

# Package ‘helper’

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**Title** map-x helper functions.

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**Description** map-x helper functions

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**URL** <https://github.com/fxi/map-x-shiny>

**BugReports** <https://github.com/fxi/map-x-shiny/issues>

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## R topics documented:

addPaletteFun . . . . .	3
addVectorTiles . . . . .	4
glAddLayer . . . . .	4
glAddSource . . . . .	4
glInit . . . . .	5
glMakeUrl . . . . .	5
glRemoveLayer . . . . .	5
glRemoveSource . . . . .	5
glSetFilter . . . . .	6
glSetPaintProperty . . . . .	6
hot.to.df . . . . .	6
hotable . . . . .	6
leafletDrawDependencies . . . . .	7
listToHtml . . . . .	7
listToHtmlClass . . . . .	7
loadUi . . . . .	8
mapxhelper . . . . .	8
mxAccordionGroup . . . . .	8
mxActionButtonState . . . . .	9
mxAllow . . . . .	9
mxAnalysisOverlaps . . . . .	9
mxCanReach . . . . .	10
mxCatch . . . . .	10

<code>mxCheckboxIcon</code>	10
<code>mxCreatePaletteList</code>	11
<code>mxCreateSecret</code>	11
<code>mxDbAddData</code>	11
<code>mxDbAddGeoJSON</code>	12
<code>mxDbAutoCon</code>	12
<code>mxDbClearAll</code>	12
<code>mxDbCreateUser</code>	13
<code>mxDbDropLayer</code>	13
<code>mxDbEncrypt</code>	13
<code>mxDbExistsTable</code>	14
<code>mxDbGetColumnInfo</code>	14
<code>mxDbGetColumnsNames</code>	14
<code>mxDbGetColumnsTypes</code>	15
<code>mxDbGetFilterCenter</code>	15
<code>mxDbGetGeoJSON</code>	16
<code>mxDbGetLayerCentroid</code>	16
<code>mxDbGetLayerExtent</code>	17
<code>mxDbGetQuery</code>	17
<code>mxDbGetSp</code>	18
<code>mxDbGetUserInfoList</code>	18
<code>mxDbGetUsersGroups</code>	19
<code>mxDbListTable</code>	19
<code>mxDbUpdate</code>	19
<code>mxDbWriteSpatial</code>	20
<code>mxDebugMsg</code>	21
<code>mxDecode</code>	21
<code>mxEitiGetCountryCenter</code>	21
<code>mxEitiGetCountrySelectizeList</code>	22
<code>mxEmailIsKnown</code>	22
<code>mxEmailIsValid</code>	22
<code>mxEncode</code>	23
<code>mxFileInput</code>	23
<code>mxGetLayerMeta</code>	23
<code>mxGetListView</code>	24
<code>mxGetMaxRole</code>	24
<code>mxGetStoryMapData</code>	25
<code>mxGetViewData</code>	25
<code>mxGetViewsTable</code>	26
<code>mxGetWdiIndicators</code>	26
<code>mxMakeViewList</code>	26
<code>mxMakeViews</code>	27
<code>mxPanel</code>	27
<code>mxPanelAlert</code>	28
<code>mxParseListFromText</code>	28
<code>mxParseStory</code>	29
<code>mxParseView</code>	29
<code>mxParseVimeo</code>	30
<code>mxRecursiveSearch</code>	30
<code>mxRemoveEl</code>	31
<code>mxSelectInput</code>	31
<code>mxSendJson</code>	31

<i>addPaletteFun</i>	3
mxSendMail . . . . .	32
mxSetCookie . . . . .	32
mxSetStyle . . . . .	33
mxSliderOpacity . . . . .	33
mxStyleReset . . . . .	33
mxTextValidation . . . . .	34
mxTimeSlider . . . . .	34
mxTimeSliderRange . . . . .	35
mxUiAccess . . . . .	35
mxUiEnable . . . . .	36
mxUpdateChartRadar . . . . .	36
mxUpdatePanel . . . . .	37
mxUpdateText . . . . .	37
mxUpdateValue . . . . .	38
noDataCheck . . . . .	38
pwdInput . . . . .	39
randomString . . . . .	39
remoteCmd . . . . .	40
renderHotable . . . . .	40
setVectorTilesVisibility . . . . .	41
setZoomOptions . . . . .	41
subPunct . . . . .	41
usrInput . . . . .	42
vtDataList . . . . .	42
vtGetColumns . . . . .	43
vtGetLayers . . . . .	43
<b>Index</b>	<b>44</b>

---

addPaletteFun	<i>Add palette to map-x style list</i>
---------------	--

---

## Description

Update a style list with a palette, using the defined scale type : continuous or discrete.

## Usage

```
addPaletteFun(sty, pal)
```

## Arguments

sty	map-x style
pal	name of palette to use

---

addVectorTiles	<i>Add vector tiles for a given PGRestAPI postgres endpoint.</i>
----------------	--

---

### Description

Add vector tiles for a given PGRestAPI postgres endpoint.

### Usage

```
addVectorTiles(map, userId = "1", protocol = "http", host = "localhost",
  port = 3030, layer = NULL, dataColumns = NULL, geomColumn = "geom",
  idColumn = "gid", id = NULL, group = "default", debug = FALSE,
  zIndex = 100, onLoadFeedback = c("once", "never", "always"))
```

### Arguments

map	Leaflet map object
urlTemplate	Url template for a given PGRestAPI endpoint.

