72b-4873-aa7d-96f7f1f80fa0
# Run with replace = FALSE
remDr %>% executeScript(script = script
                         , args = list(), replace = FALSE)
# $str
# [1] "a"
# $num
# [1] 1
# $el
# $el$ELEMENT
# [1] "0"
remDr %>% setTimeout("script")
asScript <- "cb = arguments[0];setTimeout(function(){cb('DONE');},5000); "</pre>
system.time(test1 <- remDr %>% executeAsyncScript(asScript, args = list()))
sScript <- "setTimeout(function(){},5000); return 'DONE';"</pre>
system.time(test2 <- remDr %>% executeScript(sScript, args = list()))
remDr %>% deleteSession()
## End(Not run)
```

getTitle 51

### **Description**

getTitle Get the current page title.

## Usage

```
getTitle(remDr, ...)
```

## **Arguments**

remDr An object of class "rDriver". A remote driver object see remoteDr.

... Additional function arguments - Currently passes the retry argument.

### Value

The title of the current page is returned as a character string.

### See Also

Other navigation functions: back, forward, getCurrentUrl, go, refresh

```
## Not run:
 remDr <- remoteDr()</pre>
 remDr %>% go("http://www.google.com/ncr")
 # get the title
 remDr %>% getTitle
 # get the current page url
 remDr %>% getCurrentUrl
 # navigate
 remDr %>% go("http://www.bbc.co.uk")
 # go back
 remDr %>% (seleniumPipes::back)
 # go forward
 remDr %>% forward
 # refresh page
 remDr %>% refresh
 # close browser
 remDr %>% deleteSession
## End(Not run)
```

52 getWindowHandle

getWindowHandle

get current window handle

### **Description**

getWindowHandle Retrieve the current window handle.

### Usage

```
getWindowHandle(remDr, ...)
```

### **Arguments**

remDr An object of class "rDriver". A remote driver object see remoteDr.

... Additional function arguments - Currently passes the retry argument.

#### Value

Returns a string which is the "handle" for the current window.

#### See Also

Other commandContexts functions: closeWindow, fullscreenWindow, getWindowHandles, getWindowPosition, getWindowSize, maximizeWindow, setWindowPosition, setWindowSize, switchToFrame, switchToParentFrame, switchToWindow

```
## Not run:
    remDr <- remoteDr()
    remDr %>% getWindowHandle() # The current window handle
    remDr %>% getWindowHandles() # All windows in the session

# Get the window position
    remDr %>% getWindowPosition

# Some browsers are still using the old JSON wire end points
    remDr %>% getWindowPositionOld

# Get the size of the window
    remDr %>% getWindowSize

# Some browsers are still using the old JSON wire end points
    # remDr %>% getWindowSizeOld

# Set the window size
    remDr %>% setWindowSize(500, 500)

# Some browsers are still using the old JSON wire end points
```

getWindowHandleOld 53

```
remDr %>% setWindowSizeOld(500, 500)

# Set the position of the window
remDr %>% setWindowPositionOld(400, 100)

# Some browsers are still using the old JSON wire end points
# remDr %>% setWindowPositionOld(400, 100)

# Maximise the window
remDr %>% maximizeWindow
# Some browsers are still using the old JSON wire end points
# remDr %>% maximizeWindowold()

remDr %>% go("http://www.google.com/ncr")
# search for the "R project"

remDr %>% findElement("name", "q") %>% elementSendKeys("R project", key = "enter")

webElem <- remDr %>% findElement("css", "h3.r a")

remDr %>% deleteSession

## End(Not run)
```

getWindowHandleOld

Retrieve the current window handle.

### **Description**

getWindowHandleOld Retrieve the current window handle. Uses the old JSONwireprotocol end points

### Usage

```
getWindowHandleOld(remDr, ...)
```

# **Arguments**

remDr An object of class "rDriver". A remote driver object see remoteDr.

... Additional function arguments - Currently passes the retry argument.

# Value

Returns a string which is the "handle" for the current window.

# See Also

Other oldMethods functions: acceptAlertOld, dismissAlertOld, executeAsyncScriptOld, executeScriptOld, getAlertTextOld, getWindowHandlesOld, getWindowPositionOld, getWindowSizeOld, maximizeWindowOld, sendAlertTextOld, setWindowPositionOld, setWindowSizeOld

54 getWindowHandles

### **Examples**

```
## Not run:
# functions in this group are using the old JSONwireprotocol end points
## End(Not run)
```

getWindowHandles

Get all window handles.

## **Description**

getWindowHandles Retrieve the list of all window handles available to the session.

#### **Usage**

```
getWindowHandles(remDr, ...)
```

### **Arguments**

remDr An object of class "rDriver". A remote driver object see remoteDr.
... Additional function arguments - Currently passes the retry argument.

### Value

Returns a list of windows handles. Each element of the list is a string. The order window handles are returned is arbitrary.

### See Also

Other commandContexts functions: closeWindow, fullscreenWindow, getWindowHandle, getWindowPosition, getWindowSize, maximizeWindow, setWindowPosition, setWindowSize, switchToFrame, switchToParentFrame, switchToWindow

```
## Not run:
    remDr <- remoteDr()
    remDr %>% getWindowHandle() # The current window handle
    remDr %>% getWindowHandles() # All windows in the session

# Get the window position
    remDr %>% getWindowPosition

# Some browsers are still using the old JSON wire end points
    remDr %>% getWindowPositionOld

# Get the size of the window
```

getWindowHandlesOld

```
remDr %>% getWindowSize
 # Some browsers are still using the old JSON wire end points
 # remDr %>% getWindowSizeOld
 # Set the window size
 remDr %>% setWindowSize(500, 500)
 # Some browsers are still using the old JSON wire end points
 remDr %>% setWindowSizeOld(500, 500)
 # Set the position of the window
 remDr %>% setWindowPositionOld(400, 100)
 # Some browsers are still using the old JSON wire end points
 # remDr %>% setWindowPositionOld(400, 100)
 # Maximise the window
 remDr %>% maximizeWindow
 # Some browsers are still using the old JSON wire end points
 # remDr %>% maximizeWindowold()
 remDr %>% go("http://www.google.com/ncr")
 # search for the "R project"
 remDr %>% findElement("name", "q") %>% elementSendKeys("R project", key = "enter")
 webElem <- remDr %>% findElement("css", "h3.r a")
 remDr %>% deleteSession
## End(Not run)
```

55

getWindowHandlesOld

Get all window handles.

#### **Description**

getWindowHandlesOld Uses the old JSONwireprotocol end points. Retrieve the list of all window handles available to the session.

### Usage

```
getWindowHandlesOld(remDr, ...)
```

### **Arguments**

```
remDr An object of class "rDriver". A remote driver object see remoteDr.

