

Package: `kwb.fisbroker` (via `r-universe`)

October 17, 2024

Title R Package for Getting Spatial Data from FIS-Broker

Version 0.0.0.9000

Description R Package for getting spatial data from FIS-Broker
(<https://www.stadtentwicklung.berlin.de/geoinformation/fis-broker/>).

License MIT + file LICENSE

URL <https://github.com/KWB-R/kwb.fisbroker>

BugReports <https://github.com/KWB-R/kwb.fisbroker/issues>

Depends R (>= 2.10)

Imports dplyr, fs, httr, jsonlite, kwb.utils, magrittr, readr, rlang,
rvest, sf, tibble, tidyr, xml2

Suggests covr, DT, ggplot2, knitr, leaflet, rmarkdown

VignetteBuilder knitr

Remotes github:kwb-r/kwb.utils

Encoding UTF-8

LazyData true

Roxygen list(markdown = TRUE)

RoxygenNote 7.2.1

Repository <https://kwb-r.r-universe.dev>

RemoteUrl <https://github.com/KWB-R/kwb.fisbroker>

RemoteRef HEAD

RemoteSha 853cbcd475cf005ae52ab9921dceaab493419e7f

Contents

<code>compose_fis_broker_url</code>	2
<code>create_info_page_hrefs</code>	3
<code>get_dataset_overview</code>	3
<code>get_urls</code>	4
<code>httr_get_or_fail</code>	4

login_to_fis_broker	5
lookup_dataset_id	5
read_all_metadata	6
read_metadata	7
read_wfs	8
write_to	9

Index	10
--------------	-----------

compose_fis_broker_url

Compose FIS-Broker URL

Description

Compose FIS-Broker URL

Usage

```
compose_fis_broker_url(
  cmd = "user_login",
  session_id = NULL,
  type = NULL,
  id = NULL
)
```

Arguments

cmd	command (default: "user login")
session_id	as retrieved by login_to_fis_broker , (default: NULL)
type	dataset type, i.e. "ATOM", "WFS" or "WMS" (default: NULL)
id	dataset id (default: NULL)

Value

composed FIS-Broker URL

 create_info_page_hrefs

Create Full URLs to Info Pages about Datasets in Overview Table

Description

Create Full URLs to Info Pages about Datasets in Overview Table

Usage

```
create_info_page_hrefs(overview, dbg = TRUE)
```

Arguments

overview	overview tibble as retrieved by get_dataset_overview , (default: get_dataset_overview)
dbg	whether or not to show debug messages (default: TRUE)

Value

vector with hrefs

 get_dataset_overview *Get Dataset Overview*

Description

Get Dataset Overview

Usage

```
get_dataset_overview(dbg = TRUE)
```

Arguments

dbg	whether or not to show debug messages
-----	---------------------------------------

Value

tibble with 7 columns and rows equal to number of datasets (one for each dataset type, e.g WMS, WFS, ATOM)

category_id Category id of dataset (artificially generated)

category_name Category name of dataset)

dataset_id Dataset id, artificially generated!!!

dataset_name Dataset name as listed on table

dataset_name_href Link of dataset name. JS session Id was replaced with a placeholder

dataset_type Dataset type as listed on table one of ATOM, WFS or WMS

dataset_type_href Link of dataset type. JS session Id was replaced with a placeholder

Examples

```
fb_dataset_overview <- kwb.fisbroker::get_dataset_overview()
# View(fb_dataset_overview)
```

get_urls	<i>Get Urls</i>
----------	-----------------

Description

Get Urls

Usage

```
get_urls(..., key. = NULL)
```

Arguments

... further arguments passed to [resolve](#)

key. optional. Name of element to be returned from the URL dictionary. If NULL (the default), the whole dictionary (a list) is returned.

Value

return base and wfs urls of FIS-Broker

Examples

```
# List of all defined (partial) URLs
get_urls()

# One specific URL with placeholders replaced as given
get_urls(
  key. = "href_type", sid = "my-session-id", type = "WFS", id = "my-id"
)
```

httr_get_or_fail	<i>GET Request with Check for Error</i>
------------------	---

Description

The function stops with error if the GET request returns status != 200

Usage

```
httr_get_or_fail(url, handle = NULL)
```

Arguments

url URL to which to send a GET request
handle passed to [GET](#)

Value

If the status was not 200, the function returns what [GET](#) returned

login_to_fis_broker *Login to FIS-Broker*

Description

Login to FIS-Broker

Usage

```
login_to_fis_broker(dbg = TRUE)
```

Arguments

dbg print debug messages (default: TRUE)

Value

session id

Examples

```
login_to_fis_broker()
```

lookup_dataset_id *Lookup Dataset ID Required for Download*

Description

Lookup Dataset ID Required for Download

Usage

```
lookup_dataset_id(overview, dataset_id, type)
```

Arguments

overview overview tibble as retrieved by [get_dataset_overview](#)
dataset_id one dataset_id from column "dataset_id" of provided overview
type dataset type, i.e. "ATOM", "WFS" or "WMS"

