Package ‘NSO1212’

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Title National Statistical Office of Mongolia's Open Data API Handler
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Description National Statistical Office of Mongolia (NSO) is the national statistical service and an organization of Mongolian government. NSO provides open access to official data via its API [http://opendata.1212.mn/en/doc](http://opendata.1212.mn/en/doc). The package NSO1212 has functions for accessing the API service. The functions are compatible with the API v2.0 and get data sets and its detailed informations from the API.

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URL https://github.com/galaamn/NSO1212

BugReports https://github.com/galaamn/NSO1212/issues

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License GPL-3

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all_tables

Brief Information about All Database Tables

Description

Brief information about all available database tables on the open-data API which is supported by National Statistical Office of Mongolia (NSO)

Usage

all_tables(try = FALSE, timeout = Inf, na.rm = FALSE)

Arguments

try logical: Should the body of the function be wrapped by the function try? See details.
timeout positive numeric or Inf: The number of seconds to wait for a response from the NSO server. Can not be less than 1 ms or 0.001 s.
na.rm logical: If TRUE, it removes empty rows in a data frame which is result of this function.

Details

The NSO server returns "HTTP error 500" frequently. Due to the server error, error handling is supported. if try is TRUE, you have to write code with error handling as shown in the example.

Value

A data frame which has brief information of all available database tables if the function is executed without error, but an object of class "try-error" containing the error message, if it fails. The data frame has following structure:

- `rownum`: Row number
- `list_id`: Sector number
- `tbl_id`: Table identification number
- `tbl_nm`: Table name in Mongolian
- `tbl_eng_nm`: Table name in English
- `unit_id`: Unit code
- `cd_nm`: Unit name in Mongolian
- `cd_eng_nm`: Unit name in English
- `strt_prd`: Start date
- `end_prd`: Finish date
- `prd_se`: Time frequency
- `lst_chn_de`: Last update date
get_sector_info

References


See Also

get_table, get_table_info, get_sector_info

Examples

all.tables <- all_tables(try = TRUE, timeout = 4)
if (!inherits(all.tables, "try-error")) {
  str(all.tables)
}

get_sector_info

Detailed Information about All Main Sectors

Description

Detailed information about all main sectors, which are major classification of data, on the open-data API which is supported by National Statistical Office of Mongolia (NSO)

Usage

get_sector_info(try = FALSE, timeout = Inf)

Arguments

try
  logical: Should the body of the function be wrapped by the function try? See details.

timeout
  positive numeric or Inf: The number of seconds to wait for a response from the NSO server. Can not be less than 1 ms or 0.001 s.

Details

The NSO server returns "HTTP error 500" frequently. Due to the server error, error handling is supported. if try is TRUE, you have to write code with error handling as shown in the example.

Value

A data frame which has sector information if the function is executed without error, but an object of class "try-error" containing the error message, if it fails. The data frame has following structure:

- **rownun**  Row number
- **list_id**  Sector identification number
- **up_list_id**  Sub sector identification number
- **list_nm**  Sector name in Mongolian
- **list_eng_nm**  Sector name in English
- **isExist**  Whether or exist sub-sectors
get_subsector_info

References

See Also
all_tables, get_table, get_table_info, get_subsector_info

Examples
sector_info <- get_sector_info(try = TRUE, timeout = 4)
if (!inherits(sector_info, "try-error")) {
  print(sector_info)
}

gsubsector_info  Detailed Information about a Sub-Sector

Description
Detailed information about a sub-sector, which is minor classification of data, on the open-data API which is supported by National Statistical Office of Mongolia

Usage
gsubsector_info(subid, try = FALSE, timeout = Inf)

Arguments
subid  character string, Sub-sector identification number
try    logical: Should the body of the function be wrapped by the function try? See details.
timeout positive numeric or Inf: The number of seconds to wait for a response from the NSO server. Can not be less than 1 ms or 0.001 s.

Details
The NSO server returns "HTTP error 500" frequently. Due to the server error, error handling is supported. if try is TRUE, you have to write code with error handling as shown in the example.

Value
A data frame which has sub-sector information if the function is executed without error, but an object of class "try-error" containing the error message, if it fails. The data frame has following structure:

rownum  Row number
list_id  Sector identification number
get_table

Description

It downloads a database table, which contains statistical data, from the open-data API which is supported by National Statistical Office of Mongolia (NSO).

