Package: rgeoboundaries (via r-universe)

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Title geoBoundaries Client

Version 1.3

Description Provides access to the geoBoundaries international boundary database <https://www.geoboundaries.org>, a NSF and foundation supported dataset of subnational boundaries around the globe. Methods allow you to access data directly from the API <https://www.geoboundaries.org/api/current/> to query for the geometric boundaries for any country, globally. For more details, refer to the publication by Runfola et al. (2020) <doi:10.1371/journal.pone.0231866>.

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Encoding UTF-8

URL https://github.com/wmgeolab/rgeoboundaries

BugReports https://github.com/wmgeolab/rgeoboundaries/issues

Depends R (>= 4.1)

Imports crul (>= 1.4.0), jsonlite, sf (>= 1.0.0), hoardr, glue, memoise, countrycode (>= 1.2.0), lifecycle

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Additional_repositories https://cranhaven.r-universe.dev

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

Repositoryhttps://cranhaven.r-universe.devRemoteUrlhttps://github.com/cranhaven/cranhaven.r-universe.devRemoteRefpackage/rgeoboundariesRemoteSha104219de8e4a4756753b554c34eb8da0fa82c718

Contents

rgeoboundaries-package	2
gb_max_adm_lvl	2
gb_metadata	3
geoboundaries	4
	7

Index

rgeoboundaries-package

rgeoboundaries

Description

R client to access geoBoundaries API

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gb_max_adm_lvl Get the highest administrative level available for a given country

Description

Get the highest administrative level available for a given country

Usage

```
gb_max_adm_lvl(
  country = NULL,
  release_type = c("gbOpen", "gbHumanitarian", "gbAuthoritative")
)
```

gb_metadata

Arguments

country	characher; a vector of country names or iso3 country codes.
release_type	character; This is one of gbOpen, gbHumanitarian, or gbAuthoritative. For most users, we suggest using gbOpen, as it is CC-BY 4.0 compliant, and can be used for most purposes so long as attribution is provided. gbHumanitarian files are mirrored from UN OCHA, but may have less open licensure. gbAuthoritative files are mirrored from UN SALB, and cannot be used for commerical purposes, but are verified through in-country processes. Default to gbOpen.

Value

a data.frame with the country names and corresponding highest administrative level

gb_metadata	Get metadata for a country, administrative level, type of data and ver-
	sion

Description

Get metadata for a country and an administrative level, type of data and version

Usage

```
gb_metadata(
  country = NULL,
  adm_lvl = "all",
  release_type = c("gbOpen", "gbHumanitarian", "gbAuthoritative")
)
```

Arguments

country	characher; a vector of country names or iso 3 country codes
adm_lvl	characher or integer; administrative level, adm0, adm1, adm2, adm3, adm4 or adm5. adm0 being the country. 0, 1, 2, 3, 4 or 5 can also be used.
release_type	character; This is one of gbOpen, gbHumanitarian, or gbAuthoritative. For most users, we suggest using gbOpen, as it is CC-BY 4.0 compliant, and can be used for most purposes so long as attribution is provided. gbHumanitarian files are mirrored from UN OCHA, but may have less open licensure. gbAuthoritative files are mirrored from UN SALB, and cannot be used for commerical purposes, but are verified through in-country processes. Default to gbOpen.

Value

returns metadata from the api

geoboundaries

Description

Access country boundaries at a specified administrative level

Usage

```
geoboundaries(
  country = NULL,
  adm_1v1 = "adm0"
 type = c("unsimplified", "simplified", "UNSIMPLIFIED", "SIMPLIFIED", "HPSCU", "HPSCGS",
    "SSCGS", "SSCU", "CGAZ", "hpscu", "hpscgs", "sscgs", "sscu", "cgaz"),
  release_type = c("gbOpen", "gbHumanitarian", "gbAuthoritative"),
  quiet = TRUE,
  overwrite = FALSE,
  version = deprecated()
)
gb_adm0(
  country = NULL,
  type = NULL,
  release_type = NULL,
  quiet = TRUE,
 overwrite = FALSE,
  version = deprecated()
)
gb_adm1(
  country = NULL,
  type = NULL,
  release_type = NULL,
  quiet = TRUE,
  overwrite = FALSE,
  version = deprecated()
)
gb_adm2(
  country = NULL,
  type = NULL,
  release_type = NULL,
  quiet = TRUE,
  version = deprecated()
)
gb_adm3(
```