... Additional function arguments - Currently passes the retry argument.
```

56 getWindowPosition

#### Value

Returns a list of windows handles. Each element of the list is a string. The order window handles are returned is arbitrary.

### See Also

Other oldMethods functions: acceptAlertOld, dismissAlertOld, executeAsyncScriptOld, executeScriptOld, getAlertTextOld, getWindowHandleOld, getWindowPositionOld, getWindowSizeOld, maximizeWindowOld, sendAlertTextOld, setWindowPositionOld, setWindowSizeOld

### **Examples**

### **Description**

getWindowPosition The Get Window Position command returns the position on the screen of the operating system window corresponding to the current top-level browsing context.

### Usage

```
getWindowPosition(remDr, ...)
```

### **Arguments**

```
remDr An object of class "rDriver". A remote driver object see remoteDr.

... Additional function arguments - Currently passes the retry argument.
```

### Value

Returns a list which contains the x coordinate to position the window at, relative to the upper left corner of the screen and the Y coordinate to position the window at, relative to the upper left corner of the screen

### See Also

Other commandContexts functions: closeWindow, fullscreenWindow, getWindowHandles, getWindowHandle, getWindowSize, maximizeWindow, setWindowPosition, setWindowSize, switchToFrame, switchToParentFrame, switchToWindow

getWindowPositionOld 57

```
## Not run:
 remDr <- remoteDr()</pre>
 remDr %>% getWindowHandle() # The current window handle
 remDr %>% getWindowHandles() # All windows in the session
 # Get the window position
 remDr %>% getWindowPosition
 # Some browsers are still using the old JSON wire end points
 remDr %>% getWindowPositionOld
 # Get the size of the window
 remDr %>% getWindowSize
 # Some browsers are still using the old JSON wire end points
 # remDr %>% getWindowSizeOld
 \# Set the window size
 remDr %>% setWindowSize(500, 500)
 # Some browsers are still using the old JSON wire end points
 remDr %>% setWindowSizeOld(500, 500)
 # Set the position of the window
 remDr %>% setWindowPositionOld(400, 100)
 # Some browsers are still using the old JSON wire end points
 # remDr %>% setWindowPositionOld(400, 100)
 # Maximise the window
 remDr %>% maximizeWindow
 # Some browsers are still using the old JSON wire end points
 # remDr %>% maximizeWindowold()
 remDr %>% go("http://www.google.com/ncr")
 # search for the "R project"
 remDr %>% findElement("name", "q") %>% elementSendKeys("R project", key = "enter")
 webElem <- remDr %>% findElement("css", "h3.r a")
 remDr %>% deleteSession
## End(Not run)
```

58 getWindowSize

### **Description**

getWindowPositionOld Get the position of the specified window. Uses the old JSONwireprotocol end points.

## Usage

```
getWindowPositionOld(remDr, handle = "current", ...)
```

# **Arguments**

remDr An object of class "rDriver". A remote driver object see remoteDr.

handle Handle of the window to query. If handle = "current" (the default) the current

window is used.

... Additional function arguments - Currently passes the retry argument.

### Value

Returns a list which contains the x coordinate to position the window at, relative to the upper left corner of the screen and the Y coordinate to position the window at, relative to the upper left corner of the screen

#### See Also

Other oldMethods functions: acceptAlertOld, dismissAlertOld, executeAsyncScriptOld, executeScriptOld, getAlertTextOld, getWindowHandleOld, getWindowHandleSold, getWindowSizeOld, maximizeWindowOld, sendAlertTextOld, setWindowPositionOld, setWindowSizeOld

### **Examples**

```
## Not run:
# functions in this group are using the old JSONwireprotocol end points
## End(Not run)
```

getWindowSize

getWindowSize

# **Description**

```
getWindowSize
```

#### **Usage**

```
getWindowSize(remDr, ...)
```

getWindowSize 59

### **Arguments**

```
remDr An object of class "rDriver". A remote driver object see remoteDr.

... Additional function arguments - Currently passes the retry argument.
```

#### Value

The width and height of the window are returned as elements in a list.

### See Also

Other commandContexts functions: closeWindow, fullscreenWindow, getWindowHandles, getWindowHandle, getWindowPosition, maximizeWindow, setWindowPosition, setWindowSize, switchToFrame, switchToParentFrame, switchToWindow

```
## Not run:
 remDr <- remoteDr()</pre>
 remDr %>% getWindowHandle() # The current window handle
 remDr %>% getWindowHandles() # All windows in the session
 # Get the window position
 remDr %>% getWindowPosition
 # Some browsers are still using the old JSON wire end points
 remDr %>% getWindowPositionOld
 # Get the size of the window
 remDr %>% getWindowSize
 # Some browsers are still using the old JSON wire end points
 # remDr %>% getWindowSizeOld
 # Set the window size
 remDr %>% setWindowSize(500, 500)
 # Some browsers are still using the old JSON wire end points
 remDr %>% setWindowSizeOld(500, 500)
 # Set the position of the window
 remDr %>% setWindowPositionOld(400, 100)
 # Some browsers are still using the old JSON wire end points
 # remDr %>% setWindowPositionOld(400, 100)
 # Maximise the window
  remDr %>% maximizeWindow
 # Some browsers are still using the old JSON wire end points
 # remDr %>% maximizeWindowold()
 remDr %>% go("http://www.google.com/ncr")
```

60 getWindowSizeOld

```
# search for the "R project"

remDr %>% findElement("name", "q") %>% elementSendKeys("R project", key = "enter")

webElem <- remDr %>% findElement("css", "h3.r a")

remDr %>% deleteSession

## End(Not run)
```

getWindowSizeOld

Get window size

## **Description**

getWindowSizeOld Get the size of the specified window. Uses the old JSONwireprotocol end points.

### Usage