---

glAddLayer	<i>gl add layer</i>
------------	---------------------

---

### Description

gl add layer

### Usage

```
glAddLayer(map, idGl, idBelowTo = NULL, style)
```

---

glAddSource	<i>gl add source</i>
-------------	----------------------

---

### Description

gl add source

### Usage

```
glAddSource(map, idGl, idSource, style)
```

---

glInit	<i>gl layer new</i>
--------	---------------------

---

**Description**

gl layer new

**Usage**

```
glInit(map, idGl, style, token)
```

---

glMakeUrl	<i>Create url for pgrestapi source</i>
-----------	--

---

**Description**

Create url for pgrestapi source

**Usage**

```
glMakeUrl(protocol = "http", host = "localhost", port, table,  
           fieldVariables, fieldGeom)
```

**Value**

url

---

glRemoveLayer	<i>gl remove layer</i>
---------------	------------------------

---

**Description**

gl remove layer

**Usage**

```
glRemoveLayer(map, idGl, idLayer)
```

---

glRemoveSource	<i>gl remove source</i>
----------------	-------------------------

---

**Description**

gl remove source

**Usage**

```
glRemoveSource(map, idGl, idSource)
```

---

glSetFilter	<i>gl set filter for a layer</i>
-------------	----------------------------------

---

**Description**

gl set filter for a layer

**Usage**

glSetFilter(map, idGl, idLayer, filter)

---

glSetPaintProperty	<i>gl set paint property for a layer</i>
--------------------	--

---

**Description**

gl set paint property for a layer

**Usage**

glSetPaintProperty(map, idGl, idLayer, name, value)

---

hot.to.df	<i>hot.to.df</i>
-----------	------------------

---

**Description**

Converts the table data passed from the client-side into a data.frame

**Usage**

hot.to.df(b)

**Arguments**

b                      The input\$hotable\_id value.

---

hotable	<i>hotable</i>
---------	----------------

---

**Description**

Creates a hotable (handsontable)

**Usage**

hotable(id, width = "100%", height = "100%")

**Arguments**

id                      The id used to refer to the table input\$id or output\$id

---

`leafletDrawDependencies`*Add leaflet draw tools*

---

**Description**

Add leaflet draw tools

**Usage**

```
leafletDrawDependencies()
```

---

`listToHtml`*R list to html*

---

**Description**

R list to html

**Usage**

```
listToHtml(listInput, htL = "", h = 2, exclude = NULL)
```

**Arguments**

<code>listInput</code>	list in input
<code>htL</code>	List to append to
<code>h</code>	Value of the first level of html header
<code>exclude</code>	list named item to exclude

---

`listToHtmlClass`*R list to html list*

---

**Description**

Create a html list and apply a class for <ul> and <li>

**Usage**

```
listToHtmlClass(listInput, exclude = NULL, c = 0, htL = "",  
  classUl = "list-group", classLi = "list-group-item")
```

**Arguments**

<code>listInput</code>	list in input
<code>exclude</code>	list named item to exclude
<code>htL</code>	List to append to
<code>h</code>	Value of the first level of html header

Value

HTML list

---

loadUi	<i>Load external ui file value in shiny app</i>
--------	---

---

Description

Shortcut to load external shiny ui file

Usage

loadUi(path)

Arguments

path	Path to the file
------	------------------

---

mapxhelper	<i>Map-x helper functions</i>
------------	-------------------------------

---

Description

Map-x core functions

---

mxAccordionGroup	<i>Create a bootstrap accordion</i>
------------------	-------------------------------------

---

Description

Create a bootstrap accordion element, based on a named list.

Usage

mxAccordionGroup(id, style = NULL, show = NULL, itemList)

Arguments

id	Accordion group ID
style	Additional style.
show	Vector of item number. Collapse all item except those in this list. E.g. c(1,5) will open items 1 and 5 by default.
itemList	Nested named list of items, containing title and content items. E.g. list("foo"=list("title"="foo","content"="foo"))

Examples

```
mxAccordionGroup(id='superTest',
  itemList=list(
    'a'=list('title'='superTitle',content='acontent'),
    'b'=list('title'='bTitle',content='bContent'))
)
```



---

mxActionButtonState	<i>Toggle disabling of given button, based on its id.</i>
---------------------	---

---

### Description

Action or other button can be disabled using the attribute "disabled". This function can update a button state using this method.

### Usage

```
mxActionButtonState(id, disable = FALSE, warning = FALSE,
  session = shiny::getDefaultReactiveDomain())
```

### Arguments

id	Id of the button.
disable	State of the button
session	Shiny session object.

---

mxAllow	<i>Control ui access</i>
---------	--------------------------

---

### Description

Use mxConfig\$roleVal list to check if the curent user's role name can access to the given numeric role.

### Usage

```
mxAllow(logged, roleName, roleLowerLimit)
```

### Arguments

logged	Boolean. Is the user logged in ?
roleName	Character. Role in numeric format
roleLowerLimit	Numeric. Minumum role requirement

---

mxAnalysisOverlaps	<i>Get cookie from session HTTP request Overlaps analysis</i>
--------------------	---

---

### Description

Use a mask to get overlaps over a layer

### Usage

```
mxAnalysisOverlaps(inputBaseLayer, inputMaskLayer, outName,
  dataOwner = "mapxw", sridOut = 4326, varToKeep = "gid")
```

---

mxCanReach	<i>Test for internet connection. The idea is to reach google with a ping and determine if there is a full packet response without loss</i>
------------	--

---

**Description**

Test for internet connection. The idea is to reach google with a ping and determine if there is a full packet response without loss

**Usage**

```
mxCanReach(server = "google.com", port = 80)
```

**Arguments**

host	String. Host name to ping
------	---------------------------

---



---

mxCatch	<i>Catch errors</i>
---------	---------------------

---

**Description**

Catch errors and return alert panel in an existing div id.

**Usage**

```
mxCatch(title, expression, session = shiny::getDefaultReactiveDomain(),
  debug = TRUE, logToJs = FALSE, panelId = "panelAlert", ...)
```

**Arguments**

title	Title of the alert
session	Shiny session object
debug	Boolean. Return also message as alert.
panelId	Id of the output element

---



---

mxCheckboxIcon	<i>Set a checkbox button with custom icon.</i>
----------------	--

---

**Description**

Create a checkbox input with a select icon.

