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>. 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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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_chk_de Last update date
get_sector_info

References


See Also

get_table, get_table_info, get_sector_info

Examples

```r
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

```r
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:

- **rownum** 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
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)
}

get_subsector_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

get_subsector_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)
}
```
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

```r
ns0.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

```r
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.
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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