

# Package: cansim (via r-universe)

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**Type** Package

**Title** Accessing Statistics Canada Data Table and Vectors

**Version** 0.3.16

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**Description** Searches for, accesses, and retrieves new-format and old-format Statistics Canada data tables, as well as individual vectors, as tidy data frames. This package deals with encoding issues, allows for bilingual English or French language data retrieval, and bundles convenience functions to make it easier to work with retrieved table data. Optional caching features are provided.

**License** MIT + file LICENSE

**Encoding** UTF-8

**ByteCompile** yes

**NeedsCompilation** no

**LazyData** true

**Depends** R (>= 2.10)

**Imports** digest (>= 0.1), dplyr (>= 0.7), httr (>= 1.0.0), jsonlite (>= 1.0), readr, rlang, xml2, rvest, stringr, purrr, tibble, utils, DBI, RSQLite

**RoxygenNote** 7.2.3

**Suggests** knitr, rmarkdown, scales, tidyr, ggplot2, dbplyr

**URL** <https://github.com/mountainMath/cansim>,  
<https://mountainmath.github.io/cansim/>,  
<https://www.statcan.gc.ca/>

**BugReports** <https://github.com/mountainMath/cansim/issues>

**VignetteBuilder** knitr

**Language** en-CA

**Repository** <https://mountainmath.r-universe.dev>

**RemoteUrl** <https://github.com/mountainmath/cansim>

**RemoteRef** HEAD

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## Contents

add_provincial_abbreviations . . . . .	3
cansim_old_to_new . . . . .	3
categories_for_level . . . . .	4
collect_and_normalize . . . . .	5
disconnect_cansim_sqlite . . . . .	6
get_cansim . . . . .	7
get_cansim_changed_tables . . . . .	8
get_cansim_code_set . . . . .	9
get_cansim_column_categories . . . . .	9
get_cansim_column_list . . . . .	10
get_cansim_cube_metadata . . . . .	11
get_cansim_data_for_table_coord_periods . . . . .	12
get_cansim_key_release_schedule . . . . .	13
get_cansim_sqlite . . . . .	13
get_cansim_table_info . . . . .	15
get_cansim_table_last_release_date . . . . .	16
get_cansim_table_notes . . . . .	16
get_cansim_table_overview . . . . .	17
get_cansim_table_short_notes . . . . .	18
get_cansim_table_subject . . . . .	19
get_cansim_table_survey . . . . .	20
get_cansim_table_url . . . . .	21
get_cansim_vector . . . . .	21
get_cansim_vector_for_latest_periods . . . . .	23
get_cansim_vector_info . . . . .	24
list_cansim_cubes . . . . .	24
list_cansim_sqlite_cached_tables . . . . .	25
normalize_cansim_values . . . . .	26
remove_cansim_sqlite_cached_table . . . . .	27
search_cansim_cubes . . . . .	28
view_cansim_webpage . . . . .	28

**Index**

**30**

---

```
add_provincial_abbreviations
  Add provincial abbreviations as factor
```

---

**Description**

Add provincial abbreviations as factor

**Usage**

```
add_provincial_abbreviations(data)
```

**Arguments**

data                    A tibble as returned by get\_cansim with provincial level data

**Value**

The input tibble with additional factor GEO.abb that contains language-specific provincial abbreviations

**Examples**

```
## Not run:
df <- get_cansim("17-10-0005")
df <- add_provincial_abbreviations(df)

## End(Not run)
```

---

```
cansim_old_to_new        Translate deprecated CANSIM table number into new NDM-format
table catalogue number
```

---

**Description**

Returns NDM table catalogue equivalent given a standard old-format CANSIM table number

**Usage**

```
cansim_old_to_new(oldCansimTableNumber)
```

**Arguments**

oldCansimTableNumber  
                      deprecated style CANSIM table number (e.g. "427-0001")

**Value**

A character string with the new-format NDM table number

**Examples**

```
## Not run:
cansim_old_to_new("026-0018")

## End(Not run)
```

---

categories\_for\_level *Use metadata to extract categories for column of specific level*

---

**Description**

For tables with data with hierarchical categories, metadata containing hierarchy level descriptions is used to extract categories at a specified level of hierarchy only.