**Usage**

```
mxCheckboxIcon(id, idLabel, icon, display = TRUE)
```

**Arguments**

id	Id of the element
icon	Name of the fontawesome icon. E.g. cog, times, wrench

---

mxCreatePaletteList	Create a formatted list of available palettes
---------------------	---

---

**Description**

Create a formatted list of available palettes

**Usage**

```
mxCreatePaletteList()
```

---

mxCreateSecret	Create random secret
----------------	----------------------

---

**Description**

Get a random string .

**Usage**

```
mxCreateSecret(n = 20)
```

**Arguments**

n	Number of character
---	---------------------

---

mxDbAddData	Add data to db
-------------	----------------

---

**Description**

Add data to db

**Usage**

```
mxDbAddData(data, table)
```

---

mxDbAddGeoJSON	<i>Add geojson list or file to db postgis</i>
----------------	---

---

**Description**

Add geojson list or file to db postgis

**Usage**

```
mxDbAddGeoJSON(geojsonList = NULL, geojsonPath = NULL, tableName = NULL,  
  archiveIfExists = T, archivePrefix = "mx_archives")
```

**Arguments**

geojsonList	list containing the geojson data
geojsonPath	path the geojson
tableName	Name of the postgis layer / table

---

mxDbAutoCon	<i>Experimental db conection in config list</i>
-------------	---

---

**Description**

Experimental db conection in config list

**Usage**

```
mxDbAutoCon()
```

---

mxDbClearAll	<i>Remove old results from db query</i>
--------------	---

---

**Description**

Remove old results from db query

**Usage**

```
mxDbClearAll()
```

---

mxDbCreateUser	<i>Add</i>
----------------	------------

---

**Description**

Add

**Usage**

```
mxDbCreateUser(email = NULL, timeStamp = "")
```

---

mxDbDropLayer	<i>drop layer layerName Layer (table + entry + views) to delete from db</i>
---------------	---

---

**Description**

drop layer layerName Layer (table + entry + views) to delete from db

**Usage**

```
mxDbDropLayer(layerName)
```

---

mxDbEncrypt	<i>Encrypt or decrypt data using postgres pg_sym_encrypt</i>
-------------	--

---

**Description**

Encrypt or decrypt data using postgres pg\_sym\_encrypt

**Usage**

```
mxDbEncrypt(data, ungroup = FALSE, key = mxConfig$key)
```

```
mxDbDecrypt(data = NULL, key = mxConfig$key)
```

**Arguments**

data	vector, list or data.frame to encrypt or decrypt
ungroup	boolean : ungroup the data and apply the encryption on individual item.
key	Encryption key

**Value**

encrypted data as list

---

mxDbExistsTable	<i>Check if table exists in postgresql</i>
-----------------	--

---

**Description**

Shortcut to create a connection, and check if table exists.

**Usage**

```
mxDbExistsTable(table)
```

**Arguments**

table	Name of the table to check
-------	----------------------------

---

mxDbGetColumnInfo	<i>Get variable summary</i>
-------------------	-----------------------------

---

**Description**

Get variable summary

**Usage**

```
mxDbGetColumnInfo(table = NULL, column = NULL)
```

**Arguments**

table	Table/layer from which extract extent
column	Column/Variable on wich extract summary

---

mxDbGetColumnsNames	<i>List existing column from postgresql table</i>
---------------------	---

---

**Description**

Shortcut to get column name for a table

**Usage**

```
mxDbGetColumnsNames(table)
```

**Arguments**

dbInfo	Named list with dbName,host,port,user and password
--------	--

---

mxDbGetColumnsTypes	<i>List existing column type from postgresql table</i>
---------------------	--

---

**Description**

Shortcut to get column type for a table

**Usage**

```
mxDbGetColumnsTypes(table)
```

**Arguments**

table	Name of the table to evaluate
-------	-------------------------------

---

mxDbGetFilterCenter	<i>Get query extent, based on a pattern matching (character)</i>
---------------------	--

---

**Description**

Search for a value in a column (character data type) and return the extent if something is found.

**Usage**

```
mxDbGetFilterCenter(table = NULL, column = NULL, value = NULL,  
  geomColumn = "geom", operator = "=")
```

**Arguments**

table	Table/layer from which extract extent
geomColumn	set geometry column

**Value**

extent

---

mxDbGetGeoJSON	<i>Geojson from postGIS base</i>
----------------	----------------------------------

---

**Description**

Geojson from postGIS base

**Usage**

```
mxDbGetGeoJSON(query, fromSrid = "4326", toSrid = "4326", asList = FALSE)
```

**Arguments**

query	PostGIS spatial sql query.
-------	----------------------------

**Value**

geojson list

---

mxDbGetLayerCentroid	<i>Get layer center</i>
----------------------	-------------------------

---

**Description**

Compute the union of all geometry in a given layer and return the coordinate of the centroid.

**Usage**

```
mxDbGetLayerCentroid(table = NULL, geomColumn = "geom")
```

**Arguments**

table	Table/layer from which extract extent
geomColumn	set geometry column

**Value**

extent



---

mxDbGetLayerExtent	<i>Get layer extent</i>
--------------------	-------------------------

---

**Description**

Get layer extent

**Usage**

```
mxDbGetLayerExtent(table = NULL, geomColumn = "geom")
```

**Arguments**

table	Table/layer from which extract extent
geomColumn	set geometry column

**Value**

extent

---

mxDbGetQuery	<i>Get query result from postgresql</i>
--------------	---

---

**Description**

Wrapper to execute a query

**Usage**

```
mxDbGetQuery(query, stringAsFactors = FALSE, onError = function(x) {  
  x  
})
```

**Arguments**

query	SQL query
-------	-----------

---

mxDbGetSp	<i>Transfert postgis feature by sql query to sp object</i>
-----------	--

---

**Description**

Transfert postgis feature by sql query to sp object

**Usage**

```
mxDbGetSp(query)
```

**Arguments**

query	PostGIS spatial sql query.
-------	----------------------------

**Value**

spatial object.

