Package 'restatis'

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Title R Wrapper to Access a Wide Range of Germany's Federal
Statistical System Databases Based on the GENESIS Web Service
RESTful API of the German Federal Statistical Office
(Statistisches Bundesamt/Destatis)

Version 0.2.0

Description A RESTful API wrapper for accessing the GENESIS database of
the German Federal Statistical Office (Destatis) as well as its Census
Database and the database of Germany's regional statistics. Supports data
search functions, credential management, result caching, and handling
remote background jobs for large datasets.

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URL <https://correlaid.github.io/restatis/>,
<https://github.com/CorrelAid/restatis>

BugReports <https://github.com/CorrelAid/restatis/issues>

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Contents

---

binding_lapply   *binding_lapply*

Description

binding_lapply

Usage

```
binding_lapply(x, characteristics)
```

Arguments

x   Element to bind

characteristics

                   Characteristics to filter for

check_function_input   *check_function_input*

Description

check_function_input

Usage

```
check_function_input(
  code = NULL,
  term = NULL,
  sortcriterion = NULL,
  category = NULL,
  detailed = NULL,
  type = NULL,
  date = NULL,
  similarity = NULL,
  error.ignore = NULL,
  ordering = NULL,
  database = NULL,
  area = NULL,
  caller = NULL,
  verbose = NULL,
  raw = NULL
)
```

Arguments

code	Parameter to be checked
term	Parameter to be checked
sortcriterion	Parameter to be checked
category	Parameter to be checked
detailed	Parameter to be checked
type	Parameter to be checked
date	Parameter to be checked
similarity	Parameter to be checked
error.ignore	Parameter to be checked
ordering	Parameter to be checked
database	Parameter to be checked
area	Parameter to be checked
caller	Parameter to be checked
verbose	Parameter to be checked
raw	Parameter to be checked

check_results	*check_results*

Description

check_results

Usage

```
check_results(input)
```

Arguments

input	Input to test result structure

evas_list	*List of EVAS Codes*

Description

List of EVAS Codes

Usage

```
evas_list
```

Format

evas_list:

A data frame with 1132 rows and 3 columns:

EVAS EVAS code

Beschreibung Details on the EVAS code

Titel Alternative desription of EVAS code contents

Source

https://www.destatis.de/DE/Methoden/Revisionen/Glossar/EVAS.html

---

find_token   *find_token*

Description

find_token

Usage

```
find_token(input, error.input, text, sub_category)
```

Arguments

input	Input to test result structure
error.input	error.ignore TRUE or FALSE
text	verbose TRUE or FALSE
sub_category	sub_category character string

---

forming_evas   *forming_evas*

Description

forming_evas

Usage

```
forming_evas(list_of)
```

Arguments

list_of	List of EVAS to iterate over

gen_alternative_terms *gen_alternative_terms*

Description

Function to find search terms that are similar or related to one another in spelling and also represented in the GENESIS, Zensus 2022 or regionalstatistik.de databases. Important note: The API call is searching for terms with the same characters. To be useful in searching for related terms it is highly recommended to work with "*" placeholders (see examples). The placeholder can be placed before and/or after the search term.

Usage

```
gen_alternative_terms(
  term = NULL,
  similarity = TRUE,
  database = c("all", "genesis", "zensus", "regio"),
  verbose = TRUE,
  ...
)
```

Arguments

term	Character string. Maximum length of 15 characters. Term or word for which you are searching for alternative or related terms. Use of '*' as a placeholder is possible to generate broader search areas.
similarity	Boolean. Indicator if the output of the function should be sorted based on a Levenshtein edit distance based on the adist() function. Default is 'TRUE'.
database	Character string. Indicator if the GENESIS ('genesis'), Zensus 2022 ('zensus') or regionalstatistik.de ('regio') database is called. Default option is 'all'.
verbose	Boolean. Indicator if the output of the function should include detailed messages and warnings. Default option is 'TRUE'. Set the parameter to 'FALSE' to suppress additional messages and warnings.
...	Additional parameters for the API call. These parameters are only affecting the call itself, no further processing. For more details see vignette("additional_parameter").

Value

A list with all recollected elements from the respective database. Attributes are added to the data.frame, describing the search configuration for the returned output.

Examples

```
## Not run:
# Find terms at GENESIS that are the same (in spelling) to search term "bus"
# and sort them by Levenshtein edit distance
```

```
object <- gen_alternative_terms(term = "bus", similarity = TRUE, database = "genesis")

# Find terms at GENESIS that are related (in spelling) to search term "bus"
object <- gen_alternative_terms(term = "bus*", similarity = TRUE, database = "genesis")

# Find terms at Zensus 2022 that are related (in spelling) to search term "wohn"
object <- gen_alternative_terms(term = "wohn*", similarity = TRUE, database = "zensus")

## End(Not run)
```

---

gen_auth_ask *gen_auth_ask*

Description

gen_auth_ask

Usage

```
gen_auth_ask(credential_type)
```

Arguments

credential_type

Character string. Type of credential to ask for

Value

The user response

---

gen_auth_get *gen_auth_get*

Description

Function to retrieve the credentials stored via gen_auth_save()

Usage

```
gen_auth_get(database = c("all", "genesis", "zensus", "regio"))
```

Arguments

database   Character string. The database to get the credentials for ('all', 'genesis', 'zensus'
                  and 'regio').

Value

Credentials for the database(s) chosen by the user

Examples

```
## Not run:
gen_auth_get("all")

## End(Not run)
```

---

gen_auth_path   *gen_auth_path*

Description

gen_auth_path

Usage

```
gen_auth_path(...)
```

Arguments

...   Optional arguments for file.path()

Value

A file path for the storage of config files

---

gen_auth_save   *gen_auth_save*

Description

Save credentials of the different databases for further convenient use

Usage

```
gen_auth_save(database = c("all", "genesis", "zensus", "regio"))
```

Arguments

database   Character string. The database to store credentials for ('all', 'genesis', 'zensus' or 'regio').

Details

Username and password are encrypted and saved as RDS in the package config directory. A random string is generated and stored in the session environment variable GENESIS_KEY. This string is used as the key to encrypt and decrypt the entered credentials. To avoid havding to save authentication in future sessions, GENESIS_KEY can be added to .Renviron. The usethis package includes a helper function for editing .Renviron files from an R session with `usethis::edit_r_environ()`.

Value

Path to the RDS file in which credentials are saved, invisibly.

Examples

```
## Not run:
gen_auth_save("zensus")

## End(Not run)
```

gen_catalogue   *gen_catalogue*

Description

Function to search for tables, statistics, and cubes from GENESIS, Zensus 2022 or regionalstatistik.de. Additionally, it structures the output based on the internal tree structure based on the EVAS-numbers. Time-series are represented as cubes with a specified time span. Important note: To be useful in searching for objects it is highly recommended to work with "*" placeholders (see examples). The placeholder can be placed before and/or after the search term.