**Usage**

```
categories_for_level(
  data,
  column_name,
  level = NA,
  strict = FALSE,
  remove_duplicates = TRUE
)
```

**Arguments**

data	data table object as returned from get_cansim()
column_name	the quoted name of the column to extract categories from
level	the hierarchy level depth to which to extract categories, where 0 is top category
strict	(default FALSE) when TRUE will only extract that specific hierarchy level
remove_duplicates	(default TRUE) When set to TRUE higher level grouping categories already captured by lower level hierarchy data will be removed

**Value**

A vector of categories

**Examples**

```
## Not run:
data <- get_cansim("16-10-0117")
categories_for_level(data,"North American Industry Classification System (NAICS)",level=2)

## End(Not run)
```

---

collect\_and\_normalize *Collect data from connection and normalize cansim table output*

---

**Description**

Collect data from connection and normalize cansim table output

**Usage**

```
collect_and_normalize(
  connection,
  replacement_value = "val_norm",
  normalize_percent = TRUE,
  default_month = "07",
  default_day = "01",
  factors = FALSE,
  strip_classification_code = FALSE,
  disconnect = FALSE
)
```

**Arguments**

connection	A connection to a local StatCan table SQLite database as returned by <code>get_cansim_sqlite</code> , possibly with filters or other <code>dbplyr</code> verbs applied
replacement_value	(Optional) the name of the column the manipulated value should be returned in. Defaults to adding the 'val_norm' value field.
normalize_percent	(Optional) When true (the default) normalizes percentages by changing them to rates
default_month	The default month that should be used when creating Date objects for annual data (default set to "07")
default_day	The default day of the month that should be used when creating Date objects for monthly data (default set to "01")
factors	(Optional) Logical value indicating if dimensions should be converted to factors. (Default set to FALSE).
strip_classification_code	(Optional) Logical value indicating if classification code should be stripped from names. (Default set to false).

disconnect (Optional) Logical value to indicate if the database connection should be disconnected. (Default is FALSE)

**Value**

A tibble with the collected and normalized data

**Examples**

```
## Not run:
library(dplyr)

con <- get_cansim_sqlite("34-10-0013")
data <- con %>%
  filter(GEO=="Ontario") %>%
  collect_and_normalize()

disconnect_cansim_sqlite(con)

## End(Not run)
```

---

disconnect\_cansim\_sqlite

*Disconnect from a cansim database connection*

---

**Description**

Disconnect from a cansim database connection

**Usage**

```
disconnect_cansim_sqlite(connection)
```

**Arguments**

connection connection to database

**Value**

‘NULL‘

**Examples**

```
## Not run:
con <- get_cansim_sqlite("34-10-0013")
disconnect_cansim_sqlite(con)

## End(Not run)
```

---

get_cansim	<i>Retrieve a Statistics Canada data table using NDM catalogue number</i>
------------	---

---

## Description

Retrieves a data table using an NDM catalogue number as a tidy data frame. Retrieved table data is cached for the duration of the current R session only by default.

## Usage

```
get_cansim(  
  cansimTableNumber,  
  language = "english",  
  refresh = FALSE,  
  timeout = 200,  
  factors = TRUE,  
  default_month = "07",  
  default_day = "01"  
)
```

## Arguments

cansimTableNumber	the NDM table number to load
language	"en" or "english" for English and "fr" or "french" for French language versions (defaults to English)
refresh	(Optional) When set to TRUE, forces a reload of data table (default is FALSE)
timeout	(Optional) Timeout in seconds for downloading cansim table to work around scenarios where StatCan servers drop the network connection.
factors	(Optional) Logical value indicating if dimensions should be converted to factors. (Default set to TRUE).
default_month	The default month that should be used when creating Date objects for annual data (default set to "07")
default_day	The default day of the month that should be used when creating Date objects for monthly data (default set to "01") Set to higher values for large tables and slow network connection. (Default is 200).

## Value

A tibble with StatCan Table data and added Date column with inferred date objects and added val\_norm column with normalized value from the VALUE column.