```
getWindowSizeOld(remDr, handle = "current", ...)
```

### **Arguments**

remDr An object of class "rDriver". A remote driver object see remoteDr.

handle Handle of the window to query. If handle = "current" (the default) the current

window is used.

... Additional function arguments - Currently passes the retry argument.

#### Value

The width and height of the window are returned as elements in a list.

### See Also

Other oldMethods functions: acceptAlertOld, dismissAlertOld, executeAsyncScriptOld, executeScriptOld, getAlertTextOld, getWindowHandleOld, getWindowHandlesOld, getWindowPositionOld, maximizeWindowOld, sendAlertTextOld, setWindowPositionOld, setWindowSizeOld

```
## Not run:
# functions in this group are using the old JSONwireprotocol end points
## End(Not run)
```

go 61

go

Navigate to a new URL.

# Description

```
go Navigate to a new URL.
```

## Usage

```
go(remDr, url, ...)
```

## **Arguments**

remDr	An object of class "rDriver". A remote driver object see remoteDr.
url	The URL to navigate to.
	Additional function arguments - Currently passes the retry argument.

#### Value

invisible(remDr): An object of class "rDriver" is invisibly returned. A remote driver object see remoteDr. This allows for chaining from this function to other functions that take such an object as an argument. See examples for further details.

### See Also

Other navigation functions: back, forward, getCurrentUrl, getTitle, refresh

```
## Not run:
    remDr <- remoteDr()
    remDr %>% go("http://www.google.com/ncr")

# get the title
    remDr %>% getTitle

# get the current page url
    remDr %>% getCurrentUrl

# navigate
    remDr %>% go("http://www.bbc.co.uk")

# go back
    remDr %>% (seleniumPipes::back)

# go forward
    remDr %>% forward

# refresh page
```

62 isElementEnabled

```
remDr %>% refresh

# close browser
  remDr %>% deleteSession
## End(Not run)
```

isElementEnabled

Determine if an element is currently enabled.

### **Description**

is Element Enabled Determine if an element is currently enabled.

### Usage

```
isElementEnabled(webElem, ...)
```

# **Arguments**

```
webElem An object of class "wElement". A web Element object see wbElement.

Additional function arguments - Currently passes the retry argument.
```

# Value

A logical value is returned indicating whether the elemnent is enabled.

#### See Also

Other elementState functions: getElementAttribute, getElementCssValue, getElementProperty, getElementRect, getElementTagName, getElementText, isElementSelected

```
## Not run:
    remDr <- remoteDr()
    remDr %>% go("http://www.google.com/ncr")

# select the search box
    searchElem <- remDr %>% findElement("name", "q")

# get the name of our element
    searchElem %>% getElementAttribute("name")

# get the css background-color
    searchElem %>% getElementCssValue("background-color")
    blueScript <- "arguments[0].style.backgroundColor = 'blue';"
    remDr %>% executeScript(blueScript, list(searchElem))
```

isElementSelected 63

```
# get the javascript property
# searchElem %>% getElementProperty("backgroundColor")

# get dimensions
    searchElem %>% getElementRect

searchElem %>% getElementTagName

# get some text and return it
    remDr %>% go("http://r-project.org")
    remDr %>% findElement("css", "h1") %>% getElementText

# close browser
    remDr %>% deleteSession

## End(Not run)
```

 $\verb|isElementSelected|\\$ 

Determine if an element is currently selected.

# **Description**

is Element Selected Determines if an OPTION element, or an INPUT element of type checkbox or radiobutton is currently selected.

# Usage

```
isElementSelected(webElem, ...)
```

### **Arguments**

```
webElem An object of class "wElement". A web Element object see wbElement.

Additional function arguments - Currently passes the retry argument.
```

#### Value

A logical value is returned indicating whether the elemnent is selected.

### See Also

Other elementState functions: getElementAttribute, getElementCssValue, getElementProperty, getElementRect, getElementTagName, getElementText, isElementEnabled

64 maximizeWindow

### **Examples**

```
## Not run:
 remDr <- remoteDr()</pre>
 remDr %>% go("http://www.google.com/ncr")
 # select the search box
 searchElem <- remDr %>% findElement("name", "q")
 # get the name of our element
 searchElem %>% getElementAttribute("name")
 # get the css background-color
 searchElem %>% getElementCssValue("background-color")
 blueScript <- "arguments[0].style.backgroundColor = 'blue';"</pre>
 remDr %>% executeScript(blueScript, list(searchElem))
 searchElem %>% getElementCssValue("background-color")
 # get the javascript property
 # searchElem %>% getElementProperty("backgroundColor")
 # get dimensions
 searchElem %>% getElementRect
 searchElem %>% getElementTagName
 # get some text and return it
 remDr %>% go("http://r-project.org")
 remDr %>% findElement("css", "h1") %>% getElementText
 # close browser
 remDr %>% deleteSession
## End(Not run)
```

maximizeWindow

Maximize the current window.

### **Description**

maximizeWindow Maximize the current if not already maximized.

# Usage

```
maximizeWindow(remDr, ...)
```

#### **Arguments**

```
remDr An object of class "rDriver". A remote driver object see remoteDr.
... Additional function arguments - Currently passes the retry argument.
```

maximizeWindow 65

#### Value

invisible(remDr): An object of class "rDriver" is invisibly returned. A remote driver object see remoteDr. This allows for chaining from this function to other functions that take such an object as an argument. See examples for further details.

#### See Also

Other commandContexts functions: closeWindow, fullscreenWindow, getWindowHandles, getWindowHandle, getWindowPosition, getWindowSize, setWindowPosition, setWindowSize, switchToFrame, switchToWindow

```
## Not run:
 remDr <- remoteDr()</pre>
 remDr %>% getWindowHandle() # The current window handle
 remDr %>% getWindowHandles() # All windows in the session
 # Get the window position
 remDr %>% getWindowPosition
 # Some browsers are still using the old JSON wire end points
 remDr %>% getWindowPositionOld
 # Get the size of the window
 remDr %>% getWindowSize
 # Some browsers are still using the old JSON wire end points
 # remDr %>% getWindowSizeOld
 # Set the window size
 remDr %>% setWindowSize(500, 500)
 # Some browsers are still using the old JSON wire end points
 remDr %>% setWindowSizeOld(500, 500)
 # Set the position of the window
 remDr %>% setWindowPositionOld(400, 100)
 # Some browsers are still using the old JSON wire end points
 # remDr %>% setWindowPositionOld(400, 100)
 # Maximise the window
 remDr %>% maximizeWindow
 # Some browsers are still using the old JSON wire end points
 # remDr %>% maximizeWindowold()
 remDr %>% go("http://www.google.com/ncr")
 # search for the "R project"
 remDr %>% findElement("name", "q") %>% elementSendKeys("R project", key = "enter")
```

66 maximizeWindowOld