---

mxDbGetUserInfoList	<i>Get user info</i>
---------------------	----------------------

---

**Description**

Get user info

**Usage**

```
mxDbGetUserInfoList(id = NULL, email = NULL, userTable = "mx_users")
```

**Arguments**

email	user email
userTable	DB users table

**Value**

list containing data from the user

---

mxDbGetUsersGroups	<i>Get group table for users</i>
--------------------	----------------------------------

---

**Description**

Get group table for users

**Usage**

```
mxDbGetUsersGroups(idFilter = NULL)
```

**Arguments**

idFilter	optional filter of vector containing ids
----------	--

---

mxDbListTable	<i>List existing table from postgresql</i>
---------------	--

---

**Description**

Shortcut to create a connection, get the list of table and close the connection, using a dbInfo list.

**Usage**

```
mxDbListTable()
```

**Arguments**

dbInfo	Named list with dbName,host,port,user and password
--------	--

---

mxDbUpdate	<i>Update a single value of a table</i>
------------	---

---

**Description**

Update a single value of a table

**Usage**

```
mxDbUpdate(table, column, idCol = "id", id, value, expectedRowsAffected = 1)
```

**Arguments**

table	Table to update
column	Column to update
idCol	Column of identification
id	Identification value
value	Replacement value
expectedRowsAffected	Number of row expected to be affected. If the update change a different number of row than expected, the function will rollback

**Value**

Boolean worked or not

---

mxDWriteSpatial	<i>Write spatial data frame to postgis</i>
-----------------	--

---

**Description**

Convert spatial data.frame to postgis table. Taken from <https://philipphunziker.wordpress.com/2014/07/20/transferring-vector-data-between-postgis-and-r/>

**Usage**

```
mxDWriteSpatial(spatial.df = NULL, schemaname = "public", tablename,
  overwrite = FALSE, keyCol = "gid", srid = 4326, geomCol = "geom")
```

**Arguments**

spatial.df	Spatial data frame object
schemaname	Target schema table
tablename	Target table name
overwrite	Overwrite if exists
keyCol	Set new primary key
srid	Set the epsg code / SRID
geomCol	Set the name of the geometry column

---

mxDebugMsg	<i>Print debug message</i>
------------	----------------------------

---

**Description**

Print a default debug message with date as prefix. NOTE: this function should take a global parameter "debug" and a log file.

**Usage**

```
mxDebugMsg(text = "")
```

**Arguments**

m	Message to be printed
---	-----------------------

---

mxDecode	<i>decode base64 string</i>
----------	-----------------------------

---

**Description**

decode base64 string

**Usage**

```
mxDecode(base64text)
```

**Arguments**

base64text	base64string encoded
------------	----------------------

---

mxEitiGetCountryCenter	<i>Create a formatted list of country center from eiti countries table</i>
------------------------	--

---

**Description**

Create a formatted list of country center from eiti countries table

**Usage**

```
mxEitiGetCountryCenter(eitiCountryTable)
```

---

```
mxEitiGetCountrySelectizeList
```

*Create a formatted list for selectize input from eiti countries table*

---

### Description

Create a formatted list for selectize input from eiti countries table

### Usage

```
mxEitiGetCountrySelectizeList(eitiCountryTable)
```

---

```
mxEmailIsKnown
```

*Check if an email is known and active*

---

### Description

Check in a standard mapx database if an email/user exists

### Usage

```
mxEmailIsKnown(email = NULL, usertable = "mx_users", active = TRUE,
  validated = TRUE)
```

### Arguments

email	map-x user email
usertable	name of the table

### Value

boolean exists

---

```
mxEmailIsValid
```

*Check if given email is valid*

---

### Description

Check if given email is valid

### Usage

```
mxEmailIsValid(email = NULL)
```

### Arguments

email	String email address to verify
-------	--------------------------------

### Value

named logic vector

---

mxEncode	<i>encode in base64</i>
----------	-------------------------

---

**Description**

encode in base64

**Usage**

```
mxEncode(text)
```

**Arguments**

text	character string to encode
------	----------------------------

---

mxFileInput	<i>Custom file input</i>
-------------	--------------------------

---

**Description**

Default shiny fileInput has no option for customisation. This function allows to fully customize file input using the label tag.

**Usage**

```
mxFileInput(inputId, label, fileAccept = NULL, multiple = FALSE)
```

**Arguments**

inputId	id of the file input
label	Label for the input
fileAccept	List of accepted file type. Could be extension.
multiple	Boolean. Allow multiple file to be choosen. Doesn't work on all client.