**Examples**

```
## Not run:  
get_cansim("34-10-0013")  
  
## End(Not run)
```

---

get\_cansim\_changed\_tables

*Retrieve a list of modified tables since a given date*

---

**Description**

Retrieve a list of tables that have been modified or updated since the specified date.

**Usage**

```
get_cansim_changed_tables(start_date, end_date = NULL)
```

**Arguments**

start_date	Starting date in YYYY-MM-DD format to look for changes that changed on or after that date
end_date	Optional end date in YYYY-MM-DD format to look for changes that changed on or before that date, default is same as start date

**Value**

A tibble with Statistics Canada data table product ids and their release times

**Examples**

```
## Not run:  
get_cansim_changed_tables("2018-08-01")  
  
## End(Not run)
```



---

get\_cansim\_code\_set     *Get NDM code sets*

---

**Description**

Useful to get a list of surveys or subjects and used internally

**Usage**

```
get_cansim_code_set(  
  code_set = c("scalar", "frequency", "symbol", "status", "uom", "survey", "subject",  
              "wdsResponseStatus"),  
  refresh = FALSE  
)
```

**Arguments**

code_set	the code set to retrieve.
refresh	Default is FALSE, repeated calls during the same session will hit the cached data. To refresh the code list during a running R session set to TRUE

**Value**

A tibble with english and french labels for the given code set

**Examples**

```
## Not run:  
get_cansim_code_set("survey")  
  
## End(Not run)
```

---

get\_cansim\_column\_categories  
*Retrieve Statistics Canada data table categories for a specific column*

---

**Description**

Returns table column details given an NDM table number in English or French. Retrieved table information data is cached for the duration of the R session only.

**Usage**

```
get_cansim_column_categories(
  cansimTableNumber,
  column,
  language = "english",
  refresh = FALSE,
  timeout = 200
)
```

**Arguments**

cansimTableNumber	the NDM table number to load
column	the specified column for which to retrieve category information for
language	"en" or "english" for English and "fr" or "french" for French language versions (default set to English)
refresh	(Optional) When set to TRUE, forces a reload of data table (default is FALSE)
timeout	(Optional) Timeout in seconds for downloading cansim table to work around scenarios where StatCan servers drop the network connection.

**Value**

A tibble with detailed information on StatCan table categories for the specified field

**Examples**

```
## Not run:
get_cansim_column_categories("34-10-0013", "Geography")

## End(Not run)
```

---

```
get_cansim_column_list
```

*Retrieve Statistics Canada data table column list*

---

**Description**

Returns table column details given an NDM table number in English or French. Retrieved table information data is cached for the duration of the R session only.

**Usage**

```
get_cansim_column_list(
  cansimTableNumber,
  language = "english",
  refresh = FALSE,
  timeout = 200
)
```

**Arguments**

cansimTableNumber	the NDM table number to load
language	"en" or "english" for English and "fr" or "french" for French language versions (default set to English)
refresh	(Optional) When set to TRUE, forces a reload of data table (default is FALSE)
timeout	(Optional) Timeout in seconds for downloading cansim table to work around scenarios where StatCan servers drop the network connection.

**Value**

A tibble listing the column names of the StatCan table.

**Examples**

```
## Not run:
get_cansim_column_list("34-10-0013")

## End(Not run)
```

---

```
get_cansim_cube_metadata
```

*Retrieve table metadata from Statistics Canada API*

---

**Description**

Retrieves table metadata given an input table number or vector of table numbers using either the new or old table number format. Patience is suggested as the Statistics Canada API can be very slow. The 'list\_cansim\_tables()' function can be used as an alternative to retrieve a (cached) list of CANSIM tables with (more limited) metadata.