geoboundaries

```
country = NULL,
  type = NULL,
 release_type = NULL,
 quiet = TRUE,
 overwrite = FALSE,
 version = deprecated()
)
gb_adm4(
 country = NULL,
  type = NULL,
 release_type = NULL,
 quiet = TRUE,
 overwrite = FALSE,
 version = deprecated()
)
gb_adm5(
 country = NULL,
  type = NULL,
 release_type = NULL,
 quiet = TRUE,
 overwrite = FALSE,
 version = deprecated()
)
```

Arguments

country	characher; a vector of country names or country ISO3. If NULL all countries will be used for adm0, adm1, adm2 where the administrative level are available
adm_lvl	character; administrative level, adm0, adm1, adm2, adm3, adm4 or adm5. adm0 being the country boundary. 0, 1, 2, 3, 4 or 5 can also be used.
type	character; One of simplified and unsimplified. Determines the type of boundary to use. Default to unsimplified.
release_type	character; This is one of gbOpen, gbHumanitarian, or gbAuthoritative. For most users, we suggest using gbOpen, as it is CC-BY 4.0 compliant, and can be used for most purposes so long as attribution is provided. gbHumanitarian files are mirrored from UN OCHA, but may have less open licensure. gbAuthoritative files are mirrored from UN SALB, and cannot be used for commerical purposes, but are verified through in-country processes. Default to gbOpen
quiet	logical; if TRUE no message while downloading and reading the data. Default to FALSE
overwrite	logical; if TRUE overwrite the files downloaded previously in the cache. Default to FALSE.
version	character; deprecated parameter.

Details

Different types of boundaries are available:

- unsimplified The premier geoBoundaries release, representing the highest precision files available for every country in the world. No standardization is performed on these files, so (for example) two countries may overlap in the case of contested boundaries.
- simplified A simplified version of every file available for every country in the world. No standardization is performed on these files, so (for example) two countries may overlap in the case of contested boundaries.

The following wrappers are also available:

- gb_adm0 returns the country boundaries
- gb_adm1 if available, returns the country first administrative level boundaries
- gb_adm2 if available, returns the country second administrative level boundaries
- gb_adm3 if avaiable, returns the country third administrative level boundaries
- gb_adm4 if available, returns the country fourth administrative level boundaries
- gb_adm5 if available, returns the country first administrative level boundaries

Value

a sf object

References

Runfola D, Anderson A, Baier H, Crittenden M, Dowker E, Fuhrig S, et al. (2020) geoBoundaries: A global database of political administrative boundaries. PLoS ONE 15(4): e0231866. https://doi.org/10.1371/journal.pone.0231866

Examples

```
# Get administrative boundaries for Canada at adm1 level
canada_adm1 <- geoboundaries(country = "Canada", adm_lvl = "adm1")</pre>
```

```
# Get administrative boundaries for all countries at adm0 level
all_countries_adm0 <- geoboundaries()</pre>
```

Index

* package

rgeoboundaries-package, 2 gb_adm0 (geoboundaries), 4 gb_adm1 (geoboundaries), 4 gb_adm2 (geoboundaries), 4 gb_adm3 (geoboundaries), 4 gb_adm4 (geoboundaries), 4 gb_adm5 (geoboundaries), 4 gb_max_adm_lv1, 2 gb_metadata, 3 geoboundaries, 4

rgeoboundaries
 (rgeoboundaries-package), 2
rgeoboundaries-package, 2