---

mxGetLayerMeta	<i>Get layer meta stored in default layer table</i>
----------------	---

---

**Description**

Get layer meta stored in default layer table

**Usage**

```
mxGetLayerMeta(layer)
```

**Arguments**

layer	Postgis layer stored in layer table. Should have a meta field.
-------	--

---

mxGetListValue	<i>Extract value from a list using path</i>
----------------	---

---

**Description**

Extract value from a list using path

**Usage**

```
mxGetListValue(li, path)
```

**Arguments**

li	Input named list
path	Path inside the list

**Value**

value extracted or NULL

---

mxGetMaxRole	<i>Return the highest role for a given user</i>
--------------	---

---

**Description**

Return the highest role for a given user

**Usage**

```
mxGetMaxRole(project, userInfo, useWorld = T)
```

**Arguments**

project	Project to look for
userInfo	object of class mxUserInfoList produced with mxDbGetUserInfoList
useWorld	Boolean keep result for project "world" in the result



---

mxGetStoryMapData	<i>Get story map data</i>
-------------------	---------------------------

---

**Description**

Get story map data

**Usage**

```
mxGetStoryMapData(id)
```

**Arguments**

id	Id of the story map to get
----	----------------------------

**Value**

Story map content and visibility

---

mxGetViewData	<i>Get view data as list</i>
---------------	------------------------------

---

**Description**

Get view data as list

**Usage**

```
mxGetViewData(viewId, select = NULL)
```

**Arguments**

viewId	Vector of view id(s) for which to retrieve data
select	Vector of columns to retrieve

---

mxGetViewsTable	<i>Retrieve map views table</i>
-----------------	---------------------------------

---

**Description**

Get a list of available map-x views in given table, e.g. mx\_views

**Usage**

```
mxGetViewsTable(table = "mx_views", validated = TRUE, archived = FALSE,
  country = "AFG", visibility = "public", userId = "")
```

**Arguments**

table	Table name containing views info
validated	Boolean filter validated dataset. Default = TRUE
archived	Boolean filter to get archived data. Default =FALSE
country	ISO 3 code to filter country.

---

mxGetWdiIndicators	<i>Create WDI indicators list</i>
--------------------	-----------------------------------

---

**Description**

Create WDI indicators list

**Usage**

```
mxGetWdiIndicators()
```

---

mxMakeViewList	<i>extract views from the db and create a list</i>
----------------	--

---

**Description**

extract views from the db and create a list

**Usage**

```
mxMakeViewList(country, visibility, userId)
```

**Arguments**

cntry	Country iso3 code
-------	-------------------

**Value**

list of views data and style

---

mxMakeViews	<i>Create html list of available views</i>
-------------	--

---

**Description**

get a list of views and return a HTML shiny checkbox input.

**Usage**

```
mxMakeViews(views)
```

**Arguments**

views	List of available views
-------	-------------------------

---

mxPanel	<i>Create a modal panel</i>
---------	-----------------------------

---

**Description**

Create a modal panel with some options as custom button, close button, html content.

**Usage**

```
mxPanel(id = "default", title = NULL, subtitle = NULL, html = NULL,
  listActionButton = NULL, background = TRUE, addCancelButton = FALSE,
  addOnClickClose = TRUE, defaultButtonText = "OK", style = NULL,
  class = NULL, hideCloseButton = FALSE, draggable = TRUE, fixed = TRUE)
```

**Arguments**

id	Panel id
title	Panel title
subtitle	Panel subtitle
html	HTML content of the panel, main text
listActionButton	If FALSE, hide buttons. If NULL, display default close panel button, with text given in defaultButtonText. If list of buttons, list of button.
defaultButtonText	Text of the default button if listActionButton is NULL and not FALSE
style	Additional CSS style for the panel
class	Additional class for the panel
hideCloseButton	Boolean. Hide the close panel button
draggable	Boolean. Set the panel as draggable

---

mxPanelAlert	<i>Alert panel</i>
--------------	--------------------

---

### Description

Create an alert panel. This panel could be send to an output object from a reactive context.

### Usage

```
mxPanelAlert(title = c("error", "warning", "message"), subtitle = NULL,  
             message = NULL, listActionButton = NULL, ...)
```

### Arguments

title	Title of the alert. Should be "error", "warning" or "message"
subtitle	Subtitle of the alert
message	html or text message for the alert
listActionButtons	List of action button for the panel

---

mxParseListFromText	<i>Parse key value pair from text</i>
---------------------	---------------------------------------

---

### Description

Parse key value pair from text

### Usage

```
mxParseListFromText(txt)
```

### Arguments

txt	unformatted text with key value pair. eg. myKey = myValue
-----	---

### Value

list of value

---

mxParseStory	<i>Parse story map : markdown, R, view and video</i>
--------------	--

---

**Description**

Parse story map : markdown, R, view and video

**Usage**

```
mxParseStory(txtorig, knit = T, toc = F)
```

**Arguments**

test	Story map text
------	----------------

**Value**

parsed html

---

mxParseView	<i>Parse view string</i>
-------------	--------------------------

---

**Description**

Parse view string

**Usage**

```
mxParseView(text)
```

**Arguments**

test	Story map text with @view_start( name ; id ; extent ) ... @view_end tags
------	--

**Value**

parsed html

---

mxParseVimeo	<i>Parse vimeo string</i>
--------------	---------------------------

---

### Description

Parse vimeo string

### Usage

```
mxParseVimeo(text)
```

### Arguments

text	Story map text with @vimeo( id ; desc ) tag
------	---

### Value

html enabled version

---

mxRecursiveSearch	<i>Recursive search and filter on named list</i>
-------------------	--

---

### Usage

```
mxRecursiveSearch(li, column = "", operator = "==", search = "",
  filter = "")
```

### Arguments

li	List to evaluate
column	Named field to search on (unique)
operator	Search operator ('>', '<', '==', '>=', '<=', '!=', \itemsearchValue to search \itemfilterNamed field to keep list or named vector if filter is given Recursive search and filter on named list

---

mxRemoveEl	<i>remove element by class or id</i>
------------	--------------------------------------

---

**Description**

remove element by class or id

**Usage**

```
mxRemoveEl(session = getDefaultReactiveDomain(), class = NULL, id = NULL)
```

**Arguments**

session	default shiny session
class	class name to remove
id	id to remove

---

mxSelectInput	<i>Custom select input</i>
---------------	----------------------------

---

**Description**

Custom select input without label.