Usage

```
gen_catalogue(
  code = NULL,
  database = c("all", "genesis", "zensus", "regio"),
  category = c("tables", "statistics", "cubes"),
  area = c("all", "public", "user"),
  detailed = FALSE,
  sortcriterion = c("code", "content"),
  error.ignore = FALSE,
  verbose = TRUE,
  ...
)
```

Arguments

code	String with a maximum length of 15 characters for a database object (GENESIS and regionalstatistik.de) and 15 characters for a Zensus 2022 object. Only one code per iteration. "*" notations are possible.
database	Character string. Indicator if the GENESIS ('genesis'), Zensus 2022 ('zensus') or regionalstatistik.de ('regio') database is called. Default option is 'all'.
category	Character string. Specify specific GENESIS/regionalstatistik.de object types ('tables', 'statistics' and 'cubes') and specific Zensus 2022 object types ('tables' and 'statistics'). All types that are specific for one database can be used together. Default option is to use all types that are possible for the specific database.
area	Character string. Indicator from which area of the database the results are called. In general, 'all' is the appropriate solution. Default option is 'all'. Not used for 'statistics'.
detailed	Boolean. Indicator if the function should return the detailed output of the iteration including all object-related information or only a shortened output including only code and object title. Default option is 'FALSE'.
sortcriterion	Character string. Indicator if the output should be sorted by 'code' or 'content'. This is a parameter of the API call itself. The default is 'code'.
error.ignore	Boolean. Indicator if the function should stop if an error occurs or no object for the request is found or if it should produce a token as response. Default option is 'FALSE'.
verbose	Boolean. Indicator if the output of the function should include detailed messages and warnings. Default option is 'TRUE'. Set the parameter to 'FALSE' to suppress additional messages and warnings.
...	Additional parameters for the API call. These parameters are only affecting the call itself, no further processing. For more details see `vignette("additional_parameter")`.

Value

A list with all recalled elements from the API. Based on the 'detailed' parameter it contains more or less information, but always includes the code of the object, the title, and the type of the object. This is done to facilitate further processing with the data. Attributes are added to the data.frame describing the search configuration for the returned output.

Examples

```
## Not run:
# Scroll through objects under the topic "12*"
# which is "Bevoelkerung" in GENESIS from all categories and
# with a detailed output
object <- gen_catalogue(code = "12*", detailed = TRUE)

# Search tables under the topic "12*" which is "Bevölkerung"
# without a detailed output
object <- gen_catalogue(code = "12*", category = "tables")


## End(Not run)
```

gen_cube *gen_cube*

Description

Download a cube with data from GENESIS or regionalstatistik.de database

Usage

```
gen_cube(name, ...)
```

Arguments

name
: Character string for a cube object (only GENESIS and regionalstatistik.de)

...
: Further (optional) parameters passed on to the API call:

area Character string. The area in which the table is stored. Possible values:
- "public": cube in the public catalogue
- "user": cube in the user's account
- "all": both of the above

values Boolean. Should values be included?

metadata Boolean. Should metadata be included?

additionals Boolean. Should additional metadata be included?

contents Character string. Names of required statistical specifications

startyear,endyear Four-digit integers. Only retrieve data between these years.

timeslices Integer. Number of timeslices (cumulative to startyear or endyear)

regionalvariable Character string. Code of the regional variable whose value is specified in regionalkey to filter the results.

regionalkey Character string. One or more regional keys. Multiple values can be supplied as a character vector or as a single string, with the regional keys separated by commas. Use of wildcard (*) allowed.

classifyingvariable1,classifyingvariable2 ,classifyingvariable3 Character string. Code of the subject classification (SK-Merkmal) to which the selection by means of the corresponding classifyingkey parameter is to be applied.

classifyingkey1,classifyingkey2,classifyingkey3 Character string. One or more values of a subject classification (e.g. "WZ93012"). Applied to the corresponding classifyingvariable parameter. Multiple keys can be supplied as a character vector or as a single string, with the keys separated by commas. Use of wildcard (*) allowed.

stand Character string, format: "DD.MM.YYYY". Only retrieve data updated after this date.

language Character string. Search terms, returned messages and data descriptions in German ("de") or English ("en")?

Value

A [tibble](). Non-data contents of the data cube object are saved in the metadata [attribute]() of the data frame.

Examples

```
## Not run:
gen_cube("47414BJ002")

## End(Not run)
```

---

gen_download_job   *gen_download_job*

Description

gen_download_job

Usage

```
gen_download_job(
  name,
  database = c("genesis", "regio"),
  area = c("all", "public", "user"),
  compress = FALSE,
  language = Sys.getenv("GENESIS_LANG"),
  all_character = TRUE
)
```

Arguments

name	Character string. The job code retrieved by using gen_list_jobs().
database	Character string. Indicator if the GENESIS ('genesis') or regionalstatistik.de ('regio') database is called. Only one database can be addressed per function call. Default option is 'genesis'.
area	Character string. Indicator from which area of the database the results are called. In general, 'all' is the appropriate solution. Default option is 'all'.
compress	Boolean. Should empty rows and columns be discarded? Default is FALSE.
language	Character string. Defines if the decimal mark and grouping mark of integers should be represented based on the European (e.g.: '100,5', '200.000,5') or American ('100.5', '200,000.5') system. Defaults to 'Sys.getenv("GENESIS_LANG")'.
all_character	Boolean. Should all variables be imported as 'character' variables? Avoids fuzzy data type conversions if there are leading zeros or other special characters. Defaults to TRUE.

Value

Returns a data.frame with the table content

Examples

```
## Not run:
gen_download_job("21311-00-01-1_123456789", "regio")

## End(Not run)
```

---

gen_find *General Search for Objects Through GENESIS*

Description

Function to search through the databases GENESIS, Zensus 2022 and regionalstatistik.de. It is similar in usage as the search function on the GENESIS main page (https://www-genesis.destatis.de/genesis/online). In the search query, "UND" (German word for 'and', also written "und" or "&") as well as "ODER" (German word for 'or', also written "oder" or "|") can be included and logically combined. Furthermore, wildcards are possible by including "*". If more then one word is included in the term string, 'and' is used automatically to combine the different words. Important note: Time-series are treated as cubes in GENESIS and regionalstatistik.de, they are not longer distinguished. If you want to find a specific object with a clear code with this find function, you need to specify the object type or search for all object types.