Value

dataset id required for [read_wfs](#)

read_all_metadata *Read Metadata based on Overview on FIS Broker Datasets*

Description

Read Metadata based on Overview on FIS Broker Datasets

Usage

```
read_all_metadata(
  overview = get_dataset_overview(),
  preserve_handle = TRUE,
  dbg = TRUE
)
```

Arguments

overview overview tibble as retrieved by [get_dataset_overview](#), (default: [get_dataset_overview](#))
preserve_handle logical. If TRUE (the default is FALSE), the Curl handle is created in advance and reused for all [GET](#) requests.
dbg whether or not to show debug messages (default: TRUE)

Value

tibble with all metadata information

Examples

```
## Not run:
overview <- kwb.fisbroker::get_dataset_overview()
overview_atom <- overview[overview$type == "ATOM",]
metadata_atom <- kwb.fisbroker::read_all_metadata(overview_atom)
overview_wfs <- overview[overview$type == "WFS",]
metadata_wfs <- kwb.fisbroker::read_all_metadata(overview_wfs)
overview_wms <- overview[overview$type == "WMS",]
metadata_wms <- kwb.fisbroker::read_all_metadata(overview_wms)

## End(Not run)
```

read_metadata	<i>Read metadata</i>
---------------	----------------------

Description

Read metadata

Usage

```
read_metadata(  
  dataset_id = "s_wfs_alkis_bezirk",  
  service_type = "WFS",  
  encoding = "Windows-1252",  
  dbg = TRUE,  
  url = NULL,  
  handle = NULL  
)
```

Arguments

dataset_id	id of wfs dataset (default: "s_wfs_alkis_bezirk"). Needs to be checked out manually as described below: <ol style="list-style-type: none">1. Go to: https://fbinter.stadt-berlin.de/fb/2. Click on a "WFS" or "WMS" Dataset3. Read the content of Rechneradresse in the opened tab. The basename of the url is the required dataset id!
service_type	either "WFS" or "WMS" (default: "WFS")
encoding	encoding of metadata FIS-Broker site (default: "Windows-1252")
dbg	print debug messages (default: TRUE)
url	optional. URL to web resource from which to load metadata. by default generated by the function
handle	passed to GET

Value

tibble with metadata for provided dataset_id

See Also

https://fbinter.stadt-berlin.de/fb/berlin/service_intern.jsp?id=s_wfs_alkis_bezirk@senstadt&type=WFS

Examples

```

### One Dataset
berlin_bezirke_metadata <- read_metadata(dataset_id = "s_wfs_alkis_bezirk")
berlin_bezirke_metadata

### Multiple
ids_wfs <- readLines(system.file("extdata/ids_wfs.txt",
package = "kwb.fisbroker"))

wfs_meta_list <- setNames(lapply(ids_wfs, function(id) {
kwb.fisbroker::read_metadata(id)}),
ids_wfs)

wfs_meta <- dplyr::bind_rows(wfs_meta_list, .id = "id_wfs")

wfs_meta

```

read_wfs

*Read WFS Dataset from FIS-Broker***Description**

Read WFS Dataset from FIS-Broker

Usage

```

read_wfs(
  dataset_id = "s_wfs_alkis_bezirk",
  service_version = "2.0.0",
  srs = "EPSG:25833",
  encoding = "UTF-8",
  dbg = TRUE
)

```

Arguments

dataset_id	id of wfs dataset (default: "s_wfs_alkis_bezirk"). Needs to be checked out manually as described below: <ol style="list-style-type: none"> 1. Go to: https://fbinter.stadt-berlin.de/fb/ 2. Click on a WFS Dataset 3. Read the content of Rechneradresse in the opened tab. The basename of the url is the required dataset id!
service_version	one of "1.0.0", "1.1.0" or "2.0.0" (default: "2.0.0")
srs	one of "EPSG:4258" or "EPSG:25833" (default: "EPSG:25833")
encoding	default: UTF-8
dbg	prints debug messages if TRUE (default: TRUE)

Value

imports selected WFS dataset into R

See Also

https://fbinter.stadt-berlin.de/fb/berlin/service_intern.jsp?id=s_wfs_alkis_bezirk@senstadt&type=WFS

Examples

```
berlin_bezirke <- kwb.fisbroker::read_wfs(dataset_id = "s_wfs_alkis_bezirk")
```

write_to	<i>Write to JSON or CSV</i>
----------	-----------------------------

Description

Write to JSON or CSV

Usage

```
write_to(format, df)
```

Arguments

format	either 'json' or 'csv'
df	data frame

Value

writes provided df to working directory with same name

Index

compose_fis_broker_url, 2
create_info_page_hrefs, 3

GET, 5–7
get_dataset_overview, 3, 3, 6
get_urls, 4

httr_get_or_fail, 4

login_to_fis_broker, 2, 5
lookup_dataset_id, 5

read_all_metadata, 6
read_metadata, 7
read_wfs, 6, 8
resolve, 4

write_to, 9