**Usage**

```
get_cansim_cube_metadata(cansimTableNumber)
```

**Arguments**

cansimTableNumber	A new or old CANSIM/NDM table number or a vector of table numbers
-------------------	---

**Value**

a tibble containing the table metadata

**Examples**

```
## Not run:
get_cansim_cube_metadata("34-10-0013")

## End(Not run)
```

---

```
get_cansim_data_for_table_coord_periods
```

*Retrieve data for specified Statistics Canada data product for last N periods for specific coordinates*

---

**Description**

Allows for the retrieval of data for a Statistics Canada data table with specific coordinates for the N most-recently released periods. Caution: coordinates are concatenations of table member ID values and require familiarity with the TableMetadata data structure. Coordinates have a maximum of ten dimensions.

**Usage**

```
get_cansim_data_for_table_coord_periods(
  cansimTableNumber,
  coordinate,
  periods = 1,
  refresh = FALSE,
  timeout = 200,
  factors = TRUE,
  default_month = "07",
  default_day = "01"
)
```

**Arguments**

cansimTableNumber	Statistics Canada data table number
coordinate	A string of table coordinates in the form "1.1.1.36.1.0.0.0.0.0"
periods	Numeric value for number of latest periods to retrieve data for
refresh	(Optional) When set to TRUE, forces a reload of data table (default is FALSE)
timeout	(Optional) Timeout in seconds for downloading cansim table to work around scenarios where StatCan servers drop the network connection.
factors	(Optional) Logical value indicating if dimensions should be converted to factors. (Default set to TRUE).
default_month	The default month that should be used when creating Date objects for annual data (default set to "07")
default_day	The default day of the month that should be used when creating Date objects for monthly data (default set to "01")

**Value**

A tibble with data matching specified coordinate and period input arguments

**Examples**

```
## Not run:
get_cansim_data_for_table_coord_periods("35-10-0003", coordinate="1.12.0.0.0.0.0.0", periods=3)

## End(Not run)
```

---

```
get_cansim_key_release_schedule
```

*Major economic indicator release schedule*

---

**Description**

Returns every release date of major economic indicators since March 14, 2012. This also includes scheduled future releases.

**Usage**

```
get_cansim_key_release_schedule()
```

**Value**

a tibble with data, and details for major economic indicator release

**Examples**

```
## Not run:
get_cansim_key_release_schedule()

## End(Not run)
```

---

```
get_cansim_sqlite
```

*Retrieve a Statistics Canada data table using NDM catalogue number as SQLite database connection*

---

**Description**

Retrieves a data table using an NDM catalogue number as an SQLite table. Retrieved table data is cached permanently if a cache path is supplied or for duration of the current R session. The function will check against the latest release data for the table and emit a warning message if the cached table is out of date.

## Usage

```
get_cansim_sqlite(  
  cansimTableNumber,  
  language = "english",  
  refresh = FALSE,  
  auto_refresh = FALSE,  
  timeout = 1000,  
  cache_path = getOption("cansim.cache_path")  
)
```

## Arguments

cansimTableNumber	the NDM table number to load
language	"en" or "english" for English and "fr" or "french" for French language versions (defaults to English)
refresh	(Optional) When set to TRUE, forces a reload of data table (default is FALSE)
auto_refresh	(Optional) When set to TRUE, it will reload of data table if a new version is available (default is FALSE)
timeout	(Optional) Timeout in seconds for downloading cansim table to work around scenarios where StatCan servers drop the network connection.
cache_path	(Optional) Path to where to cache the table permanently. By default, the data is cached in the path specified by 'getOption("cansim.cache_path")', if this is set. Otherwise it will use 'tempdir()'.

## Value

A database connection to a local SQLite database with the StatCan Table data.

## Examples

```
## Not run:  
con <- get_cansim_sqlite("34-10-0013")  
  
# Work with the data connection  
head(con)  
  
disconnect_cansim_sqlite(con)  
  
## End(Not run)
```

---

get\_cansim\_table\_info *Retrieve Statistics Canada data table information*

---

## Description

Returns table information given an NDM table catalogue number in English or French. Retrieved table information data is cached for the duration of the R session only.

## Usage

```
get_cansim_table_info(  
  cansimTableNumber,  
  language = "english",  
  refresh = FALSE,  
  timeout = 200  
)
```

## Arguments

cansimTableNumber	the NDM table number to load
language	"en" or "english" for English and "fr" or "french" for French language versions (default set to English)
refresh	(Optional) When set to TRUE, forces a reload of data table (default is FALSE)
timeout	(Optional) Timeout in seconds for downloading cansim table to work around scenarios where StatCan servers drop the network connection.