Usage

```
gen_find(
  term = NULL,
  database = c("all", "genesis", "zensus", "regio"),
  category = c("all", "tables", "statistics", "variables", "cubes"),
  detailed = FALSE,
  ordering = TRUE,
  error.ignore = TRUE,
  verbose = TRUE,
  ...
)
```

Arguments

term	A character string with no maximum character length, but a word limit of five words.
database	Character string. Indicator if the GENESIS ('genesis'), Zensus 2022 ('zensus') or regionalstatistik.de ('regio') database is called. Default option is 'all'.

category	Character string. Specify specific GENESIS/regionalstatistik.de object types ('tables', 'statistics' and 'cubes') and specific Zensus 2022 object types ('tables' and 'statistics'). All types that are specific for one database can be used together. Default option is to use all types that are possible for the specific database.
detailed	Boolean. Indicator if the function should return the detailed output of the iteration including all object-related information or only a shortened output including only code and object title. Default option is 'FALSE'.
ordering	A logical. Indicator if the function should return the output of the iteration ordered first based on the fact if the searched term is appearing in the title of the object and secondly on an estimator of the number of variables in this object. Default option is 'TRUE'.
error.ignore	Boolean. Indicator if the function should stop if an error occurs or no object for the request is found or if it should produce a token as response. Default option is 'TRUE'.
verbose	Boolean. Indicator if the output of the function should include detailed messages and warnings. Default option is 'TRUE'. Set the parameter to 'FALSE' to suppress additional messages and warnings.
...	Additional parameters for the API call. These parameters are only affecting the call itself, no further processing. For more details see `vignette("additional_parameter")`.

Value

A list with all recalled elements from the API. Based on the 'detailed' parameter it contains more or less information, but always includes the code of the object, the title, and the type of the object. This is done to facilitate further processing with the data. Attributes are added to the data.frame describing the search configuration for the returned output.

Examples

```
## Not run:
# Find objects related to "bus" in GENESIS
object <- gen_find(term = "bus")

# Find tables related to "bus" in GENESIS and return a unordered detailed output
object <- gen_find(term = "bus", detailed = TRUE, ordering = FALSE)

# Find tables related to "Autos" or "Corona" in GENESIS and return a unordered detailed output
object <- gen_find(term = "autos ODER corona", detailed = TRUE, ordering = FALSE)

#' # Find tables related to "Autos" and "Corona" in GENESIS and return a unordered detailed output
object <- gen_find(term = "autos UND corona", detailed = TRUE, ordering = FALSE)

## End(Not run)
```

---

gen_list_jobs *gen_list_jobs*

Description

Function to list all current jobs connected to the given user in the GENESIS or regionalstatistik.de database. Important note: For this function it is also possible to use searchcriterion parameter and selection parameter, making it possible to filter the job list based on 'type','time','status' or 'code'. For more details see vignette("additional_parameter").

Usage

```
gen_list_jobs(
  database = c("genesis", "regio"),
  sortcriterion = c("type", "time", "status", "code"),
  flat = FALSE,
  ...
)
```

Arguments

database	Character string. Indicator if 'genesis' or 'regionalstatistik.de' database is called. Default option is 'genesis'.
sortcriterion	Character string. Indicator if the output should be sorted by 'type','time','status' or 'code'. This is a parameter of the API call itself. The default is 'type'.
flat	Boolean. Should the function return a list with jobs and metadata ('FALSE') or just a flat data.frame ('TRUE')? Defaults to FALSE.
...	Additional parameters for the API call. These parameters are only affecting the call itself, no further processing. For more details see vignette("additional_parameter").

Value

A list or data.frame (see parameter 'flat') of all current jobs of the user.

Examples

```
## Not run:
gen_list_jobs("regio", flat = TRUE)

## End(Not run)
```

---

gen_logincheck   *gen_logincheck*

Description

Function to check if a login is possible for a certain database.

Usage

```
gen_logincheck(database, verbose = FALSE)
```

Arguments

database   Character string. Indicator if the GENESIS ('genesis'), Zensus 2022 ('zensus')
                or regionalstatistik.de ('regio') database is called. Only one database can be
                addressed per function call. Default option is 'genesis'.

verbose   Boolean. In case of success, should a message be printed? Defaults to FALSE.

Value

Leads to an informative error message if the login check failed and returns FALSE invisibly. Invisibly returns TRUE otherwise.

Examples

```
## Not run:
gen_logincheck("zensus")

## End(Not run)
```

---

gen_metadata   *Search for Meta-Information for All Types of Objects*

Description

Function to search for meta-information for all types of objects.

Search For Meta-Information For All Types Of Objects

Usage

```
gen_metadata(
  code = NULL,
  database = c("all", "genesis", "zensus", "regio"),
  category = c("cube", "statistic", "table", "variable", "value"),
  area = c("all", "public", "user"),
  error.ignore = FALSE,
  verbose = TRUE,
  raw = FALSE,
  ...
)

gen_metadata(
  code = NULL,
  database = c("all", "genesis", "zensus", "regio"),
  category = c("cube", "statistic", "table", "variable", "value"),
  area = c("all", "public", "user"),
  error.ignore = FALSE,
  verbose = TRUE,
  raw = FALSE,
  ...
)
```

Arguments

code	String with a maximum length of 15 characters for a database object (GENESIS, regionalstatistik.de, Zensus 2022). Only one code per iteration.
database	Character string. Indicator if the GENESIS ('genesis'), Zensus 2022 ('zensus') or regionalstatistik.de ('regio') database is called. Default option is 'all'.
category	Character string. Specifying the specific object type of the object that you want meta data for. No default option - you need to specify the object type. Hint: The functions in 'restatis' often return information on object 'Type'.
area	Character string. Indicator from which area of the database the results are called. In general, 'all' is the appropriate solution. Default option is 'all'. Not used for 'statistics'.
error.ignore	Boolean. Indicator if the function should stop if an error occurs or no object for the request is found or if it should produce a token as response. Default option is 'FALSE'.
verbose	Boolean. Indicator if the output of the function should include detailed messages and warnings. Default option is 'TRUE'. Set the parameter to 'FALSE' to suppress additional messages and warnings.
raw	Boolean. Should a non-parsed API response be returned? Default option is 'FALSE'.
...	Additional parameters for the API call. These parameters are only affecting the call itself, no further processing. For more details see vignette("additional_parameter").

Value

A list with all recalled elements from GENESIS. Attributes are added to the dataframe describing the search configuration for the returned output.

A list with all recalled elements from the API. Attributes are added to the data.frame describing the search configuration for the returned output.

Examples

```
## Not run:
# Find meta-information of the table with the code "11111"
object <- gen_metadata(code = "11111", category = "Table")

## End(Not run)

## Not run:
# Find meta-information of the table with the code "11111"
object <- gen_metadata(code = "11111", category = "table")

## End(Not run)
```

---

gen_metadata_cube   *Search for Meta-Information for a Cube*

Description

Function to search for meta-information for a specific cube.

Function to search for meta information for a specific cube. Usable only for GENESIS and regionalstatistik.de.