```
webElem <- remDr %>% findElement("css", "h3.r a")
  remDr %>% deleteSession
## End(Not run)
```

maximizeWindowOld

Maximize the current window.

### Description

maximizeWindowOld Maximize the specified window if not already maximized.

#### **Usage**

```
maximizeWindowOld(remDr, handle = "current", ...)
```

### **Arguments**

remDr An object of class "rDriver". A remote driver object see remoteDr.

handle Handle of the window to query. If handle = "current" (the default) the current

window is used.

... Additional function arguments - Currently passes the retry argument.

#### Value

invisible(remDr): An object of class "rDriver" is invisibly returned. A remote driver object see remoteDr. This allows for chaining from this function to other functions that take such an object as an argument. See examples for further details.

### See Also

Other oldMethods functions: acceptAlertOld, dismissAlertOld, executeAsyncScriptOld, executeScriptOld, getWindowHandleOld, getWindowHandleSold, getWindowPositionOld, getWindowSizeOld, sendAlertTextOld, setWindowPositionOld, setWindowSizeOld

```
## Not run:
# functions in this group are using the old JSONwireprotocol end points
## End(Not run)
```

newSession 67

newSession

Create a new session.

### **Description**

newSession The server should attempt to create a session that most closely matches the desired and required capabilities. Required capabilities have higher priority than desired capabilities and must be set for the session to be created.

#### Usage

```
newSession(remDr, ...)
```

# **Arguments**

remDr An object of class "rDriver". A remote driver object see remoteDr.

... Additional function arguments - Currently passes the retry argument.

#### Value

invisible(remDr): An object of class "rDriver" is invisibly returned. A remote driver object see remoteDr. This allows for chaining from this function to other functions that take such an object as an argument. See examples for further details.

### See Also

Other sessions functions: deleteSession, setTimeout

```
## Not run:
    # start a driver without opening a browser
    remDr <- remoteDr(newSession = FALSE)

# open a broswer
    remDr %>% newSession

# set timeout on waiting for elements
    remDr %>% setTimeout(type = "implicit", 5000)

# close Session
    remDr %>% deleteSession

## End(Not run)
```

68 queryDriver

performActions

Not currently implemented

#### **Description**

performActions The Perform Actions command allows you to create sequential interactions that can be sent over from the local end to the remote end. This type of interactions allow emulations like drag and drop.

### Usage

```
performActions(remDr, ...)
```

### **Arguments**

remDr An object of class "rDriver". A remote driver object see remoteDr.
... Additional function arguments - Currently passes the retry argument.

### Value

invisible(remDr): An object of class "rDriver" is invisibly returned. A remote driver object see remoteDr. This allows for chaining from this function to other functions that take such an object as an argument. See examples for further details.

# See Also

Other interactions functions: releasingActions

# Examples

```
## Not run:
# functions not currently implemented
## End(Not run)
```

queryDriver

Send a query to remote Driver.

## **Description**

queryDriver A function to send a query to a remote driver. Intended for seleniumPipes internal use mainly.

#### Usage

```
queryDriver(verb = GET, url, source, drvID, ...)
```

refresh 69

# **Arguments**

verb	The http method to use. See VERB
url	The url of the remote server endpoint.
source	The name of the seleniumPipes function that called queryDriver.
drvID	The driver id of the session as given by an object of class "remoteDr"
	additonal arguments

### Value

The contents of the response from the remote server. See content for details.

### **Examples**

```
## Not run:
# internal method
## End(Not run)
```

refresh

Refresh the current page.

# Description

refresh Refresh the current page.

## Usage

```
refresh(remDr, ...)
```

### **Arguments**

remDr An object of class "rDriver". A remote driver object see remoteDr.

... Additional function arguments - Currently passes the retry argument.

# Value

invisible(remDr): An object of class "rDriver" is invisibly returned. A remote driver object see remoteDr. This allows for chaining from this function to other functions that take such an object as an argument. See examples for further details.

# See Also

Other navigation functions: back, forward, getCurrentUrl, getTitle, go

70 releasing Actions

### **Examples**

```
## Not run:
 remDr <- remoteDr()</pre>
 remDr %>% go("http://www.google.com/ncr")
 # get the title
 remDr %>% getTitle
 # get the current page url
 remDr %>% getCurrentUrl
 # navigate
 remDr %>% go("http://www.bbc.co.uk")
 # go back
 remDr %>% (seleniumPipes::back)
 # go forward
 remDr %>% forward
 # refresh page
 remDr %>% refresh
 # close browser
 remDr %>% deleteSession
## End(Not run)
```

releasingActions

Not currently implemented

# Description

releasingActions The Release Actions command is used to cancel all current action chains. This is the equivalent of releasing all modifiers from input sources.

## Usage

```
releasingActions(remDr, ...)
```

## **Arguments**

remDr An object of class "rDriver". A remote driver object see remoteDr.

... Additional function arguments - Currently passes the retry argument.

remoteDr 71

#### Value

invisible(remDr): An object of class "rDriver" is invisibly returned. A remote driver object see remoteDr. This allows for chaining from this function to other functions that take such an object as an argument. See examples for further details.

### See Also

Other interactions functions: performActions

### **Examples**

```
## Not run:
# functions not currently implemented
## End(Not run)
```

remoteDr

Create a remote driver

### **Description**

remoteDr: Create a remote Driver object

### Usage