## Value

A tibble with the table overview information

## Examples

```
## Not run:  
get_cansim_table_info("34-10-0013")  
  
## End(Not run)
```

```
get_cansim_table_last_release_date
```

*Get the latest release data for a StatCan table, if available*

---

**Description**

This can be used to check when a table has last been updated.

**Usage**

```
get_cansim_table_last_release_date(cansimTableNumber)
```

**Arguments**

```
cansimTableNumber  
    the NDM table number
```

**Value**

A datetime object if a release data is available, NULL otherwise.

**Examples**

```
## Not run:  
get_cansim_table_last_release_date("34-10-0013")  
  
## End(Not run)
```

---

```
get_cansim_table_notes
```

*Retrieve Statistics Canada data table notes and column categories*

---

**Description**

Returns table notes given an NDM table number in English or French. Retrieved table information data is cached for the duration of the R session only.

**Usage**

```
get_cansim_table_notes(  
  cansimTableNumber,  
  language = "en",  
  refresh = FALSE,  
  timeout = 200  
)
```



**Arguments**

cansimTableNumber	the NDM table number to load
language	"en" or "english" for English and "fr" or "french" for French language versions (default set to English)
refresh	(Optional) When set to TRUE, forces a reload of data table (default is FALSE)
timeout	(Optional) Timeout in seconds for downloading cansim table to work around scenarios where StatCan servers drop the network connection.

**Value**

A tibble with table notes.

**Examples**

```
## Not run:
get_cansim_table_notes("34-10-0013")

## End(Not run)
```

---

```
get_cansim_table_overview
```

*Retrieve Statistics Canada data table overview text*

---

**Description**

Prints table overview information as console output. In order to display table overview information, the selected CANSIM table must be loaded entirely to display overview information. Overview information is printed in console an in English or French, as specified.

**Usage**

```
get_cansim_table_overview(
  cansimTableNumber,
  language = "english",
  refresh = FALSE
)
```

**Arguments**

cansimTableNumber	the NDM table number to load
language	"en" or "english" for English and "fr" or "french" for French language versions (default set to English)
refresh	(Optional) When set to TRUE, forces a reload of data table (default is FALSE)

**Value**

none

**Examples**

```
## Not run:  
get_cansim_table_overview("34-10-0013")  
  
## End(Not run)
```

---

get\_cansim\_table\_short\_notes

*Retrieve Statistics Canada data table short notes*

---

**Description**

Returns table notes given an NDM table number in English or French. Retrieved table information data is cached for the duration of the R session only.

**Usage**

```
get_cansim_table_short_notes(  
  cansimTableNumber,  
  language = "english",  
  refresh = FALSE,  
  timeout = 200  
)
```

**Arguments**

cansimTableNumber	the NDM table number to load
language	"en" or "english" for English and "fr" or "french" for French language versions (default set to English)
refresh	(Optional) When set to TRUE, forces a reload of data table (default is FALSE)
timeout	(Optional) Timeout in seconds for downloading cansim table to work around scenarios where StatCan servers drop the network connection.

**Value**

A tibble with the StatCan Notes for the table

**Examples**

```
## Not run:  
get_cansim_table_short_notes("34-10-0013")  
  
## End(Not run)
```

---

`get_cansim_table_subject`*Retrieve Statistics Canada data table subject detail*

---

### Description

Returns table subject detail given an NDM table number in English or French. Retrieved table information data is cached for the duration of the R session only.

### Usage

```
get_cansim_table_subject(  
  cansimTableNumber,  
  language = "english",  
  refresh = FALSE,  
  timeout = 200  
)
```

### Arguments

<code>cansimTableNumber</code>	the NDM table number to load
<code>language</code>	"en" or "english" for English and "fr" or "french" for French language versions (default set to English)
<code>refresh</code>	(Optional) When set to TRUE, forces a reload of data table (default is FALSE)
<code>timeout</code>	(Optional) Timeout in seconds for downloading cansim table to work around scenarios where StatCan servers drop the network connection.