Usage

```
gen_metadata_cube(
  code = NULL,
  database = c("all", "genesis", "regio"),
  area = c("all", "public", "user"),
  error.ignore = FALSE,
  verbose = TRUE,
  raw = FALSE,
  ...
)

gen_metadata_cube(
  code = NULL,
  database = c("all", "genesis", "regio"),
  area = c("all", "public", "user"),
  error.ignore = FALSE,
```

```
    verbose = TRUE,
    raw = FALSE,
    ...
)
```

Arguments

code	A character string with a maximum length of 15 characters. Code from a GENESIS or regionalstatistik.de object. Only one code per iteration.
database	Character string. Indicator if the GENESIS ('genesis') or regionalstatistik.de ('regio') database is called. Default option is 'all'.
area	Character string. Indicator from which area of the database the results are called. In general, 'all' is the appropriate solution. Default option is 'all'. Not used for 'statistics'.
error.ignore	Boolean. Indicator if the function should stop if an error occurs or no object for the request is found or if it should produce a token as response. Default option is 'FALSE'.
verbose	Boolean. Indicator if the output of the function should include detailed messages and warnings. Default option is 'TRUE'. Set the parameter to 'FALSE' to suppress additional messages and warnings.
raw	Boolean. Should a non-parsed API response be returned? Default option is 'FALSE'.
...	Additional parameters for the API call. These parameters are only affecting the call itself, no further processing. For more details see vignette("additional_parameter").

Value

A list with all recalled elements from GENESIS. Attributes are added to the dataframe describing the search configuration for the returned output.

A list with all recalled elements from the API. Attributes are added to the data.frame describing the search configuration for the returned output.

Examples

```
## Not run:
# Find meta-information of the cube with the code "11111KE001"
object <- gen_metadata_cube(code = "11111KE001")


## End(Not run)

## Not run:
# Find meta-information of the cube with the code "11111KE001"
object <- gen_metadata_cube(code = "11111KE001")


## End(Not run)
```

gen_metadata_statistic

gen_metadata_statistic

Description

Function to search for meta information for a specific statistic.

Usage

```
gen_metadata_statistic(
  code = NULL,
  database = c("all", "genesis", "zensus", "regio"),
  area = c("all", "public", "user"),
  error.ignore = FALSE,
  verbose = TRUE,
  raw = FALSE,
  ...
)
```

Arguments

code	A character string with a maximum length of 15 characters. Code from a GEN-ESIS, Zensus 2022 or regionalstatistik.de object. Only one code per iteration.
database	Character string. Indicator if the GENESIS ('genesis'), Zensus 2022 ('zensus') or regionalstatistik.de ('regio') database is called. Default option is 'all'.
area	Character string. Indicator from which area of the database the results are called. In general, 'all' is the appropriate solution. Default option is 'all'. Not used for 'statistics'.
error.ignore	Boolean. Indicator if the function should stop if an error occurs or no object for the request is found or if it should produce a token as response. Default option is 'FALSE'.
verbose	Boolean. Indicator if the output of the function should include detailed messages and warnings. Default option is 'TRUE'. Set the parameter to 'FALSE' to suppress additional messages and warnings.
raw	Boolean. Should a non-parsed API response be returned? Default option is 'FALSE'.
...	Additional parameters for the API call. These parameters are only affecting the call itself, no further processing. For more details see vignette("additional_parameter").

Value

A list with all recalled elements from the API. Attributes are added to the data.frame describing the search configuration for the returned output.

Examples

```
## Not run:
# Find meta-information of the statistic with the code "12411"
object <- gen_metadata_stats(code = "12411")

## End(Not run)
```

---

gen_metadata_stats   *Search for Meta-Information for a Statistic*

Description

Function to search for meta-information for a specific statistic.

Usage

```
gen_metadata_stats(code = NULL, error.ignore = FALSE, ...)
```

Arguments

code   a string with a maximum length of 15 characters. Code from a GENESIS-
                Object. Only one code per iteration.

error.ignore   a logical. Indicator if the function should stop if an error occurs or no object for
                the request is found or if it should produce a token as response.

...   Additional parameter of the GENESIS API call. These parameters are only
                affecting the GENESIS API call itself, no further processing.

Value

A list with all recalled elements from GENESIS. Attributes are added to the dataframe describing
the search configuration for the returned output.

Examples

```
## Not run:
# Find meta-information of the statistic with the code "12411"
object <- gen_metadata_stats(code = "12411")

## End(Not run)
```

---

gen_metadata_tab *Search for Meta-Information for a Table*

Description

Function to search for meta-information for a specific table.

Usage

```
gen_metadata_tab(code = NULL, error.ignore = FALSE, ...)
```

Arguments

code	a string with a maximum length of 15 characters. Code from a GENESIS-Object. Only one code per iteration.
error.ignore	a logical. Indicator if the function should stop if an error occurs or no object for the request is found or if it should produce a token as response.
...	Additional parameter of the GENESIS API call. These parameters are only affecting the GENESIS API call itself, no further processing.

Value

A list with all recalled elements from GENESIS. Attributes are added to the dataframe describing the search configuration for the returned output.

Examples

```
## Not run:
# Find meta-information of the table with the code "11111"
object <- gen_metadata_tab(code = "11111")

## End(Not run)
```

---

gen_metadata_table *gen_metadata_table*

Description

Function to search for meta information for a specific table.

Usage

```
gen_metadata_table(
  code = NULL,
  database = c("all", "genesis", "zensus", "regio"),
  area = c("all", "public", "user"),
  error.ignore = FALSE,
  verbose = TRUE,
  raw = FALSE,
  ...
)
```

Arguments

code	A character string with a maximum length of 15 characters. Code from a GEN-ESIS, Zensus 2022 or regionalstatistik.de object. Only one code per iteration.
database	Character string. Indicator if the GENESIS ('genesis'), Zensus 2022 ('zensus') or regionalstatistik.de ('regio') database is called. Default option is 'all'.
area	Character string. Indicator from which area of the database the results are called. In general, 'all' is the appropriate solution. Default option is 'all'. Not used for 'statistics'.
error.ignore	Boolean. Indicator if the function should stop if an error occurs or no object for the request is found or if it should produce a token as response. Default option is 'FALSE'.
verbose	Boolean. Indicator if the output of the function should include detailed messages and warnings. Default option is 'TRUE'. Set the parameter to 'FALSE' to suppress additional messages and warnings.
raw	Boolean. Should a non-parsed API response be returned? Default option is 'FALSE'.
...	Additional parameters for the API call. These parameters are only affecting the call itself, no further processing. For more details see `vignette("additional_parameter")`.

Value

A list with all recalled elements from the API. Attributes are added to the data.frame describing the search configuration for the returned output.

Examples

```
## Not run:
# Find meta-information of the table with the code "11111"
object <- gen_metadata_tab(code = "11111")

## End(Not run)
```

---

gen_metadata_val *Search for Meta-Information for a Value*

Description

Function to search for meta-information for a specific value.

Usage

```
gen_metadata_val(code = NULL, error.ignore = FALSE, ...)
```

Arguments

code	a string with a maximum length of 15 characters. Code from a GENESIS-Object. Only one code per iteration.
error.ignore	a logical. Indicator if the function should stop if an error occurs or no object for the request is found or if it should produce a token as response.
...	Additional parameter of the GENESIS API call. These parameters are only affecting the GENESIS API call itself, no further processing.

Value

A list with all recalled elements from GENESIS. Attributes are added to the dataframe describing the search configuration for the returned output.