```
remoteDr(remoteServerAddr = "http://localhost", port = 4444L,
  browserName = "firefox", version = "", platform = "ANY",
  javascript = TRUE, nativeEvents = TRUE, extraCapabilities = list(),
  path = "wd/hub", newSession = TRUE)
```

### **Arguments**

remoteServerAddr

Object of class "character", giving the ip of the remote server. Defaults to

localhost

port Object of class "integer", the port of the remote server on which to connect

browserName Object of class "character". The name of the browser being used; choices

include chromelfirefoxlinternet explorerliphonelhtmlunit. Defaults to firefox.

version Object of class "character". The browser version, or the empty string if un-

known.

platform Object of class "character". A key specifying which platform the browser is

running on. This value should be one of WINDOWSIXPIVISTAIMACILINUXIUNIX. When requesting a new session, the client may specify "ANY" to indicate any

available platform may be used.

72 retry

javascript Object of class "logical". Whether the session supports executing user sup-

plied JavaScript in the context of the current page.

nativeEvents Object of class "logical". Whether the session supports native events. n

WebDriver advanced user interactions are provided by either simulating the Javascript events directly (i.e. synthetic events) or by letting the browser generate the Javascript events (i.e. native events). Native events simulate the user

interactions better.

extraCapabilities

A list containing any os/platform/driver specific arguments.

path Path on the server side to issue webdriver calls to. Normally use the default

value.

newSession Logical value whether to start an instance of the browser. If TRUE a browser

will be opened using newSession

#### Value

An object of class "rDriver" is returned. This is a remote Driver object that is used in many of the remote driver specific functions. Many functions that take a remote driver object as input also return the remote driver object. This allows chaining of commands. See the examples for chaining in action.

### **Examples**

```
## Not run:
# assume a server is available at the default location.
remDr <- remoteDr()
remDR %>% go("http://www.google.com") %>%
  findElement("name", "q") %>%
  elementSendKeys("R project", key = "enter")
# close our browser
remDr %>% deleteSession
## End(Not run)
```

retry

Documetation of retry argument

### **Description**

The ability to retry function code is enabled by default. retry can be a logical value. if it is TRUE then noTry = getOption("seleniumPipes\_no\_try") and delay = getOption("seleniumPipes\_no\_try\_delay"). If it is FALSE the facility to have multiple trys of the function call is removed. retry can also be a list with the following named arguments that will override the values in options

"noTry" Integer indicating how many times to try the function call

"delay" Integer indicating delay between trys of the function call

seleniumPipes 73

# **Examples**

```
## Not run:
remDr <- remoteDr()</pre>
webElem <- remDr %>% go("http://www.google.com/ncr") %>%
  findElement("name", "q")
# change the name of q with an 8 second delay
myscript <- "var myElem = arguments[0];</pre>
window.setTimeout(function(){
 myElem.setAttribute('name', 'funkyname');
}, 8000);"
remDr %>% executeScript(myscript, args = list(webElem))
newWebElem <- remDr %>% findElement("name", "funkyname")
# > newWebElem <- remDr %>% findElement("name", "funkyname")
# Calling findElement - Try no: 1 of 3
# Calling findElement - Try no: 2 of 3
newWebElem %>% getElementAttribute("name")
# compare with a function that will fail (no element present)
remDr %>% findElement("id", "i am not here", retry = list(noTry = 5, delay = 10))
remDr %>% findElement("id", "i am not here", retry = FALSE)
## End(Not run)
```

seleniumPipes

*Implements the W3C webdriver specification.* 

# **Description**

Implements the W3C webdriver specification.

## Package options

seleniumPipes uses the following options to configure behaviour:

- seleniumPipes\_display\_screenshot: Logical value indicating whether to display PNG returned by takeScreenshot and takeElementScreenshot. Defaults to TRUE
- seleniumPipes\_no\_try: An integer giving the number of time to try calling an endpoint on the Selenium Server. Defaults to 3 attempts
- seleniumPipes\_no\_try\_delay: An integer detailing the delay between attempts to call a failing endpoint on the Selenium Server. Defaults to 5000 miliseconds = 5 seconds.
- seleniumPipes\_SL: A logical value which acts as a flag indicating whether SauiceLabs is being used for package testing.

74 sendAlertText

 seleniumPipes\_selOptions: A list used to store options to pass to remoteDr when running tests.

• seleniumPipes\_sauceID: A character used to store remote session ids when running Sauce-Lab tests on the package.

selKeys

Selenium key mappings

# Description

This data set contains a list of selenium key mappings. The key mappings are outlined at https://github.com/SeleniumHQ/selenium/wiki/JsonWireProtocol#sessionsessionidelementidvalue. selKeys is used when a sendKeys variable is needed. sendKeys is defined as a list. If an entry is needed from selKeys it is denoted by key.

# Usage

selKeys

# **Format**

A named list. The names are the descriptions of the keys. The values are the "UTF-8" character representations.

# Author(s)

John Harrison, 2012-10-05

# **Source**

http://code.google.com/p/selenium/wiki/JsonWireProtocol#/session/:sessionId/element/:id/value

sendAlertText

Send text to alert

## **Description**

sendAlertText Send keystrokes to JavaScript prompt() dialog

# Usage

```
sendAlertText(remDr, text = "", ...)
```

sendAlertText 75

# **Arguments**

remDr	An object of class "rDriver". A remote driver object see remoteDr.
text	A character vector of length 1. In other words a string. The text is passed to the JavaScript alert
	Additional function arguments - Currently passes the retry argument.

## Value

invisible(remDr): An object of class "rDriver" is invisibly returned. A remote driver object see remoteDr. This allows for chaining from this function to other functions that take such an object as an argument. See examples for further details.

# See Also

Other userPrompts functions: acceptAlert, dismissAlert, getAlertText

```
## Not run:
 remDr <- remoteDr()</pre>
 remDr %>% go("https://www.google.com/ncr") %>%
 sScript <- "setTimeout(function(){alert('HELLO')},1000); return 'DONE';"</pre>
 remDr %>% executeScript(sScript, args = list())
 remDr %>% dismissAlert()
 sScript <- "setTimeout(function(){confirm('Press a button')},1000); return 'DONE';"</pre>
 remDr %>% executeScript(sScript, args = list())
 remDr %>% acceptAlert()
 sScript <- "setTimeout(function(){confirm('Press a button')},1000); return 'DONE';"</pre>
 remDr %>% executeScript(sScript, args = list())
 remDr %>% getAlertText()
 remDr %>% dismissAlert()
 sScript <- "setTimeout(function(){prompt('Please enter your name', '')},1000); return 'DONE';"</pre>
 remDr %>% executeScript(sScript, args = list())
 remDr %>% getAlertText()
 remDr %>% sendAlertText("Buck Rogers?")
 remDr %>% deleteSession()
## End(Not run)
```

76 sendAlertTextOld

sendAlertTextOld	Send text to alert

# **Description**

sendAlertTextOld Send keystrokes to JavaScript prompt() dialog. This uses the old JSONwire-protocol endpoints.

# Usage