### Value

A tibble with the table subject code and name.

### Examples

```
## Not run:  
get_cansim_table_subject("34-10-0013")  
  
## End(Not run)
```

---

`get_cansim_table_survey`*Retrieve Statistics Canada data table survey detail*

---

### Description

Returns table survey detail given an NDM table number in English or French. Retrieved table information data is cached for the duration of the R session only.

### Usage

```
get_cansim_table_survey(  
  cansimTableNumber,  
  language = "english",  
  refresh = FALSE,  
  timeout = 200  
)
```

### Arguments

<code>cansimTableNumber</code>	the NDM table number to load
<code>language</code>	"en" or "english" for English and "fr" or "french" for French language versions (default set to English)
<code>refresh</code>	(Optional) When set to TRUE, forces a reload of data table (default is FALSE)
<code>timeout</code>	(Optional) Timeout in seconds for downloading cansim table to work around scenarios where StatCan servers drop the network connection.

### Value

A tibble with the table survey code and name

### Examples

```
## Not run:  
get_cansim_table_survey("34-10-0013")  
  
## End(Not run)
```

---

get\_cansim\_table\_url    *Retrieve a Statistics Canada data table URL given a table number*

---

### Description

Retrieve URL of a table from the API given a table number. Offers a more stable approach than manually guessing the URL of the table.

### Usage

```
get_cansim_table_url(cansimTableNumber, language = "en")
```

### Arguments

cansimTableNumber	the NDM table number to load
language	"en" or "english" for English and "fr" or "french" for French language versions (defaults to English)

### Value

String object containing URL for specified table number

### Examples

```
## Not run:  
get_cansim_table_url("34-10-0013")  
get_cansim_table_url("34-10-0013", language = "fr")  
  
## End(Not run)
```

---

get\_cansim\_vector    *Retrieve data for a Statistics Canada data vector released within a given time frame*

---

### Description

Retrieve data for a Statistics Canada data vector released within a given time frame

**Usage**

```

get_cansim_vector(
  vectors,
  start_time = as.Date("1800-01-01"),
  end_time = Sys.time(),
  use_ref_date = TRUE,
  refresh = FALSE,
  timeout = 200,
  factors = TRUE,
  default_month = "07",
  default_day = "01"
)

```

**Arguments**

vectors	The list of vectors to retrieve
start_time	Starting date in YYYY-MM-DD format, applies to REF_DATE or releaseTime, depending on use_ref_date parameter
end_time	Set an optional end time filter in YYYY-MM-DD format (defaults to current system time)
use_ref_date	Optional, TRUE by default. When set to TRUE, uses REF_DATE of vector data to filter, otherwise it uses StatisticsCanada's releaseDate value for filtering the specified vectors.
refresh	(Optional) When set to TRUE, forces a reload of data table (default is FALSE)
timeout	(Optional) Timeout in seconds for downloading cansim table to work around scenarios where StatCan servers drop the network connection.
factors	(Optional) Logical value indicating if dimensions should be converted to factors. (Default set to TRUE).
default_month	The default month that should be used when creating Date objects for annual data (default set to "07")
default_day	The default day of the month that should be used when creating Date objects for monthly data (default set to "01")

**Value**

A tibble with data for vectors released between start and end time

**Examples**

```

## Not run:
get_cansim_vector("v41690973", "2015-01-01")

## End(Not run)

```

---

```
get_cansim_vector_for_latest_periods
```

*Retrieve data for specified Statistics Canada data vector(s) for last N periods*

---

## Description

Allows for the retrieval of data for specified vector series for the N most-recently released periods.