Usage

```r
get_table(
  tbl_id,
  PERIOD = NULL,
  CODE = NULL,
  CODE1 = NULL,
  CODE2 = NULL,
  try = FALSE,
  timeout = Inf
)
make_period(start, end = NULL, period = "Y")
```

References


See Also

all_tables, get_table, get_table_info, get_sector_info

Examples

```r
subsector_info <- get_subsector_info("976_L05", try = TRUE, timeout = 4)
if (!inherits(subsector_info, "try-error")) {
  print(subsector_info)
}
```
get_table

Arguments

- **tbl_id** character string. Table identification number
- **PERIOD** character vector, Time
- **CODE, CODE1, CODE2** character vector, Classification code (age, gender etc)
- **try** logical: Should the main body of the function be wrapped by the function try? See details.
- **timeout** positive numeric or Inf: The number of seconds to wait for a response from the NSO server. Can not be less than 1 ms or 0.001 s.
- **start, end** Starting and stopping moments of period which has following formats: "YYYY", "YYYYMM", "YYYYMMDD", "YYYYQQ". Notations YYYY, MM, DD and QQ, respectively, indicate year, month, day and quarter of a date. These are written as a number has a leading zero, if necessary.
- **period** One of single characters "Y" (default), "M", "D" and "Q" which represent periods yearly, monthly, daily and quarterly respectively. There is one more value "F" which is supported by the API. However it can not be used for such function due to there is not a fixed rule for this type of periods.

Details

The NSO server returns "HTTP error 500" frequently. Due to the server error, error handling is supported. if try is TRUE, you have to write code with error handling as shown in the example.

Value

A data frame if the function is executed without error, but an object of class "try-error" containing the error message, if it fails. The data frame has following structure:

- **TBL_ID** Row number
- **Period** Time
- **CODE** Classification code
- **SCR_MN** Classification name in Mongolian
- **SCR_ENG** Classification name in English
- **CODE1** Classification code
- **SCR_MN1** Classification name in Mongolian
- **SCR_ENG1** Classification name in English
- **CODE2** Classification code
- **SCR_MN2** Classification name in Mongolian
- **SCR_ENG2** Classification name in English
- **DTVAL_CO** Datum

a character vector which contains an API compatible period.
get_table_info

Functions

• make_period: It is used to prepare values for the argument PERIOD of the function get_table.

References


See Also

all_tables, get_table_info, get_sector_info

Examples

nso.data <- get_table(
  tbl_id = "DT_NSO_2400_015V2",
  PERIOD = make_period(start = "201711", end = "202103", period = "M"),
  CODE = c("10", "11"),
  CODE1 = "11",
  try = TRUE, # to prevent a server error
  timeout = 4
)
if (!inherits(nso.data, "try-error")) {
  print(nso.data)
}

get_table_info

Detailed Information about a Database Table and Its Classification

Description

Detailed information about a database table and its classification on the open-data API which is supported by National Statistical Office of Mongolia (NSO)

Usage

get_table_info(tbl_id, simplify = FALSE, try = FALSE, timeout = Inf)

Arguments

tbl_id character string. Table identification number

simplify logical: Should the result be simplified to a vector and a data frame?

try logical: Should the body of the function be wrapped by the function try? See details.

timeout positive numeric or Inf: The number of seconds to wait for a response from the NSO server. Can not be less than 1 ms or 0.001 s.
get_table_info

Details

The NSO server returns "HTTP error 500" frequently. Due to the server error, error handling is supported. If `try` is `TRUE`, you have to write code with error handling as shown in the example.

Value

A list which contains information about database table and its classification if the function is executed without error, but an object of class "try-error" containing the error message, if it fails. The list has following structure:

- `tbl_id` Table identification number
- `unit_id` Unit identification number
- `unit_nm` Unit name in Mongolia
- `unit_eng_nm` Unit name in English
- `obj` Table classification:
  - `obj_var_id` Variable identification
  - `var_ord_sn` Variable identification number
  - `field` Field name
  - `scr_mn` Variable name in Mongolian
  - `scr_eng` Variable identification
  - `itm` Variable classification and code:
    - `itm_id` Classification number
    - `up_itm_id` Sub-classification
    - `scr_mn` Classification name in Mongolian
    - `scr_eng` Classification name in English

If `simplify` is `TRUE`, an user-friendly result is returned.

References


See Also

all_tables, get_table, get_sector_info

Examples

```r
# tree shaped result
table_info <- get_table_info("DT_NSO_2400_015V2", try = TRUE, timeout = 4)
if (!inherits(table_info, "try-error")) {
  str(table_info)
}

# tabular result
table_info_simplified <- get_table_info(
  "DT_NSO_2400_015V2", simplify = TRUE, try = TRUE, timeout = 4)
if (!inherits(table_info_simplified, "try-error")) {
  str(table_info_simplified)
}
```
NSO1212

National Statistical Office of Mongolia’s Open Data API Handler

Description
National Statistical Office of Mongolia (NSO) is the national statistical service and an organization of Mongolian government. NSO provides open access and official data via its open-data API. The package NSO1212 has functions for accessing the API service. The functions are compatible with the API v2.0 and get data-sets or its detailed information from the API.

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