Package 'planscorer'

September 24, 2024

Title Score Redistricting Plans with 'PlanScore'

Version 0.0.2

Description Provides access to the 'PlanScore' Application Programming Interface (<https://github.com/PlanScore/PlanScore/blob/main/API.md>) for scoring redistricting plans. Allows for upload of plans from block assignment files and shape files. For shapes in memory, such as from 'sf' or 'redist', it processes them to save and upload. Includes tools for tidying responses and saving output from the website.

License MIT + file LICENSE

Encoding UTF-8

RoxygenNote 7.3.2.9000

Imports cli, curl, dplyr, fs, httr2, jsonlite, purrr, readr, rlang, sf, stringr, tibble, tidyr, webshot2

URL http://christophertkenny.com/planscorer/,

https://github.com/christopherkenny/planscorer

BugReports https://github.com/christopherkenny/planscorer/issues

Suggests httptest2, spelling, testthat (>= 3.0.0)

Config/testthat/edition 3

Language en-US

NeedsCompilation no

Author Christopher T. Kenny [aut, trl, cre] (R port,

<https://orcid.org/0000-0002-9386-6860>), Michal Migurski [aut] (python original, https://github.com/PlanScore/PlanScore-CLI), Cory McCartan [art]

Maintainer Christopher T. Kenny <christopherkenny@fas.harvard.edu>

Repository CRAN

Date/Publication 2024-09-24 14:50:02 UTC

Contents

key	2
ps_capture	2
ps_ingest	3
ps_model_versions	4
ps_save	4
ps_set_key	5
ps_supported_states	
upload	6
	0
	8

Index

key

Check or Get PlanScore API Key

Description

Check or Get PlanScore API Key

Usage

ps_has_key()

ps_get_key()

Value

logical if has, key invisibly if get

Examples

ps_has_key()

ps_capture Capture PlanScore Graphs

Description

Capture PlanScore Graphs

Usage

ps_capture(link, path)

ps_ingest

Arguments

link	plan_url output from ps_upload() functions
path	path to save copy of graphs in, likely ending in .png

Value

path to screenshot

Examples

```
# often times out
url <- 'https://planscore.org/plan.html?20221127T213653.168557156Z'
tf <- tempfile(fileext = '.png')
ps_capture(url, path = tf)</pre>
```

ps_ingest

Ingest PlanScore Output

Description

Ingest PlanScore Output

Usage

ps_ingest(link)

Arguments

link index url output from ps_upload() functions

Value

tibble with district and plan level data

Examples

```
url <- 'https://planscore.s3.amazonaws.com/uploads/20221127T213653.168557156Z/index.json'
ps_ingest(url)</pre>
```

ps_model_versions List Model Versions

Description

List Model Versions

Usage

ps_model_versions()

Value

tibble of model versions

Examples

ps_model_versions()

ps_save

Save PlanScore Output

Description

Save PlanScore Output

Usage

ps_save(link, path, json = TRUE)

Arguments

link	index url output from ps_upload() functions
path	path to save copy of data in, likely ending in .json if json = TRUE or .tsv if json = FALSE.
json	should the file be saved as . json (TRUE) or .tsv (FALSE). json = TRUE is slower but contains more information.

Value

path to json file

ps_set_key

Examples

```
url <- 'https://planscore.s3.amazonaws.com/uploads/20221127T213653.168557156Z/index.json'
tf <- tempfile(fileext = '.json')
try({ # relies on internet resource
    ps_save(url, tf)
})</pre>
```

ps_set_key Add Entry to Renviron

Description

Adds PlanScore API key to .Renviron.

Usage

ps_set_key(key, overwrite = FALSE, install = FALSE)

Arguments

key	Character. API key to add to add.
overwrite	Defaults to FALSE. Boolean. Should existing PLANSCORE_KEY in Renviron be overwritten?
install	Defaults to FALSE. Boolean. Should this be added '~/.Renviron' file?

Value

key, invisibly

Examples

```
## Not run:
set_planscore_key('1234')
```

End(Not run)

ps_supported_states List Currently Supported States

Description

List Currently Supported States

Usage

```
ps_supported_states()
```

Value

tibble of supported states

Examples

ps_supported_states()

upload

Upload to PlanScore

Description

Upload to PlanScore

Usage

```
ps_upload_file(
   file,
   description = NULL,
   incumbents = NULL,
   model_version = NULL,
   library_metadata = NULL,
   temporary = TRUE
)
ps_upload_redist(map, plans, draw, ...)
ps_upload_shp(shp, ...)
```

upload

Arguments

file	file to upload, one of a geojson, block assignment file, or zipped shape file		
description	text for plan description		
incumbents	Incumbent party, one of 'D' (Democrat), 'R' (Republican), or '0' (Open) for each district. Assumes '0' if none is provided.#'		
model_version	character model version to use. Available options are listed by ps_model_versions().		
library_metadata			
	Any additional data to be passed through for possible later use. For advanced use: Should likely be left NULL.		
temporary	Should a temporary PlanScore upload be used? Default is TRUE.		
map	a redist_map object		
plans	a redist_plans object		
draw	the draw to use from plans		
	arguments to pass on to ps_upload_file()		
shp	an sf shape to upload, where each entry is a district		

Value

list of links to index and plan, on success

Examples

```
# Requires API Key
file <- system.file('extdata/null-plan-incumbency.geojson', package = 'planscorer')
ps_upload_file(file)</pre>
```

Index

```
* info
    ps_model_versions, 4
    ps_supported_states, 6
* key
    key, 2
    ps_set_key, 5
* results
    ps_capture, 2
    ps_ingest, 3
    ps_save, 4
* upload
    upload, 6
key, 2
ps_capture, 2
ps_get_key (key), 2
\texttt{ps\_has\_key}~(\texttt{key}), \textbf{2}
ps_ingest, 3
ps_model_versions, 4
ps_model_versions(), 7
ps_save, 4
ps_set_key, 5
ps_supported_states, 6
ps_upload_file (upload), 6
ps_upload_redist (upload), 6
ps_upload_shp (upload), 6
```

upload, 6