**Usage**

```
mxSelectInput(inputId, choices = NULL, selected = NULL)
```

**Arguments**

inputId	Element id
choices	List of options
select	Value selected by default

---

mxSendJson	<i>function to read json and save as an object</i>
------------	--

---

**Description**

function to read json and save as an object

**Usage**

```
mxSendJson(pathToJson, objName, session = getDefaultReactiveDomain())
```

---

mxSendMail	<i>Send an email using local or remote 'mail' command</i>
------------	---

---

### Description

Send an email using local or remote 'mail' command

### Usage

```
mxSendMail(from = mxConfig$mapxBotEmail, to = NULL, body = "",
  subject = "", wait = FALSE)
```

### Arguments

from	String. Valid email for sender
to	String. Valid email for Recipient
body	String. Text of the body
subject.	String. Test for the subject

---

mxSetCookie	<i>Save named list of value into cookie</i>
-------------	---

---

### Description

Note : don't use this for storing sensitive data, unless you have a trusted network.

### Usage

```
mxSetCookie(cookie = NULL, expireDays = NULL, deleteAll = FALSE,
  reloadPage = FALSE, session = getDefaultReactiveDomain())
```

### Arguments

cookie	Named list holding paired cookie value. e.g. (list(whoAteTheCat="Alf"))
expireDays	Integer of days for the cookie expiration
session	Shiny session object. By default: default reactive domain.
read	Boolean. Read written cookie



---

mxSetStyle	<i>Apply map-x style to existing vector tiles</i>
------------	---

---

**Description**

When leafletvt handle a vector tile source, a leaflet object is stored in leafletvtId, but no style is applied. Default is transparent. We add a style function after that the layer is fully loaded using this function. The style function is also stored alongside the leaflet object in leafletId under the name "vtStyle".

**Usage**

```
mxSetStyle(session = shiny::getDefaultReactiveDomain(), style,
  mapId = "mapxMap")
```

**Arguments**

session	Shiny session object
style	map-x style

---

mxSliderOpacity	<i>Set ioRange slider for opacity</i>
-----------------	---------------------------------------

---

**Description**

Return a div than contain a slider input instantiated with ionRangeSlider for view opacity

**Usage**

```
mxSliderOpacity(id, opacity)
```

**Arguments**

id	Id of the slider
opacity	Default opacity

---

mxStyleReset	<i>Reset all value in a reactiveValues object</i>
--------------	---

---

**Description**

Reset all value in a reactiveValues object

**Usage**

```
mxStyleReset(reactiveObj)
```

**Arguments**

reactiveObj	Reactive values object
-------------	------------------------

---

mxTextValidation	<i>String validation</i>
------------------	--------------------------

---

### Description

Check if a string exists in a vector of string, if there is a duplicate, if contains at least n character, etc.. and update an existing div with a html summary. Return if the string is valid or not.

### Usage

```
mxTextValidation(textToTest, existingTexts, idTextValidation, minChar = 5,
  testForDuplicate = TRUE, testForMinChar = TRUE,
  displayNameInValidation = TRUE, existsText = "taken",
  errorColor = "#FF0000")
```

### Arguments

existingTexts	Vector of existing text
idTextValidation	Id of the ui element to update (id=example -> uiOutput("example"))
minChar	Minimum character length
testForDuplicate	Boolean test for duplicate.
testForMinChar	Boolean test for minimum number of character
displayNameInValidation	Boolean add text in validation text
textToTest	text to test against rules

### Value

boolean : valid or not

---

mxTimeSlider	<i>Set ioRange slider for time slider</i>
--------------	---

---

### Description

Return a div than contain a slider input instantiated with ionRangeSlider for view time slider.

### Usage

```
mxTimeSlider(id, min, max, lay)
```

### Arguments

id	Id of the slider
min	Minimum js unix date in milisecond
max	Maxmimum js unix date in milisecond
lay	Layer name

---

mxTimeSliderRange	<i>Set ioRange slider for time slider</i>
-------------------	---

---

**Description**

Return a div than contain a slider input instantiated with ionRangeSlider for view time slider range.

**Usage**

```
mxTimeSliderRange(id, min, max, lay)
```

**Arguments**

id	Id of the slider
min	Minimum js unix date in milisecond
max	Maxmimum js unix date in milisecond
lay	Layer name

---

mxUiAccess	<i>Control ui access UI manager based on login info</i>
------------	---

---

**Description**

Control ui access

UI manager based on login info

**Usage**

```
mxUiAccess(logged, roleNum, roleLowerLimit, uiDefault, uiRestricted)
```

**Arguments**

logged	Boolean. Is the user logged in ?
roleNum	Numeric. Role in numeric format
roleLowerLimit	Numeric. Minumum role requirement
uiDefault	TagList. Default ui.
uiRestricted	TagList. Restricted ui.

---

mxUiEnable	<i>Control visibility of elements</i>
------------	---------------------------------------

---

### Description

Display or hide element by id, without removing element AND without having element's space empty in UI. This function add or remove mx-hide class to the element.

### Usage

```
mxUiEnable(session = shiny::getDefaultReactiveDomain(), id = NULL,
  class = NULL, enable = TRUE, classToRemove = "mx-hide")
```

### Arguments

session	Shiny session
id	Id of element to enable/disable
enable	Boolean. Enable or not.

---

mxUpdateChartRadar	<i>Create a chartRadar in a canvas element.</i>
--------------------	---

---

### Description

Search the dom for an id a get drawing context, create a new chart object and config it with data.

