Package: wikimapR (via r-universe)

October 20, 2026

Type Package

Title Import Wikimapia Data as Simple Features via API

Version 0.1.2

Maintainer Egor Kotov <kotov.egor@gmail.com>

Description Download and import of Wikimapia data as 'sf' objects.
Wikimapia data is retrieved via the Wikimapia API and converted
to `sf` objects retaining all recevied fields.

Date 2023-05-14

Depends R (>= 3.1.2)

License MIT + file LICENSE

Encoding UTF-8

LazyData true

Imports dplyr, purrr, httr, sf, progress

URL https://github.com/e-kotov/wikimapR/,
http://www.ekotov.pro/wikimapR/

BugReports https://github.com/e-kotov/wikimapR/issues

RoxygenNote 7.2.3

Config/pak/sysreqs libabsl-dev cmake libgdal-dev gdal-bin libgeos-dev libssl-dev libproj-dev libsqlite3-dev libudunits2-dev

Repository https://e-kotov-r-universe.r-universe.dev

Date/Publication 2023-05-14 15:50:40 UTC

RemoteUrl https://github.com/e-kotov/wikimapR

RemoteRef HEAD

RemoteSha 15db13eb99bc4ada6a811e93cfde466578106c3c

Contents

set_wikimapia_api_key 2
subdivide_bbox 2
wikimapR 3
wm_get_by_id 4
wm_get_by_id_single 5
wm_get_from_bbox 6

Index **8**

`set_wikimapia_api_key` *Set Wikimapia API Key*

Description

Sets an API key to make it available for all wikimapR functions calls. See details

Usage

```
set_wikimapia_api_key(api_key)
```

Arguments

`api_key`	Wikimapia API key

Details

Use `set_wikimapia_api_key` to make API keys available for all Wikimapia API calls in a session so you don't have to keep specifying the `wm_api_key` argument each time.

References

mapdeck https://github.com/SymbolixAU/mapdeck code related to API key handling was used as a template.

`subdivide_bbox` *Subdivide large bounding box into smaller ones*

Description

Subdivide large bounding box into smaller ones.

Usage

```
subdivide_bbox(
  x,
  bbox_cell_size = 0.045,
  return_bbox_or_sf = "bbox",
  out_crs = 4326
)
```

Arguments

x	a numeric vector of length four, with xmin, ymin, xmax and ymax values; or a ‘bbox‘ object that is an output of st_bbox. The values must be in WGS 84 (EPSG 4326)
bbox_cell_size	bounding box cell size is in degrees (need to somehow fix that to work with meters across the globe). Default of 0.045 is reasonably large, roughly equivalent to 2845x5010 meters. The grid will be created in WGS84 coordinate reference system and then transformed into CRS set by ‘out_crs‘, which is also WGS84 by default (EPSG:4326).
return_bbox_or_sf	object type to retun. If set to default "bbox", returns objects of type ‘bbox‘, "sf" - returns ‘sf polygons‘ (good for plotting), "both" - returns a list of length 2 with both ‘bbox‘ and ‘sf‘ named accorgingly.
out_crs	EPSG code or proj4 string for the desired coordinate reference system of the output bounding box coordinates. The grid will be created in WGS84 coordinate reference system and then transformed into CRS set by ‘out_crs‘. Default value is 4326 for WGS84.

Value

an ‘sf‘ object grid with consequtive IDs. Also prints out a message with the number of bounding boxes and the average cell dimensions in meters.

`wikimapR` *Import 'Wikimapia' Data as Simple Features via API*

Description

Download and import of 'Wikimapia' data as 'sf' objects. 'Wikimapia' data are extracted via the 'Wikimapia' API and converted to ‘sf‘ objects retaining all recevied fields.

Author(s)

Egor Kotov <kotov.egor@gmail.com>

See Also

Useful links:

- https://github.com/e-kotov/wikimapR/
- http://www.ekotov.pro/wikimapR/
- Report bugs at https://github.com/e-kotov/wikimapR/issues

---

wm_get_by_id *Get Wikimapia Objects by ID*

Description

Retrieves Wikimapia objects by ID.