Examples

```
## Not run:
# Find meta-information of the value with the code "LEDIG"
object <- gen_metadata_val(code = "LEDIG")

## End(Not run)
```

---

gen_metadata_value *gen_metadata_value*

Description

Function to search for meta information for a specific value.

Usage

```
gen_metadata_value(
  code = NULL,
  database = c("all", "genesis", "zensus", "regio"),
  area = c("all", "public", "user"),
  error.ignore = FALSE,
  verbose = TRUE,
  raw = FALSE,
  ...
)
```

Arguments

code   A character string with a maximum length of 15 characters. Code from a GEN-
                ESIS, Zensus 2022 or regionalstatistik.de object. Only one code per iteration.

database   Character string. Indicator if the GENESIS ('genesis'), Zensus 2022 ('zensus')
                or regionalstatistik.de ('regio') database is called. Default option is 'all'.

area   Character string. Indicator from which area of the database the results are called.
                In general, 'all' is the appropriate solution. Default option is 'all'. Not used for
                'statistics'.

error.ignore   Boolean. Indicator if the function should stop if an error occurs or no object for
                the request is found or if it should produce a token as response. Default option
                is 'FALSE'.

verbose   Boolean. Indicator if the output of the function should include detailed mes-
                sages and warnings. Default option is 'TRUE'. Set the parameter to 'FALSE' to
                suppress additional messages and warnings.

raw   Boolean. Should a non-parsed API response be returned? Default option is
                'FALSE'.

...   Additional parameters for the API call. These parameters are only affecting the
                call itself, no further processing. For more details see `vignette("additional_parameter")`.

Value

A list with all recalled elements from the API. Attributes are added to the data.frame describing the
search configuration for the returned output.

Examples

```
## Not run:
# Find meta-information of the value with the code "LEDIG"
object <- gen_metadata_val(code = "LEDIG")

## End(Not run)
```

---

gen_metadata_var *Search for Meta-Information for a Variable*

Description

Function to search for meta-information for a specific variable.

Usage

```
gen_metadata_var(code = NULL, error.ignore = FALSE, ...)
```

Arguments

code   a string with a maximum length of 15 characters. Code from a GENESIS-Object. Only one code per iteration. "*"-Notation is possible.

error.ignore   a logical. Indicator if the function should stop if an error occurs or no object for the request is found or if it should produce a token as response.

...   Additional parameter of the GENESIS API call. These parameters are only affecting the GENESIS API call itself, no further processing.

Value

A list with all recalled elements from GENESIS. Attributes are added to the dataframe describing the search configuration for the returned output.

Examples

```
## Not run:
# Find meta-information of the variable with the code "FAMSTD"
object <- gen_metadata_var(code = "FAMSTD")

## End(Not run)
```

---

gen_metadata_variable *gen_metadata_variable*

Description

Function to search for meta information for a specific variable.

Usage

```
gen_metadata_variable(
  code = NULL,
  database = c("all", "genesis", "zensus", "regio"),
  area = c("all", "public", "user"),
  error.ignore = FALSE,
  verbose = TRUE,
  raw = FALSE,
  ...
)
```

Arguments

code	A character string with a maximum length of 15 characters. Code from a GENESIS, Zensus 2022 or regionalstatistik.de object. Only one code per iteration.
database	Character string. Indicator if the GENESIS ('genesis'), Zensus 2022 ('zensus') or regionalstatistik.de ('regio') database is called. Default option is 'all'.
area	Character string. Indicator from which area of the database the results are called. In general, 'all' is the appropriate solution. Default option is 'all'. Not used for 'statistics'.
error.ignore	Boolean. Indicator if the function should stop if an error occurs or no object for the request is found or if it should produce a token as response. Default option is 'FALSE'.
verbose	Boolean. Indicator if the output of the function should include detailed messages and warnings. Default option is 'TRUE'. Set the parameter to 'FALSE' to suppress additional messages and warnings.
raw	Boolean. Should a non-parsed API response be returned? Default option is 'FALSE'.
...	Additional parameters for the API call. These parameters are only affecting the call itself, no further processing. For more details see vignette("additional_parameter").

Value

A list with all recalled elements from the API. Attributes are added to the data.frame describing the search configuration for the returned output.

Examples

```
## Not run:
# Find meta-information of the variable with the code "FAMSTD"
object <- gen_metadata_var(code = "FAMSTD")

## End(Not run)
```

---

gen_modified_data *gen_modified_data*

Description

Function to check for updates, changes, or new objects based on a specific date.

Usage

```
gen_modified_data(
  code = "",
  database = c("all", "genesis", "zensus", "regio"),
  type = c("all", "tables", "statistics", "statisticsUpdates"),
  date = c("now", "week_before", "month_before", "year_before"),
  verbose = TRUE,
  ...
)
```

Arguments

code	A character string with a maximum length of 15 characters. Code from a GENESIS, Zensus 2022 or regionalstatistik.de object. Only one code per iteration.
database	Character string. Indicator if the GENESIS ('genesis'), Zensus 2022 ('zensus') or regionalstatistik.de ('regio') database is called. Default option is 'all'.
type	Character string. Specific GENESIS and regionalstatistik.de object types: 'tables', 'statistics', and 'statisticsUpdates'. Specific Zensus 2022 object types: 'tables' and 'statistics'. All types that are specific for one database can be used together through 'all', which is the default.
date	Character string. Specific date that is used as the last update or upload time to include an object in return. Default option is 'now', which uses the current date of your system. Alternative options are 'week_before', using the current date of your system minus 7 days, 'month_before', using the current date of your system minus 4 weeks, and 'year_before', using the current date of your system minus 52 weeks. Additionally, it is possible to fill in a specific date of format 'DD.MM.YYYY'.
verbose	Boolean. Indicator if the output of the function should include detailed messages and warnings. Default option is 'TRUE'. Set the parameter to 'FALSE' to suppress additional messages and warnings.
...	Additional parameters for the API call. These parameters are only affecting the call itself, no further processing. For more details see vignette("additional_parameter").

Value

A list with all recalled elements from the API. Always includes the code of the object, the title, and the type of the object. This is done to facilitate further processing with the data. Attributes are added to the data.frame describing the search configuration for the returned output.