### Usage

```
mxUpdateChartRadar(session = shiny::getDefaultReactiveDomain(), main,
  compMain, id, idLegend, labels, values, compValues)
```

### Arguments

session	Shiny reactive session
main	Main label
compMain	Comparative value label
id	Id of the canvas
idLegend	Id of the legend
labels	Labels for value and comparative values
compValues	Comparative values
value	Values

---

mxUpdatePanel	<i>Update existing panel</i>
---------------	------------------------------

---

**Description**

Use output object to update the panel with a known id. E.g. for updating `uiOutput("panelTest")`, use `mxUpdatePanel` with `panelId "panelTest"`

**Usage**

```
mxUpdatePanel(panelId = NULL, session = shiny::getDefaultReactiveDomain(),  
  ...)
```

**Arguments**

<code>panelId</code>	Id of the existing panel
<code>session</code>	Shiny reactive object of the session
<code>...</code>	Other <code>mxPanel</code> options

---

mxUpdateText	<i>Update text by id</i>
--------------	--------------------------

---

**Description**

Search for given id and update content.

**Usage**

```
mxUpdateText(id, text = NULL, ui = NULL, addId = FALSE,  
  session = shiny::getDefaultReactiveDomain())
```

**Arguments**

<code>id</code>	Id of the element
<code>text</code>	New text
<code>session</code>	Shiny session

---

mxUpdateValue	<i>Update value by id</i>
---------------	---------------------------

---

**Description**

Search for given id and update value.

**Usage**

```
mxUpdateValue(id, value, session = shiny::getDefaultReactiveDomain())
```

**Arguments**

id	Id of the element
value	New text value
session	Shiny session

---

noDataCheck	<i>Check for no null, NA's, nchar of 0, lenght of 0 or "[NO DATA]" string in a vector.</i>
-------------	--

---

**Description**

Check for no null, NA's, nchar of 0, lenght of 0 or "[NO DATA]" string in a vector.

**Usage**

```
noDataCheck(val, useNoData = TRUE, noDataVal = "[ NO DATA ]")
```

**Arguments**

val	Vector to test for no data.
-----	-----------------------------

**Value**

TRUE if no data (nchar == 0 OR is.na OR is.null) found or if input is not a vector

---

pwdInput	<i>Password input</i>
----------	-----------------------

---

**Description**

Create a password input.

**Usage**

```
pwdInput(inputId, label)
```

**Arguments**

inputId	Input id
label	Label to display

---

randomString	<i>Random string generator</i>
--------------	--------------------------------

---

**Description**

Create a random string with optional settings.

**Usage**

```
randomString(prefix = NULL, suffix = NULL, n = 15, sep = "_",  
  addSymbols = F, addLetters = T, splitIn = 5, splitSep = "-")
```

**Arguments**

prefix	Prefix. Default = NULL
suffix	Suffix. Default = NULL
n	Number of character to include in the random string
sep	Separator for prefix or suffix
addSymbols	Add random symbols
addLetters	Add random letters (upper and lowercase)
splitIn	Split string into chunk, with separator as defined in splitSep
splitSep	Split symbols if splitIn > 1

**Value**

Random string of letters, with prefix and suffix

---

remoteCmd	<i>Send command on remote server through ssh</i>
-----------	--

---

### Description

Allow sending command on a remote server, e.g. Vagrant machine, using ssh.

### Usage

```
remoteCmd(host = NULL, user = NULL, port = NULL, cmd = NULL,
  vagrant = TRUE, sshConfig = "settings/sshConfig")
```

### Arguments

host	Host
user	User
port	Port
cmd	Command to send
vagrant	Boolean. If TRUE, use ssh config file. E.g. vagrant ssh-config > sshConfig

---

renderHotable	<i>renderHotable</i>
---------------	----------------------

---

### Description

Renders the hotable.

### Usage

```
renderHotable(expr, env = parent.frame(), quoted = FALSE, options = NULL,
  readOnly = NULL, fixedCols = 1, stretched = c("all", "last", "none"))
```

### Arguments

expr	The computation that leads to an output
env	The R environment in which to create the dataset
quoted	Pass to the exprToFunction
options	Pass to the exprToFunction
readOnly	A vector of TRUE/FALSE values to indicate which of the columns should be readonly. If numeric vector, select col number to set as readOnly.
fixedCols	A vector of integer of columns number to fix.



---

```
setVectorTilesVisibility
```

*Remove vector tiles.*

---

**Description**

Remove vector tiles.

**Usage**

```
setVectorTilesVisibility(map, group = "default", visible = TRUE)
```

**Arguments**

map	Leaflet map object
group	Group/id of the vector tiles layer

---

```
setZoomOptions
```

*Set zoom button options*

---

**Description**

Set zoom button options

**Usage**

```
setZoomOptions(map, buttonOptions = list(), removeButton = FALSE)
```

**Arguments**

map	Leaflet map object
removeButton	Boolean. Remove the zoom button.
butonOptions	List of Leaflet options for zoom butons. E.g. list(position="topright")

---

```
subPunct
```

*Substitute ponctiation and non-ascii character*

---

**Description**

Take a string and convert to ascii string with optional transliteration ponctuation conversion.

**Usage**

```
subPunct(str, sep = "_", rmTrailingSep = T, rmLeadingSep = T,  
  rmDuplicateSep = T, useTransliteration = T)
```

**Arguments**

str	String to evaluate
sep	Replace separator
rmTrailingSep	Logical argument : no trailing separator returned
rmLeadingSep	Logical argument : no leading separator returned
rmDuplicateSep	Logical argument : no consecutive separator returned

---

usrInput	<i>User name input</i>
----------	------------------------

---

**Description**

Create a username input

**Usage**

```
usrInput(inputId, label, class = "form-control")
```

**Arguments**

inputId	Input id
label	Label to display

---

vtDataList	<i>Get layer/table and available field/column combined in a list</i>
------------	--

---

**Description**

Get layer/table and available field/column combined in a list

**Usage**

```
vtDataList(protocol = "http", url = "localhost", port = 3030)
```

**Arguments**

protocol	E.g. http
url	Server url (without http://), default = "localhost"
port	Server port number. default = 3000

---

`vtGetColumns`*Get available fields/columns from a layer/table*

---

**Description**

Get available fields/columns from a layer/table

**Usage**

```
vtGetColumns(protocol = "http", url = "localhost", port = 3030,  
             table = NULL, exclude = NULL)
```

**Arguments**

<code>protocol</code>	E.g. http
<code>url</code>	Server url (without http://), default = "localhost"
<code>port</code>	Server port number, default = 3000
<code>table</code>	Table name.