## Usage

```
get_cansim_vector_for_latest_periods(  
  vectors,  
  periods = 1,  
  refresh = FALSE,  
  timeout = 200,  
  factors = TRUE,  
  default_month = "07",  
  default_day = "01"  
)
```

## Arguments

vectors	The list of vectors to retrieve
periods	Numeric value for number of latest periods to retrieve data for
refresh	(Optional) When set to TRUE, forces a reload of data table (default is FALSE)
timeout	(Optional) Timeout in seconds for downloading cansim table to work around scenarios where StatCan servers drop the network connection.
factors	(Optional) Logical value indicating if dimensions should be converted to factors. (Default set to TRUE).
default_month	The default month that should be used when creating Date objects for annual data (default set to "07")
default_day	The default day of the month that should be used when creating Date objects for monthly data (default set to "01")

## Value

A tibble with data for specified vector(s) for the last N periods

## Examples

```
## Not run:  
get_cansim_vector_for_latest_periods("v41690973", 10)  
  
## End(Not run)
```

---

```
get_cansim_vector_info
```

*Retrieve metadata for specified Statistics Canada data vectors*

---

### Description

Allows for the retrieval of metadata for Statistics Canada data vectors

### Usage

```
get_cansim_vector_info(vectors)
```

### Arguments

vectors            a vector of cansim vectors

### Value

A tibble with metadata for selected vectors

### Examples

```
## Not run:
get_cansim_vector_info("v41690973")

## End(Not run)
```

---

```
list_cansim_cubes
```

*Get overview list for all Statistics Canada data cubes*

---

### Description

Generates an overview table containing metadata of available Statistics Canada data cubes.

### Usage

```
list_cansim_cubes(lite = FALSE, refresh = FALSE, quiet = FALSE)
```

### Arguments

lite	Get the version without cube dimensions and comments for faster retrieval, default is FALSE.
refresh	Default is FALSE, repeated calls during the same session will hit the cached data.
quiet	Optional, suppress messages To refresh the code list during a running R session set to TRUE



**Value**

A tibble with available Statistics Canada data cubes, including NDM table number, cube title, start and end dates, achieve status, subject and survey codes, frequency codes and a list of cube dimensions.

**Examples**

```
## Not run:  
list_cansim_cubes()  
  
## End(Not run)
```

---

```
list_cansim_sqlite_cached_tables  
  List cached cansim SQLite database
```

---

**Description**

List cached cansim SQLite database

**Usage**

```
list_cansim_sqlite_cached_tables(  
  cache_path = getOption("cansim.cache_path"),  
  refresh = FALSE  
)
```

**Arguments**

cache\_path      Optional, default value is 'getOption("cansim.cache\_path")'.  
refresh          Optional, refresh the last updated date of cached cansim tables

**Value**

A tibble with the list of all tables that are currently cached at the given cache path.

**Examples**

```
## Not run:  
list_cansim_sqlite_cached_tables()  
  
## End(Not run)
```

---

 normalize\_cansim\_values

*Normalize retrieved data table values to appropriate scales*


---

## Description

Facilitates working with Statistics Canada data table values retrieved using the package by setting all units to counts/dollars instead of millions, etc. If "replacement\_value" is not set, it will replace the VALUE field with normalized values and drop the scale column. Otherwise it will keep the scale columns and create a new column named replacement\_value with the normalized value. It will attempt to parse the REF\_DATE field and create an R date variable. This is currently experimental.

## Usage

```
normalize_cansim_values(
  data,
  replacement_value = NA,
  normalize_percent = TRUE,
  default_month = "01",
  default_day = "01",
  factors = FALSE,
  strip_classification_code = FALSE,
  cansimTableNumber = NULL
)
```

## Arguments

data	A retrieved data table as returned from get_cansim() or get_cansim_ndm()
replacement_value	(Optional) the name of the column the manipulated value should be returned in. Defaults to replacing the current value field
normalize_percent	(Optional) When true (the default) normalizes percentages by changing them to rates
default_month	The default month that should be used when creating Date objects for annual data (default set to "01")
default_day	The default day of the month that should be used when creating Date objects for monthly data (default set to "01")
factors	(Optional) Logical value indicating if dimensions should be converted to factors. (Default set to false).
strip_classification_code	(strip_classification_code) Logical value indicating if classification code should be stripped from names. (Default set to false).
cansimTableNumber	(Optional) Only needed when operating on results of SQLite connections.