Examples

```
## Not run:
# Find objects which were modified last_week
object <- gen_modified_data(date = "week_before")

# Find tables that were new from 31.03.2020
object <- gen_modified_data(type = "tables", date = "31.03.2020")

# Find objects related to the topic "Bevölkerung" (Code: '12*') which were new today
object <- gen_modified_data(code = "12*")

## End(Not run)
```

---

gen_objects2stat   *gen_objects2stat*

Description

Function to find objects related to a statistic

Usage

```
gen_objects2stat(
  code = NULL,
  database = c("all", "genesis", "zensus", "regio"),
  category = c("tables", "variables", "cubes"),
  area = c("all", "public", "user"),
  detailed = FALSE,
  sortcriterion = c("code", "content"),
  error.ignore = FALSE,
  verbose = TRUE,
  ...
)
```

Arguments

code	Character string with a maximum length of 6 characters (15 characters if 'cubes' are not used as a category). Code from a GENESIS, Zensus 2022 or regional-statistik.de object. Only one code per iteration.
database	Character string. Indicator if the GENESIS ('genesis'), Zensus 2022 ('zensus') or regionalstatistik.de ('regio') database is called. Default option is 'all'.
category	Character string. Specify specific GENESIS/regionalstatistik.de object types ('tables', 'statistics' and 'cubes') and specific Zensus 2022 object types ('tables' and 'statistics'). All types that are specific for one database can be used together. Default option is to use all types that are possible for the specific database.

area	Character string. Indicator from which area of the database the results are called. In general, 'all' is the appropriate solution. Default option is 'all'. Not used for 'statistics'.
detailed	Boolean. Indicator if the function should return the detailed output of the iteration including all object-related information or only a shortened output including only code and object title. Default option is 'FALSE'.
sortcriterion	Character string. Indicator if the output should be sorted by 'code' or 'content'. This is a parameter of the API call itself. The default is 'code'.
error.ignore	Boolean. Indicator if the function should stop if an error occurs or no object for the request is found or if it should produce a token as response. Default option is 'FALSE'.
verbose	Boolean. Indicator if the output of the function should include detailed messages and warnings. Default option is 'TRUE'. Set the parameter to 'FALSE' to suppress additional messages and warnings.
...	Additional parameters for the API call. These parameters are only affecting the call itself, no further processing. For more details see vignette("additional_parameter").

Value

A list with all recalled elements from the API. Based on the 'detailed' parameter it contains more or less information, but always includes the code of the object, the title, and the type of the object. This is done to facilitate further processing with the data. Attributes are added to the data.frame describing the search configuration for the returned output.

Examples

```
## Not run:
# Find cubes from the statistic with the code "21111" with a detailed return
 object <- gen_objects2stat(code = "21111", category = "cubes", detailed = T)

# Find all object types from the statistic with the code "12411"
object <- gen_objects2stat(code = "12411")
# Default of detailed-parameter is FALSE, and default of the
# category-parameter is to include all object types.

## End(Not run)
```

---

gen_objects2var   *gen_objects2var*

Description

Function to find objects related to a variable

Usage

```
gen_objects2var(
  code = NULL,
  database = c("all", "genesis", "zensus", "regio"),
  category = c("tables", "statistics", "cubes"),
  area = c("all", "public", "user"),
  detailed = FALSE,
  sortcriterion = c("code", "content"),
  error.ignore = FALSE,
  verbose = TRUE,
  ...
)
```

Arguments

code	Character string with a maximum length of 15 characters. Code from a GENE-SIS, Zensus 2022 or regionalstatistik.de object. Only one code per iteration.
database	Character string. Indicator if the GENESIS ('genesis'), Zensus 2022 ('zensus') or regionalstatistik.de ('regio') database is called. Default option is 'all'.
category	Character string. Specify specific GENESIS/regionalstatistik.de object types ('tables', 'statistics' and 'cubes') and specific Zensus 2022 object types ('tables' and 'statistics'). All types that are specific for one database can be used together. Default option is to use all types that are possible for the specific database.
area	Character string. Indicator from which area of the database the results are called. In general, 'all' is the appropriate solution. Default option is 'all'. Not used for 'statistics'.
detailed	Boolean. Indicator if the function should return the detailed output of the iteration including all object-related information or only a shortened output including only code and object title. Default option is 'FALSE'.
sortcriterion	Character string. Indicator if the output should be sorted by 'code' or 'content'. This is a parameter of the API call itself. The default is 'code'.
error.ignore	Boolean. Indicator if the function should stop if an error occurs or no object for the request is found or if it should produce a token as response. Default option is 'FALSE'.
verbose	Boolean. Indicator if the output of the function should include detailed messages and warnings. Default option is 'TRUE'. Set the parameter to 'FALSE' to suppress additional messages and warnings.
...	Additional parameters for the API call. These parameters are only affecting the call itself, no further processing. For more details see vignette("additional_parameter").

Value

A list with all recalled elements from the API. Based on the 'detailed' parameter it contains more or less information, but always includes the code of the object, the title, and the type of the object. This is done to facilitate further processing with the data. Attributes are added to the data.frame describing the search configuration for the returned output.

Examples

```
## Not run:
# Find Tables for Variable "Kreise" and return detailed output
object <- gen_objects2var(code = "Kreise", category = "tables", detailed = T)

# Find everything for Variable "GES"
object <- gen_objects2var(code = "GES")
# Default of detailed-parameter is FALSE, and default of the
# category-parameter is to include all object types.

## End(Not run)
```

---

gen_search_vars   *gen_search_vars*

Description

Function to search for specific variables

Usage

```
gen_search_vars(
  code = NULL,
  database = c("all", "genesis", "zensus", "regio"),
  area = c("all", "public", "user"),
  sortcriterion = c("code", "content"),
  error.ignore = FALSE,
  verbose = TRUE,
  ...
)
```

Arguments

code	Character string with a maximum length of 6 characters. Code from a GENE-SIS, Zensus 2022 or regionalstatistik.de object. Only one code per iteration.
database	Character string. Indicator if the GENESIS ('genesis'), Zensus 2022 ('zensus') or regionalstatistik.de ('regio') database is called. Default option is 'all'.
area	Character string. Indicator from which area of the database the results are called. In general, 'all' is the appropriate solution. Default option is 'all'. Not used for 'statistics'.
sortcriterion	Character string. Indicator if the output should be sorted by 'code' or 'content'. This is a parameter of the API call itself. The default is 'code'.
error.ignore	Boolean. Indicator if the function should stop if an error occurs or no object for the request is found or if it should produce a token as response. Default option is 'FALSE'.

| verbose | Boolean. Indicator if the output of the function should include detailed messages and warnings. Default option is 'TRUE'. Set the parameter to 'FALSE' to suppress additional messages and warnings. |
| ... | Additional parameters for the API call. These parameters are only affecting the call itself, no further processing. For more details see `vignette("additional_parameter")`. |

Value

A list with all recalled elements from the API. Always includes the code of the object, the title, and the type of the object. This is done to facilitate further processing with the data. Attributes are added to the data.frame describing the search configuration for the returned output.

Examples

```
## Not run:
# Find a specific variable "GES" in Genesis
object <- gen_search_vars("GES")

## End(Not run)
```

---

gen_signs   *gen_signs*

Description

Function to list all currently used special signs (e.g., 0, *, X, (), p, ...) and their meaning in GENESIS, Zensus 2022 and/or regionalstatistik.de.

Usage

```
gen_signs(database = c("all", "genesis", "zensus", "regio"), ...)
```

Arguments

| database | Character string. Indicator if the GENESIS ('genesis'), Zensus 2022 ('zensus') or regionalstatistik.de ('regio') database is called. Default option is 'all'. |
| ... | Additional parameters for the API call. These parameters are only affecting the call itself, no further processing. For more details see `vignette("additional_parameter")`. |

Value

A list of all current used special signs.

