

Package ‘dawaR’

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Title An API Wrapper for 'DAWA' - 'The Danish Address Web API'

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Version 0.2.4

Description Functions for interacting with all sections of the official 'Danish Address Web API' (also known as 'DAWA') <<https://api.dataforsyningen.dk>>. The development of this package is completely independent from the government agency, Klimadatastyrelsen, who maintains the API.

License GPL (>= 3)

Encoding UTF-8

RoxygenNote 7.3.2

URL <https://dawaR.aleksanderbl.dk/>,
<https://github.com/aleksanderbl29/dawaR>

BugReports <https://github.com/aleksanderbl29/dawaR/issues>

Suggests knitr, rmarkdown, ggplot2, testthat (>= 3.0.0), cowplot (>= 1.1.0), rmapshaper (>= 0.5.0), microbenchmark (>= 1.5.0), dplyr

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autocomplete	<i>Base function for interacting with autocomplete of sections.</i>
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Description

This function is very handy when needing to either validate or simply "fill in gaps" with autocomplete from the API.

Usage

```
autocomplete(section, input, ...)
```

Arguments

section	Defines what section of the api should be called. <code>available_sections()</code> exposes all options for this parameter.
input	The input to autocomplete. Could be a name, a place and similar.
...	<dynamic-dots> input query parameters.

Value

Returns the autocomplete information for the provided `section` given the `input`.

Examples

```
autocomplete("regioner", "midt")
```

available_sections	<i>List of available sections for dawa()</i>
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Description

Simple function to list all available options for the section parameter in `dawa()`. Useful when getting to know the base api function of this package. To filter based on function usage you can provide `format = "geojson"` to ensure compatibility with `get_map_data()` and `func = "get_data"` to ensure compatibility with `get_data()`.

Usage

```
available_sections(as_list = FALSE, format = NULL, verbose = TRUE, func = NULL)
```

Arguments

<code>as_list</code>	This options controls the output format. The output is either a named list or an atomic vector with the available sections
<code>format</code>	Specify a format type. The function now returns only available sections that can respond with that format. Currently <code>geojson</code> is the only format that is specified.
<code>verbose</code>	whether or not to provide <code>{cli}</code> output for the user. Enabled by default, but disabled for all functions that wrap this function
<code>func</code>	Specify the function you would like to ensure section compatibility with.

Value

The function returns either a named list or an atomic vector with the available sections in the API. The format is decided by `as_list`.

Examples

```
available_sections()

available_sections(as_list = TRUE)
```

<code>dawa</code>	<i>Base API function</i>
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Description

This function is the foundation of all communication with the api in this package. Not intended for end-users, but it provides all the flexibility of the api without the nice conveniences of the other functions in this package. By default it reformats the api response (which is json) to a list object.

Usage

```
dawa(
  section,
  ...,
  append_to_url = NULL,
  format = NULL,
  verbose = TRUE,
  cache = TRUE,
  dry_run = FALSE,
  func_params = list()
)
```

Arguments

section	Defines what section of the api should be called. <code>available_sections()</code> exposes all options for this parameter.
...	<dynamic-dots> input query parameters.
append_to_url	This options enables you to append a string to the url. It is inserted in the request after the section but before the ...
format	The format to provide as a query parameter for the api call. By default it has value NULL and triggers default json formatting. When <code>geojson</code> or <code>geojsonz</code> is provided, the function will return the raw json data instead of the usual list.
verbose	whether or not to provide <code>{cli}</code> output for the user. Enabled by default, but disabled for all functions that wrap this function
cache	Option to use caching in a <code>tempdir()</code> . Enabled by default. More info can be found in the documentation for <code>httr2::req_cache()</code> .
dry_run	With this option enabled, the function will output the request that has been created - Without sending it to the api. This is useful for debugging.
func_params	Option to include extra parameters (just like ... above). This option is used to pass down the dot-inputs from <code>get_data()</code> and <code>get_map_data()</code> . It is recommended to use the dynamic dots instead of this option, as an end user.

Value

By default returns the API response as a list output. For `geojson(z)` formats it returns the raw json. When `dry_run = TRUE` it returns the request that has been created but does not run it.

Examples

```
x <- dawa(section = "sogne")

x[[1]]
```

get_data	<i>Get data from section</i>
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Description

Get data from section

Usage

```
get_data(section, as_list = FALSE, ...)
```

Arguments

section	Defines what section of the api should be called. <code>available_sections()</code> exposes all options for this parameter.
as_list	Whether or not to return the data as a list or in a dataframe. Dataframe is the default output.
...	<code><dynamic-dots></code> input query parameters.

Value

Returns either a dataframe with all the data for the specified section or a list with the same information.

Examples

```
x <- get_data("regioner")
head(x)
```

get_map_data	<i>Fetch map data to use with {sf}.</i>
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Description

This function returns map data from DAWA. It is ready to use with `{sf}` functions. The returned dataframe has date-time columns to inform when the information was last changed. It is returned in Europe/Copenhagen time as that is the *local time* for the API. You can change that behavior by setting `Sys.setenv(TZ = "Your/Timezone")`.

Usage

```
get_map_data(type, cache = TRUE, ...)
```

Arguments

type	Defines the type of map data to request from DAWA. Run <code>available_sections(format = "geojson")</code> to see your options.
cache	Boolean to determine whether or not to cache the api call and the function output. Default is TRUE.
...	<code><dynamic-dots></code> input query parameters.

Value

Returns a `data.frame` object that contains polygons (or points) for the section provided.

Examples

```
## Not run:
x <- get_map_data("regioner")
ggplot2::ggplot(x) +
  ggplot2::geom_sf()

## End(Not run)
```

reverse

Base function for interacting with reverse geocoding of sections.

Description

This function reverse geocodes the coordinates provided. When used out of the box, the function wants WGS84 coordinates (lat/long). ETRS89 or UTM zone 32 can be provided as well. When coordinates from outside of Denmark is provided, the function will fail with a code 404.

Usage

```
reverse(section, x, y, verbose = TRUE, type = NULL, ...)
```

Arguments

section	Defines what section of the api should be called. <code>available_sections()</code> exposes all options for this parameter.
x	The X coordinate to geocode. If no <code>srid</code> is provided this should be the latitude.
y	The Y coordinate to geocode. If no <code>srid</code> is provided this should be the longitude.
verbose	whether or not to provide <code>{cli}</code> output for the user. Enabled by default, but disabled for all functions that wrap this function
type	The coordinate type for the API to parse. By default none is provided and WGS84 is used. The options are ETRS89, UTM32 and WGS84. The functions checks the input against the available types and errs if the type is not allowed.
...	<code><dynamic-dots></code> input query parameters.

Value

Returns a list object with information about the provided section for the location that is input.

Examples

```
reverse("regioner", x = 12.58515, y = 55.68324)
```

status_check

Check that all DAWA services are operational

Description

This function fetches the status of all available SDFI services. This package depends on at least one of these. It checks the official status page. The status can also be followed on their official X-page @DriftDataforsyn.

Usage

```
status_check(return_df = FALSE, error_if_unavailable = FALSE)
```

Arguments

return_df This option makes the function return a data.frame object with the services and their statuses listed

error_if_unavailable This option forces the function to throw an error in the event that one or more services are unreachable.

Value

Returns a data frame object with the services and their statuses. Is only returned if return_df = TRUE.

Examples

```
status_check()
```

```
status_check(return_df = TRUE)
```

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