```
sendAlertTextOld(remDr, text = "", ...)
```

# **Arguments**

remDr	An object of class "rDriver". A remote driver object see remoteDr.
text	A character vector of length 1. In other words a string. The text is passed to the JavaScript alert
	Additional function arguments - Currently passes the retry argument.

# Value

invisible(remDr): An object of class "rDriver" is invisibly returned. A remote driver object see remoteDr. This allows for chaining from this function to other functions that take such an object as an argument. See examples for further details.

## See Also

Other oldMethods functions: acceptAlertOld, dismissAlertOld, executeAsyncScriptOld, executeScriptOld, getAlertTextOld, getWindowHandleOld, getWindowHandlesOld, getWindowPositionOld, getWindowSizeOld, maximizeWindowOld, setWindowPositionOld, setWindowSizeOld

```
## Not run:
# functions in this group are using the old JSONwireprotocol end points
## End(Not run)
```

setTimeout 77

setTimeout Configure the amount of time that a particular type of operation can execute	pe of operation can
---	---------------------

# **Description**

setTimeout Configure the amount of time that a particular type of operation can execute for before they are aborted and a |Timeout| error is returned to the client.

# Usage

```
setTimeout(remDr, type = "page load", milliseconds = 10000, ...)
```

# **Arguments**

remDr	An object of class "rDriver". A remote driver object see remoteDr.
type	The type of operation to set the timeout for. Valid values are: "script" for script timeouts, "implicit" for modifying the implicit wait timeout and "page load" for setting a page load timeout.
milliseconds	The amount of time, in milliseconds, that time-limited commands are permitted to run.
	Additional function arguments - Currently passes the retry argument.

# Value

invisible(remDr): An object of class "rDriver" is invisibly returned. A remote driver object see remoteDr. This allows for chaining from this function to other functions that take such an object as an argument. See examples for further details.

# See Also

Other sessions functions: deleteSession, newSession

```
## Not run:
    # start a driver without opening a browser
    remDr <- remoteDr(newSession = FALSE)

# open a broswer
    remDr %>% newSession

# set timeout on waiting for elements
    remDr %>% setTimeout(type = "implicit", 5000)

# close Session
    remDr %>% deleteSession
```

78 setWindowPosition

```
## End(Not run)
```

setWindowPosition

Change the position of the current window.

# **Description**

setWindowPosition Change the position of the current window.

# Usage

```
setWindowPosition(remDr, x, y, ...)
```

# **Arguments**

remDr	An object of class "rDriver". A remote driver object see remoteDr.
х	integer The X coordinate to position the window at, relative to the upper left corner of the screen.
у	integer The Y coordinate to position the window at, relative to the upper left corner of the screen.
	Additional function arguments - Currently passes the retry argument.

## Value

invisible(remDr): An object of class "rDriver" is invisibly returned. A remote driver object see remoteDr. This allows for chaining from this function to other functions that take such an object as an argument. See examples for further details.

# See Also

 $Other \ command Contexts \ functions: \ closeWindow, \ fullscreenWindow, \ getWindowHandles, \ getWindowHandle, \ getWindowSize, \ maximizeWindow, \ setWindowSize, \ switchToFrame, \ switchToParentFrame, \ switchToWindow \ setWindowSize, \ maximizeWindowSize, \ switchToFrame, \ switchToWindow \ setWindowSize, \ switchToWindowSize, \ switchToWindow \ setWindowSize, \ switchToWindowSize, \ switchToW$ 

```
## Not run:
    remDr <- remoteDr()
    remDr %>% getWindowHandle() # The current window handle
    remDr %>% getWindowHandles() # All windows in the session

# Get the window position
    remDr %>% getWindowPosition

# Some browsers are still using the old JSON wire end points
    remDr %>% getWindowPositionOld
```

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```
# Get the size of the window
 remDr %>% getWindowSize
 # Some browsers are still using the old JSON wire end points
 # remDr %>% getWindowSizeOld
 # Set the window size
 remDr %>% setWindowSize(500, 500)
 # Some browsers are still using the old JSON wire end points
 remDr %>% setWindowSizeOld(500, 500)
 # Set the position of the window
 remDr %>% setWindowPositionOld(400, 100)
 # Some browsers are still using the old JSON wire end points
 # remDr %>% setWindowPositionOld(400, 100)
 # Maximise the window
 remDr %>% maximizeWindow
 # Some browsers are still using the old JSON wire end points
 # remDr %>% maximizeWindowold()
 remDr %>% go("http://www.google.com/ncr")
 # search for the "R project"
 remDr %>% findElement("name", "q") %>% elementSendKeys("R project", key = "enter")
 webElem <- remDr %>% findElement("css", "h3.r a")
 remDr %>% deleteSession
## End(Not run)
```

setWindowPositionOld Change the position of the specified window.

## **Description**

setWindowSize Change the position of the specified window.

# Usage

```
setWindowPositionOld(remDr, x, y, handle = "current", ...)
```

# **Arguments**

remDr An ol

An object of class "rDriver". A remote driver object see remoteDr.

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x	integer The X coordinate to position the window at, relative to the upper left corner of the screen.
У	integer The Y coordinate to position the window at, relative to the upper left corner of the screen.
handle	Handle of the window to query. If handle = "current" (the default) the current window is used.
	Additional function arguments - Currently passes the retry argument.

## Value

invisible(remDr): An object of class "rDriver" is invisibly returned. A remote driver object see remoteDr. This allows for chaining from this function to other functions that take such an object as an argument. See examples for further details.

#### See Also

Other oldMethods functions: acceptAlertOld, dismissAlertOld, executeAsyncScriptOld, executeScriptOld, getWindowHandleOld, getWindowHandlesOld, getWindowPositionOld, getWindowSizeOld, maximizeWindowOld, sendAlertTextOld, setWindowSizeOld

# **Examples**

```
## Not run:
# functions in this group are using the old JSONwireprotocol end points
## End(Not run)
```

setWindowSize

Change the size of the current window.

# Description

setWindowSize Change the size of the current window.

# Usage

```
setWindowSize(remDr, width, height, ...)
```

#### **Arguments**

rembr	An object of class "rDriver". A remote driver object see remoteDr.
width	integer The new window width.
height	integer The new window height.
	Additional function arguments - Currently passes the retry argument.

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## Value

invisible(remDr): An object of class "rDriver" is invisibly returned. A remote driver object see remoteDr. This allows for chaining from this function to other functions that take such an object as an argument. See examples for further details.