---

gen_table *gen_table*

Description

Download a table with data from GENESIS, Zensus 2022 or regionalstatistik.de databases

Usage

```
gen_table(name, ...)
```

Arguments

name   Character string. Name/code of the table. Use of wildcards (*) is possible.

...   Optional parameters passed on to the Genesis API call:

area Character string. The area in which the table is stored. Possible values:
- "public": table in the public catalogue
- "user": table in the user's account
- "all": both of the above

compress Boolean. Should empty rows and columns be discarded?

transpose Boolean. Reshape the table between "wide" and "long" format.

startyear,endyear Four-digit integers. Only retrieve data between these years.

regionalvariable Character string. Code of the regional variable whose value is specified in regionalkey to filter the results.

regionalkey Character string. One or more regional keys. Multiple values can be supplied as a character vector or as a single string, with the regional keys separated by commas. Use of wildcard (*) allowed.

classifyingvariable1,classifyingvariable2 ,classifyingvariable3 Character string. Code of the subject classification (SK-Merkmal) to which the selection by means of the corresponding classifyingkey parameter is to be applied.

classifyingkey1,classifyingkey2,classifyingkey3 Character string. One or more values of a subject classification (e.g. "WZ93012"). Applied to the corresponding classifyingvariable parameter. Multiple keys can be supplied as a character vector or as a single string, with the keys separated by commas. Use of wildcard (*) allowed.

stand Character string, format: "DD.MM.YYYY". Only retrieve data updated after this date.

language Search terms, returned messages and data descriptions in German ("de") or English ("en")?

job Boolean. Indicate as to whether a job should be created (not available with the 'Zensus' database).)

all_character Boolean. Should all variables be imported as 'character' variables? Avoids fuzzy data type conversions if there are leading zeros or other special characters. Defaults to TRUE.

Value

A [tibble.](#)

Examples

```
## Not run:
gen_table("21311-0001")

## End(Not run)
```

---

gen_update_evas   *gen_update_evas*

Description

Function to web scrape the EVAS numbers from the EVAS website and save them as a .rda file. Takes no parameters.

Usage

```
gen_update_evas()
```

Value

An updated .rda file containing the latest EVAS numbers

---

gen_val2var   *gen_val2var*

Description

Function to extract the possible values from a variable. Values for continuous variables are not extractable, which is why the function returns a warning message in this case.

Usage

```
gen_val2var(
  code = NULL,
  database = c("all", "genesis", "zensus", "regio"),
  area = c("all", "public", "user"),
  sortcriterion = c("code", "content"),
  error.ignore = TRUE,
  verbose = TRUE,
  ...
)
```

Arguments

`code`	Character string with a maximum length of 15 characters. Code from a GENE-SIS, Zensus 2022 or regionalstatistik.de object. Only one code per iteration.
`database`	Character string. Indicator if the GENESIS ('genesis'), Zensus 2022 ('zensus') or regionalstatistik.de ('regio') database is called. Default option is 'all'.
`area`	Character string. Indicator from which area of the database the results are called. In general, 'all' is the appropriate solution. Default option is 'all'. Not used for 'statistics'.
`sortcriterion`	Character string. Indicator if the output should be sorted by 'code' or 'content'. This is a parameter of the API call itself. The default is 'code'.
`error.ignore`	Boolean. Indicator for values if the function should stop if an error occurs or no object for the request is found or if it should produce a token as response. Default option is 'TRUE', this prevents the function to stop even if a variable has no further explanation (often the case for numerical variables).
`verbose`	Boolean. Indicator if the output of the function should include detailed messages and warnings. Default option is 'TRUE'. Set the parameter to 'FALSE' to suppress additional messages and warnings.
`...`	Additional parameters for the API call. These parameters are only affecting the call itself, no further processing. For more details see `vignette("additional_parameter")`.

Value

A list with all recalled elements from the API. Always includes the code of the object, the title, and the type of the object. This is done to facilitate further processing with the data. Attributes are added to the data.frame describing the search configuration for the returned output.

Examples

```
## Not run:
# Find the values of the variable "DLAND"
object <- gen_val2var(code = "DLAND")

## End(Not run)
```

---

gen_val2var2stat   *gen_val2var2stat*

Description

Get values from variables from a statistic. Values for continuous variables cannot be extracted, so the function returns a warning message.

Usage

```
gen_val2var2stat(
  code = NULL,
  database = c("all", "genesis", "zensus", "regio"),
  area = c("all", "public", "user"),
  detailed = FALSE,
  sortcriterion = c("code", "content"),
  error.ignore.var = FALSE,
  error.ignore.val = TRUE,
  verbose = TRUE,
  ...
)
```

Arguments

code	Character string with a maximum length of 15 characters. Code from a GENESIS, Zensus 2022 or regionalstatistik.de object. Only one code per iteration.
database	Character string. Indicator if the GENESIS ('genesis'), Zensus 2022 ('zensus') or regionalstatistik.de ('regio') database is called. Default option is 'all'.
area	Character string. Indicator from which area of the database the results are called. In general, 'all' is the appropriate solution. Default option is 'all'. Not used for 'statistics'.
detailed	Boolean. Indicator if the function should return the detailed output of the iteration including all object-related information or only a shortened output including only code and object title. Default option is 'FALSE'.
sortcriterion	Character string. Indicator if the output should be sorted by 'code' or 'content'. This is a parameter of the API call itself. The default is 'code'.
error.ignore.var	
	Boolean. Indicator for variables if the function should stop if an error occurs or no object for the request is found or if it should produce a token as response. Default option is 'FALSE'.
error.ignore.val	
	Boolean. Indicator for values if the function should stop if an error occurs or no object for the request is found or if it should produce a token as response. Default option is 'TRUE', this prevents the function to stop even if a variable has no further explanation (often the case for numerical variables).
verbose	Boolean. Indicator if the output of the function should include detailed messages and warnings. Default option is 'TRUE'. Set the parameter to 'FALSE' to suppress additional messages and warnings.
...	Additional parameters for the API call. These parameters are only affecting the call itself, no further processing. For more details see vignette("additional_parameter").

Value

A list with all recalled elements from the API. Based on the 'detailed' parameter it contains more or less information, but always includes the code of the object, the title, and the type of the object.

This is done to facilitate further processing with the data. Attributes are added to the data.frame describing the search configuration for the returned output.