**Value**

Returns the input tibble with with adjusted values

**Examples**

```
## Not run:  
cansim_table <- get_cansim("34-10-0013")  
normalize_cansim_values(cansim_table)  
  
## End(Not run)
```

---

```
remove_cansim_sqlite_cached_table
```

*Remove cached cansim SQLite database*

---

**Description**

Remove cached cansim SQLite database

**Usage**

```
remove_cansim_sqlite_cached_table(  
  cansimTableNumber,  
  language = NULL,  
  cache_path = getOption("cansim.cache_path")  
)
```

**Arguments**

cansimTableNumber	Number of the table to be removed
language	Language for which to remove the cached data. If unspecified ('NULL') tables for all languages will be removed
cache_path	Optional, default value is 'getOption("cansim.cache_path")'

**Value**

'NULL'

**Examples**

```
## Not run:  
con <- get_cansim_sqlite("34-10-0013")  
disconnect_cansim_sqlite(con)  
remove_cansim_sqlite_cached_table("34-10-0013")  
  
## End(Not run)
```

---

search\_cansim\_cubes    *Search through Statistics Canada data cubes*

---

### Description

Searches through Statistics Canada data cubes using a search term.

### Usage

```
search_cansim_cubes(search_term, refresh = FALSE)
```

### Arguments

search_term	User-supplied search term used to find Statistics Canada data cubes with matching titles, table numbers, subject and survey codes.
refresh	Default is FALSE. The underlying cube list is cached for the duration of the R sessions and will regenerate the cube list if set to TRUE

### Value

A tibble with available Statistics Canada data cubes, listing title, Statistics Canada data cube catalogue number, deprecated CANSIM table number, survey and subject.

### Examples

```
## Not run:  
search_cansim_cubes("Labour force")  
  
## End(Not run)
```

---

view\_cansim\_webpage    *View CANSIM table information in browser*

---

### Description

Opens CANSIM table on Statistics Canada's website using default browser. This may be useful for getting further info on CANSIM table and survey methods.

### Usage

```
view_cansim_webpage(cansimTableNumber = NULL)
```

**Arguments**

`cansimTableNumber`

CANSIM or NDM table number. If no number is provided, the vector search page on the Statistic Canada website will be opened.

**Value**

none

**Examples**

```
## Not run:  
view_cansim_webpage("34-10-0013")  
  
## End(Not run)
```

# Index

[add\\_provincial\\_abbreviations](#), 3

[cansim\\_old\\_to\\_new](#), 3

[categories\\_for\\_level](#), 4

[collect\\_and\\_normalize](#), 5

[disconnect\\_cansim\\_sqlite](#), 6

[get\\_cansim](#), 7

[get\\_cansim\\_changed\\_tables](#), 8

[get\\_cansim\\_code\\_set](#), 9

[get\\_cansim\\_column\\_categories](#), 9

[get\\_cansim\\_column\\_list](#), 10

[get\\_cansim\\_cube\\_metadata](#), 11

[get\\_cansim\\_data\\_for\\_table\\_coord\\_periods](#),  
12

[get\\_cansim\\_key\\_release\\_schedule](#), 13

[get\\_cansim\\_sqlite](#), 13

[get\\_cansim\\_table\\_info](#), 15

[get\\_cansim\\_table\\_last\\_release\\_date](#), 16

[get\\_cansim\\_table\\_notes](#), 16

[get\\_cansim\\_table\\_overview](#), 17

[get\\_cansim\\_table\\_short\\_notes](#), 18

[get\\_cansim\\_table\\_subject](#), 19

[get\\_cansim\\_table\\_survey](#), 20

[get\\_cansim\\_table\\_url](#), 21

[get\\_cansim\\_vector](#), 21

[get\\_cansim\\_vector\\_for\\_latest\\_periods](#),  
23

[get\\_cansim\\_vector\\_info](#), 24

[list\\_cansim\\_cubes](#), 24

[list\\_cansim\\_sqlite\\_cached\\_tables](#), 25

[normalize\\_cansim\\_values](#), 26

[remove\\_cansim\\_sqlite\\_cached\\_table](#), 27

[search\\_cansim\\_cubes](#), 28

[view\\_cansim\\_webpage](#), 28