Usage

```
wm_get_by_id(
  ids,
  language = "en",
  wm_api_key = getOption("wikimapia_api_key", default = "example"),
  data_blocks = "main,geometry,edit,location,attached,photos,comments,translate"
)
```

Arguments

ids	a numeric or character vector with Wikimapia object IDs to fetch. You can get a list of objects to fetch using wm_get_from_bbox
language	Wikimapia language to retrieve. This is specified language in ISO 639-1 format. Default language is 'en'.
wm_api_key	Your wikimapia API Key. If not specified, the default 'example' key is used, however it is limited to about 1 request per 30 seconds and is for testing purposes only.
data_blocks	The comma-separated blocks of data you want to return: main, geometry, edit, location, attached, photos, comments, translate, similar_places, nearest_places, nearest_comments, nearest_streets, nearest_hotels. Default is "main,geometry,edit,location,attached,phot

Details

Uses ['place.getbyid'](http://wikimapia.org/api#placegetbyid) Wikimapia API function to retrieve full object details.

Value

'sf' objects with nested details.

`wm_get_by_id_single` *Get one Wikimapia object by ID*

Description

Retrieves single Wikimapia object by ID.

Usage

```
wm_get_by_id_single(
  id,
  language = "en",
  wm_api_key = getOption("wikimapia_api_key", default = "example"),
  data_blocks = "main,geometry,edit,location,attached,photos,comments,translate"
)
```

Arguments

`id`	a numeric or characted vector of length 1 with Wikimapia object ID to fetch. You can get a list of objects to fetch using wm_get_from_bbox
`language`	Wikimapia language to retrieve. This is specified language in ISO 639-1 format. Default language is 'en'.
`wm_api_key`	Your wikimapia API Key. If not specified, the default 'example' key is used, however it is limited to about 1 request per 30 seconds and is for testing purposes only.
`data_blocks`	The comma-separated blocks of data you want to return: main, geometry, edit, location, attached, photos, comments, translate, similar_places, nearest_places, nearest_comments, nearest_streets, nearest_hotels. Default is "main,geometry,edit,location,attached,phot

Details

Uses [‘place.getbyid‘](http://wikimapia.org/api#placegetbyid) Wikimapia API function to retrieve full object details.

Value

‘sf‘ object with nested details.

wm_get_from_bbox *Get Wikimapia Objects in a Bounding Box*

Description

Retrieves objects in the given boundary box either with or without geometry. May also fetch just the metadata.

Usage

```
wm_get_from_bbox(
  x,
  page = 1,
  n_per_page = 100,
  language = "en",
  category = NULL,
  get_location = TRUE,
  wm_api_key = getOption("wikimapia_api_key", default = "example"),
  meta_only = FALSE
)
```

Arguments

x	a numeric vector of length 4, with xmin, ymin, xmax and ymax values; or a 'bbox' object that is an output of st_bbox. The values must be in WGS 84 (EPSG 4326)
page	This is page number. 1 is default. There are usually more objects in a bounding box than the limit of 100 objects per page. Therefore you need to specify page other than 1 to get other objects. The returned list object contains number of found features and the required number of pages to retrieve them all.
n_per_page	This is a variable that determines the number of results per page. 100 is default (5 min, 100 max). This is 'count' parameter in Wikimapia terminilogy, but different name is used here so that it does not conflict with the 'dplyr::count()' function.
language	Wikimapia language to retrieve. This is specified language in ISO 639-1 format. Default language is 'en'.
category	This is wikimapia category code: category=17 - Shop, category=203 - School etc. (a detailed list will be published later) or category text query in UTF-8: category=School, category=Church etc. Default is NULL to get all categories.
get_location	Specifies whether to get location (centroid) and polygon geometry. You may want to disable it if you are only using the wm_get_from_bbox to estimate the number of objects to reduce the returned object size.
wm_api_key	Your wikimapia API Key. If not specified, the default 'example' key is used, however it is limited to about 1 request per 30 seconds and is for testing purposes only.

`meta_only` only return metadata from the response, do not return feature attributes or geometry.

Details

Currenlty only supports bbox parameter, but not &lon_min, &lat_min, &lon_max, &lat_max and not &x, &y, &z for tiles. 'Box" endpoint is claimed to be deprecated, but the 'Place.Getbyarea' does not seem to work properly.

Value

If 'meta_only = FALSE' returns a list with data.frame of object attributes (and object geometry if 'get_location = TRUE'). If 'meta_only = TRUE' only returns metadata of the responce: the number of objects in the bounding box ('found'), version, language, current page, current 'n_per_page'. If 'get_location = TRUE' returns a list object with 'sf polygons' with all object attributes, 'sf points' with all object attributes (the centroids), and also the metadata described above.

Index

set_wikimapia_api_key, 2
st_bbox, *3*, *6*
subdivide_bbox, 2

wikimapR, 3
wikimapR-package *(*wikimapR*)*, 3
wm_get_by_id, 4
wm_get_by_id_single, 5
wm_get_from_bbox, *4*, *5*, 6, *6*