Examples

```
## Not run:
# Find the values of variables in a specific statistic with
# the code "21111" and a detailed description of the variables
object <- gen_val2var2stat(code = "21111", detailed = TRUE)

## End(Not run)
```

---

gen_var2stat   *gen_var2stat*

Description

Function to generate variables from statistics

Usage

```
gen_var2stat(
  code = NULL,
  database = c("all", "genesis", "zensus", "regio"),
  area = c("all", "public", "user"),
  detailed = FALSE,
  sortcriterion = c("code", "content"),
  error.ignore = FALSE,
  verbose = TRUE,
  ...
)
```

Arguments

code	Character string with a maximum length of 15 characters. Code from a GENESIS, Zensus 2022 or regionalstatistik.de object. Only one code per iteration.
database	Character string. Indicator if the GENESIS ('genesis'), Zensus 2022 ('zensus') or regionalstatistik.de ('regio') database is called. Default option is 'all'.
area	Character string. Indicator from which area of the database the results are called. In general, 'all' is the appropriate solution. Default option is 'all'. Not used for 'statistics'.
detailed	Boolean. Indicator if the function should return the detailed output of the iteration including all object-related information or only a shortened output including only code and object title. Default option is 'FALSE'.
sortcriterion	Character string. Indicator if the output should be sorted by 'code' or 'content'. This is a parameter of the API call itself. The default is 'code'.

error.ignore	Boolean. Indicator if the function should stop if an error occurs or no object for the request is found or if it should produce a token as response. Default option is 'FALSE'.
verbose	Boolean. Indicator if the output of the function should include detailed messages and warnings. Default option is 'TRUE'. Set the parameter to 'FALSE' to suppress additional messages and warnings.
...	Additional parameters for the API call. These parameters are only affecting the call itself, no further processing. For more details see vignette("additional_parameter").

Value

A list with all recalled elements from the API. Based on the 'detailed' parameter it contains more or less information, but always includes the code of the object, the title, and the type of the object. This is done to facilitate further processing with the data. Attributes are added to the data.frame describing the search configuration for the returned output.

Examples

```
## Not run:
# Find the variables of the statistic with the code "12411"
# with a detailed output
object <- gen_var2stat(code = "12411", detailed = T)

## End(Not run)
```

---

ggsub   *ggsub*

Description

ggsub

Usage

```
ggsub(x)
```

Arguments

| x | Element to subset with $Content |

---

insert_and_save_credentials

insert_and_save_credentials

Description

insert_and_save_credentials

Usage

```
insert_and_save_credentials(database)
```

Arguments

database   The database to specify credentials for

---

is_cube_metadata_header

is_cube_metadata_header

Description

is_cube_metadata_header

Usage

```
is_cube_metadata_header(lines)
```

Arguments

lines   Lines to check for header

---

logincheck_http_error   *logincheck_http_error*

Description

logincheck_http_error

Usage

```
logincheck_http_error(database, verbose)
```

Arguments

database	The user input to 'gen_logincheck'
verbose	Boolean. Should the function message in case of success?

Value

Informative error/warning messages + invisibly TRUE/FALSE

---

logincheck_stop_or_warn

logincheck_stop_or_warn

Description

logincheck_stop_or_warn

Usage

```
logincheck_stop_or_warn(response, error, verbose, database)
```

Arguments

response	A HTTP response object
error	Boolean. Should the function warn or throw an error?
verbose	Boolean. Should the function message in case of success?
database	The database that the check should be run for

Value

In case of failure warns or errors. Invisibly returns TRUE (success) or FALSE (failure)

---

param_check_regionalkey

param_check_regionalkey

Description

param_check_regionalkey

Usage

```
param_check_regionalkey(regionalkey)
```

Arguments

regionalkey	Regional key

param_check_year *param_check_year*

Description

param_check_year

Usage

```
param_check_year(year)
```

Arguments

year   Year as parameter value

param_collapse_vec *param_collapse_vec*

Description

param_collapse_vec

Usage

```
param_collapse_vec(vec)
```

Arguments

vec   Vector to be collapsed

read_cube *read_cube*

Description

read_cube

Usage

```
read_cube(resp)
```

Arguments

resp   API response object resulting from a call to 'data/cubefile'

---

read_cube_block *read_cube_block*

Description

read_cube_block

Usage

```
read_cube_block(lines)
```

Arguments

lines	Lines to read as header

---

read_cube_data_lines *read_cube_data_lines*

Description

read_cube_data_lines

Usage

```
read_cube_data_lines(lines, col_names)
```

Arguments

lines	Lines to read data from
col_names	Specify column names

---

read_cube_metadata_header

read_cube_metadata_header

Description

read_cube_metadata_header

Usage

```
read_cube_metadata_header(line, rename_dups = TRUE)
```

Arguments

line	Line to read
rename_dups	Rename duplicates?

rename_cube_data_columns

rename_cube_data_columns

Description

rename_cube_data_columns

Usage

```
rename_cube_data_columns(cube)
```

Arguments

cube   A cube object to rename the columns in

resp_check_data   *resp_check_data*

Description

resp_check_data

Usage

```
resp_check_data(resp)
```

Arguments

resp   Response object

return_table_object   *return_table_object*

Description

return_table_object

Usage

```
return_table_object(response, response_type, language, all_character)
```

Arguments

`response`	Response object
`response_type`	Response type
`language`	Language locale
`all_character`	Read all variables as character?

`rev_database_function` *rev_database_function*

Description

rev_database_function

Usage

```
rev_database_function(input)
```

Arguments

`input`	Input to test for database name

`spezifisch_create` *spezifisch_create*

Description

spezifisch_create

Usage

```
spezifisch_create(x)
```

Arguments

`x`	Element to extract $Spezifisch from

split_cube *split_cube*

Description

split_cube

Usage

```
split_cube(lines)
```

Arguments

lines   Lines to split a cube

test_database_function

test_database_function

Description

test_database_function

Usage

```
test_database_function(input, error.input, text)
```

Arguments

input   Input to test for database name

error.input Indicator error.ignore

text   Indicator verbose

---

test_if_error *test_if_error*

Description

test_if_error

Usage

```
test_if_error(input, para, verbose = NULL)
```

Arguments

input	Response object
para	Parameter TRUE/FALSE
verbose	Verbose TRUE/FALSE

---

test_if_error_find *test_if_error_find*

Description

test_if_error_find

Usage

```
test_if_error_find(input, para, verbose = NULL)
```

Arguments

input	Response object
para	Parameter TRUE/FALSE
verbose	Verbose TRUE/FALSE

test_if_error_light   *test_if_error_light*

Description

test_if_error_light

Usage

```
test_if_error_light(input, verbose = NULL)
```

Arguments

input	Response object
verbose	Verbose TRUE/FALSE

test_if_error_variables

test_if_error_variables

Description

test_if_error_variables

Usage

```
test_if_error_variables(input, para)
```

Arguments

input	Response object
para	Parameter TRUE/FALSE

test_if_json   *test_if_json*

Description

test_if_json

Usage

```
test_if_json(input)
```

Arguments

input	Response object

---

test_if_okay   *test_if_okay*

Description

test_if_okay

Usage

```
test_if_okay(input)
```

Arguments

input   Response object

---

test_if_process_further

                              test_if_process_further

Description

test_if_process_further

Usage

```
test_if_process_further(input, para, verbose = NULL)
```

Arguments

input   Response object

para   Parameter TRUE/FALSE

verbose   Verbose TRUE/FALSE

---

titel_search *titel_search*

Description

titel_search

Usage

```
titel_search(x, term, text)
```

Arguments

x	Element to extract $Content from
term	Search term
text	Indicator verbose

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