#### See Also

Other commandContexts functions: closeWindow, fullscreenWindow, getWindowHandles, getWindowHandle, getWindowPosition, getWindowSize, maximizeWindow, setWindowPosition, switchToFrame, switchToParentFrame, switchToWindow

```
## Not run:
 remDr <- remoteDr()</pre>
 remDr %>% getWindowHandle() # The current window handle
 remDr %>% getWindowHandles() # All windows in the session
 # Get the window position
 remDr %>% getWindowPosition
 # Some browsers are still using the old JSON wire end points
 remDr %>% getWindowPositionOld
 # Get the size of the window
 remDr %>% getWindowSize
 # Some browsers are still using the old JSON wire end points
 # remDr %>% getWindowSizeOld
 # Set the window size
 remDr %>% setWindowSize(500, 500)
 # Some browsers are still using the old JSON wire end points
 remDr %>% setWindowSizeOld(500, 500)
 # Set the position of the window
 remDr %>% setWindowPositionOld(400, 100)
 # Some browsers are still using the old JSON wire end points
 # remDr %>% setWindowPositionOld(400, 100)
 # Maximise the window
 remDr %>% maximizeWindow
 # Some browsers are still using the old JSON wire end points
 # remDr %>% maximizeWindowold()
 remDr %>% go("http://www.google.com/ncr")
 # search for the "R project"
 remDr %>% findElement("name", "q") %>% elementSendKeys("R project", key = "enter")
```

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```
webElem <- remDr %>% findElement("css", "h3.r a")
remDr %>% deleteSession
## End(Not run)
```

setWindowSizeOld

Change the size of the specified window.

# **Description**

setWindowSize Change the size of the specified window.

# Usage

```
setWindowSizeOld(remDr, width, height, handle = "current", ...)
```

# **Arguments**

remDr	An object of class "rDriver". A remote driver object see remoteDr.
width	integer The new window width.
height	integer The new window height.
handle	Handle of the window to query. If handle = "current" (the default) the current window is used.
	Additional function arguments - Currently passes the retry argument.

# Value

invisible(remDr): An object of class "rDriver" is invisibly returned. A remote driver object see remoteDr. This allows for chaining from this function to other functions that take such an object as an argument. See examples for further details.

# See Also

Other oldMethods functions: acceptAlertOld, dismissAlertOld, executeAsyncScriptOld, executeScriptOld, getAlertTextOld, getWindowHandleOld, getWindowHandleSOld, getWindowPositionOld, getWindowSizeOld, maximizeWindowOld, sendAlertTextOld, setWindowPositionOld

```
## Not run:
# functions in this group are using the old JSONwireprotocol end points
## End(Not run)
```

switchToFrame 83

switchToFrame	Change focus to another frame on the page.

# **Description**

switchToFrame Change focus to another frame on the page. If the frame id is null, the server should switch to the page's default content.

# Usage

```
switchToFrame(remDr, Id = NULL, ...)
```

## **Arguments**

remDr	An object of class "rDriver". A remote driver object see remoteDr.
Id	$string lnumber lnull l Web Element\ Identifier\ for\ the\ frame\ to\ change\ focus\ to.$
	Additional function arguments - Currently passes the retry argument.

## Value

invisible(remDr): An object of class "rDriver" is invisibly returned. A remote driver object see remoteDr. This allows for chaining from this function to other functions that take such an object as an argument. See examples for further details.

## See Also

Other commandContexts functions: closeWindow, fullscreenWindow, getWindowHandles, getWindowHandle, getWindowPosition, getWindowSize, maximizeWindow, setWindowPosition, setWindowSize, switchToParentFrame, switchToWindow

```
## Not run:
    remDr <- remoteDr()
    remDr %>% getWindowHandle() # The current window handle
    remDr %>% getWindowHandles() # All windows in the session

# Get the window position
    remDr %>% getWindowPosition

# Some browsers are still using the old JSON wire end points
    remDr %>% getWindowPositionOld

# Get the size of the window
    remDr %>% getWindowSize

# Some browsers are still using the old JSON wire end points
# remDr %>% getWindowSizeOld
```

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```
# Set the window size
 remDr %>% setWindowSize(500, 500)
 # Some browsers are still using the old JSON wire end points
 remDr %>% setWindowSizeOld(500, 500)
 # Set the position of the window
 remDr %>% setWindowPositionOld(400, 100)
 # Some browsers are still using the old JSON wire end points
 # remDr %>% setWindowPositionOld(400, 100)
 # Maximise the window
 remDr %>% maximizeWindow
 # Some browsers are still using the old JSON wire end points
 # remDr %>% maximizeWindowold()
 remDr %>% go("http://www.google.com/ncr")
 # search for the "R project"
 remDr %>% findElement("name", "q") %>% elementSendKeys("R project", key = "enter")
 webElem <- remDr %>% findElement("css", "h3.r a")
 remDr %>% deleteSession
## End(Not run)
```

switchToParentFrame

Change focus to the parent context.

# **Description**

switchToParentFrame Change focus to the parent context. If the current context is the top level browsing context, the context remains unchanged.

## **Usage**

```
switchToParentFrame(remDr, ...)
```

# **Arguments**

remDr An object of class "rDriver". A remote driver object see remoteDr.
... Additional function arguments - Currently passes the retry argument.

# Value

invisible(remDr): An object of class "rDriver" is invisibly returned. A remote driver object see remoteDr. This allows for chaining from this function to other functions that take such an object as an argument. See examples for further details.

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## See Also

Other commandContexts functions: closeWindow, fullscreenWindow, getWindowHandles, getWindowHandle, getWindowPosition, getWindowSize, maximizeWindow, setWindowPosition, setWindowSize, switchToFrame, switchToWindow

```
## Not run:
 remDr <- remoteDr()</pre>
 remDr %>% getWindowHandle() # The current window handle
 remDr %>% getWindowHandles() # All windows in the session
 # Get the window position
 remDr %>% getWindowPosition
 # Some browsers are still using the old JSON wire end points
 remDr %>% getWindowPositionOld
 # Get the size of the window
 remDr %>% getWindowSize
 # Some browsers are still using the old JSON wire end points
 # remDr %>% getWindowSizeOld
 # Set the window size
 remDr %>% setWindowSize(500, 500)
 # Some browsers are still using the old JSON wire end points
 remDr %>% setWindowSizeOld(500, 500)
 # Set the position of the window
 remDr %>% setWindowPositionOld(400, 100)
 # Some browsers are still using the old JSON wire end points
 # remDr %>% setWindowPositionOld(400, 100)
 # Maximise the window
 remDr %>% maximizeWindow
 # Some browsers are still using the old JSON wire end points
 # remDr %>% maximizeWindowold()
 remDr %>% go("http://www.google.com/ncr")
 # search for the "R project"
 remDr %>% findElement("name", "q") %>% elementSendKeys("R project", key = "enter")
 webElem <- remDr %>% findElement("css", "h3.r a")
  remDr %>% deleteSession
## End(Not run)
```

86 switchToWindow

switchToWindow	Change focus to another window.