---

`vtGetLayers`*Get vector tile layer (PostGIS table) from PGRestAPI*

---

**Description**

Get vector tile layer (PostGIS table) from PGRestAPI

**Usage**

```
vtGetLayers(protocol = "http", url = "localhost", port = 3030,  
            grepExpr = "", nTry = 5)
```

**Arguments**

<code>protocol</code>	E.g. http
<code>url</code>	Server url (without http://), default = "localhost".
<code>port</code>	Server port number, default = 3000

# Index

[addPaletteFun](#), [3](#)  
[addVectorTiles](#), [4](#)

[glAddLayer](#), [4](#)  
[glAddSource](#), [4](#)  
[glInit](#), [5](#)  
[glMakeUrl](#), [5](#)  
[glRemoveLayer](#), [5](#)  
[glRemoveSource](#), [5](#)  
[glSetFilter](#), [6](#)  
[glSetPaintProperty](#), [6](#)

[hot.to.df](#), [6](#)  
[hotable](#), [6](#)

[leafletDrawDependencies](#), [7](#)  
[listToHtml](#), [7](#)  
[listToHtmlClass](#), [7](#)  
[loadUi](#), [8](#)

[mapxhelper](#), [8](#)  
[mapxhelper-package \(mapxhelper\)](#), [8](#)  
[mxAccordionGroup](#), [8](#)  
[mxActionButtonState](#), [9](#)  
[mxAllow](#), [9](#)  
[mxAnalysisOverlaps](#), [9](#)  
[mxCanReach](#), [10](#)  
[mxCatch](#), [10](#)  
[mxCheckboxIcon](#), [10](#)  
[mxCreatePaletteList](#), [11](#)  
[mxCreateSecret](#), [11](#)  
[mxDbAddData](#), [11](#)  
[mxDbAddGeoJSON](#), [12](#)  
[mxDbAutoCon](#), [12](#)  
[mxDbClearAll](#), [12](#)  
[mxDbCreateUser](#), [13](#)  
[mxDbDecrypt \(mxDbEncrypt\)](#), [13](#)  
[mxDbDropLayer](#), [13](#)  
[mxDbEncrypt](#), [13](#)  
[mxDbExistsTable](#), [14](#)  
[mxDbGetColumnInfo](#), [14](#)  
[mxDbGetColumnsNames](#), [14](#)  
[mxDbGetColumnsTypes](#), [15](#)  
[mxDbGetFilterCenter](#), [15](#)  
[mxDbGetGeoJSON](#), [16](#)  
[mxDbGetLayerCentroid](#), [16](#)  
[mxDbGetLayerExtent](#), [17](#)  
[mxDbGetQuery](#), [17](#)  
[mxDbGetSp](#), [18](#)  
[mxDbGetUserInfoList](#), [18](#)  
[mxDbGetUsersGroups](#), [19](#)  
[mxDbListTable](#), [19](#)  
[mxDbUpdate](#), [19](#)  
[mxDbWriteSpatial](#), [20](#)  
[mxDebugMsg](#), [21](#)  
[mxDecode](#), [21](#)  
[mxEitiGetCountryCenter](#), [21](#)  
[mxEitiGetCountrySelectizeList](#), [22](#)  
[mxEmailIsKnown](#), [22](#)  
[mxEmailIsValid](#), [22](#)  
[mxEncode](#), [23](#)  
[mxFileInput](#), [23](#)  
[mxGetLayerMeta](#), [23](#)  
[mxGetListValue](#), [24](#)  
[mxGetMaxRole](#), [24](#)  
[mxGetStoryMapData](#), [25](#)  
[mxGetViewData](#), [25](#)  
[mxGetViewsTable](#), [26](#)  
[mxGetWdiIndicators](#), [26](#)  
[mxMakeViewList](#), [26](#)  
[mxMakeViews](#), [27](#)  
[mxPanel](#), [27](#)  
[mxPanelAlert](#), [28](#)  
[mxParseListFromText](#), [28](#)  
[mxParseStory](#), [29](#)  
[mxParseView](#), [29](#)  
[mxParseVimeo](#), [30](#)  
[mxRecursiveSearch](#), [30](#)  
[mxRemoveEl](#), [31](#)  
[mxSelectInput](#), [31](#)  
[mxSendJson](#), [31](#)  
[mxSendMail](#), [32](#)  
[mxSetCookie](#), [32](#)  
[mxSetStyle](#), [33](#)  
[mxSliderOpacity](#), [33](#)  
[mxStyleReset](#), [33](#)  
[mxTextValidation](#), [34](#)

mxTimeSlider, [34](#)  
mxTimeSliderRange, [35](#)  
mxUiAccess, [35](#)  
mxUiEnable, [36](#)  
mxUpdateChartRadar, [36](#)  
mxUpdatePanel, [37](#)  
mxUpdateText, [37](#)  
mxUpdateValue, [38](#)  
  
noDataCheck, [38](#)  
  
pwdInput, [39](#)  
  
randomString, [39](#)  
remoteCmd, [40](#)  
renderHotable, [40](#)  
  
setVectorTilesVisibility, [41](#)  
setZoomOptions, [41](#)  
subPunct, [41](#)  
  
usrInput, [42](#)  
  
vtDataList, [42](#)  
vtGetColumns, [43](#)  
vtGetLayers, [43](#)