# **Description**

switchToWindow Change focus to another window.

# Usage

```
switchToWindow(remDr, name, ...)
```

# **Arguments**

remDr An object of class "rDriver". A remote driver object see remoteDr.

The handle of the window to change focus to.

Additional function arguments - Currently passes the retry argument.

## Value

invisible(remDr): An object of class "rDriver" is invisibly returned. A remote driver object see remoteDr. This allows for chaining from this function to other functions that take such an object as an argument. See examples for further details.

# See Also

Other commandContexts functions: closeWindow, fullscreenWindow, getWindowHandles, getWindowHandle, getWindowPosition, getWindowSize, maximizeWindow, setWindowPosition, setWindowSize, switchToFrame, switchToParentFrame

```
## Not run:
    remDr <- remoteDr()
    remDr %>% getWindowHandle() # The current window handle
    remDr %>% getWindowHandles() # All windows in the session

# Get the window position
    remDr %>% getWindowPosition

# Some browsers are still using the old JSON wire end points
    remDr %>% getWindowPositionOld

# Get the size of the window
    remDr %>% getWindowSize

# Some browsers are still using the old JSON wire end points
# remDr %>% getWindowSizeOld
```

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```
# Set the window size
 remDr %>% setWindowSize(500, 500)
 # Some browsers are still using the old JSON wire end points
 remDr %>% setWindowSizeOld(500, 500)
 # Set the position of the window
 remDr %>% setWindowPositionOld(400, 100)
 # Some browsers are still using the old JSON wire end points
 # remDr %>% setWindowPositionOld(400, 100)
 # Maximise the window
 remDr %>% maximizeWindow
 # Some browsers are still using the old JSON wire end points
 # remDr %>% maximizeWindowold()
 remDr %>% go("http://www.google.com/ncr")
 # search for the "R project"
 remDr %>% findElement("name", "q") %>% elementSendKeys("R project", key = "enter")
 webElem <- remDr %>% findElement("css", "h3.r a")
 remDr %>% deleteSession
## End(Not run)
```

takeElementScreenshot takeElementScreenshot

# Description

takeElementScreenshot

# Usage

```
takeElementScreenshot(webElem, file = NULL,
  display = getOption("seleniumPipes_display_screenshot"),
  useViewer = !is.null(getOption("viewer")), returnPNG = FALSE, ...)
```

# **Arguments**

webElem	An object of class "wElement". A web Element object see wbElement.
file	If not null the decoded PNG is written to file using the string provided here. Defaults to NULL.
display	$logical\ Display\ the\ PNG\ or\ not\ (default\ is\ set\ in\ getOption ("seleniumPipes\_display\_screenshot")).$
useViewer	A viewer to view the PNG. Looks for the RSudio viewer by default.

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returnPNG logical return the decoded PNG. If false (default) webElem is returned to allw chaining.

... Additional function arguments - Currently passes the retry argument.

# Value

If returnPNG is FALSE the web Element object is returned and additional chaining is possible. If TRUE then the decoded base64 image is returned see base64\_dec

# See Also

Other screenCapture functions: takeScreenshot

# **Examples**

```
## Not run:
    remDr <- remoteDr()
    remDr %>% go("http://www.google.com/ncr")
    remDr %>% takeScreenshot

# select the search box
    searchElem <- remDr %>% findElement("name", "q")
    #searchElem %>% takeElementScreenshot()

## End(Not run)
```

takeScreenshot

takeScreenshot

# **Description**

takeScreenshot

# Usage

```
takeScreenshot(remDr, file = NULL,
  display = getOption("seleniumPipes_display_screenshot"),
  useViewer = !is.null(getOption("viewer")), returnPNG = FALSE, ...)
```

# Arguments

remDr	An object of class "rDriver". A remote driver object see remoteDr.
file	If not null the decoded PNG is written to file using the string provided here. Defaults to NULL.
display	$logical\ Display\ the\ PNG\ or\ not\ (default\ is\ set\ in\ getOption ("seleniumPipes\_display\_screenshot")).$
useViewer	A viewer to view the PNG. Looks for the RSudio viewer by default.

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returnPNG logical return the decoded PNG. If false (default) remDr is returned to allw chaining.

. . . Additional function arguments - Currently passes the retry argument.

# Value

If returnPNG is FALSE the remote Driver object is returned and additional chaining is possible. If TRUE then the decoded base64 image is returned see base64\_dec

## See Also

Other screenCapture functions: takeElementScreenshot

# **Examples**

```
## Not run:
    remDr <- remoteDr()
    remDr %>% go("http://www.google.com/ncr")
    remDr %>% takeScreenshot

# select the search box
    searchElem <- remDr %>% findElement("name", "q")
    #searchElem %>% takeElementScreenshot()

## End(Not run)
```

wbElement

Create a Web Element

# Description

wbElement Create a Web Element object of class "wElement"

# Usage

```
wbElement(elementId, remDr)
```

# **Arguments**

elementId This is a string returned by the web driver that identifies the web element.

remDr An object of class "rDriver". A remote driver object see remoteDr.

# Value

An object of class "wElement" is returned. This is a web element object that is used in many of the web Element specific functions. Many functions that take a web Element object as input also return the web Element object. This allows chaining of commands. See the examples for chaining in action.

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```
## Not run:
remDr <- remoteDr()
webElem <- remDR %>% go("http://www.google.com") %>%
  findElement("name", "q")
# print the webElement
webElem

# send keys to the web Element
webElem %>% elementSendKeys("R project", key = "enter")

# close browser
remDr %>% deleteSession()

## End(Not run)
```

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