Package 'epidatr'

November 17, 2025

```
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Title Client for Delphi's 'Epidata' API
Version 1.2.2
Description The Delphi 'Epidata' API provides real-time access to
     epidemiological surveillance data for influenza, 'COVID-19', and other
     diseases for the USA at various geographical resolutions, both from
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     Change 'Healthcare'. It is built and maintained by the Carnegie Mellon
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2 Contents

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avail_endpoints

List all available Epidata API endpoints

Description

Fetches a data frame of all Epidata API endpoints that can be accessed using this package, with a brief description.

Usage

```
avail_endpoints()
```

Value

A tibble::tibble of endpoints, with two columns:

Endpoint Name of the function for accessing this API endpoint.

Description One-sentence description of the data available at the endpoint.

```
avail_endpoints()
```

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cache_info

Describe current cache

Description

Print out the information about the cache (as would be returned by cachem's info() method).

Usage

```
cache_info()
```

Value

list containing the info result as created by cachem

See Also

set_cache to start a new cache (and general caching info), clear_cache to delete the cache and set a new one, and disable_cache to disable without deleting

clear_cache

Manually reset the cache, deleting all currently saved data and starting afresh

Description

Deletes the current cache and resets a new cache. Deletes local data! If you are using a session unique cache, the previous settings will be reused. If you pass in new set_cache arguments, they will take precedence over the previous settings.

Usage

```
clear_cache(..., disable = FALSE)
```

Arguments

... Arguments passed on to set_cache

cache_dir the directory in which the cache is stored. By default, this is rappdirs::user_cache_dir("I version = "epidatr"). The path can be either relative or absolute. The environmental variable is EPIDATR_CACHE_DIR.

days the maximum length of time in days to keep any particular cached call. By default this is 1. The environmental variable is EPIDATR_CACHE_MAX_AGE_DAYS.

max_size the size of the entire cache, in MB, at which to start pruning entries.

By default this is 1024, or 1GB. The environmental variable is EPIDATR_CACHE_MAX_SIZE_MB.

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logfile where cachem's log of transactions is stored, relative to the cache directory. By default, it is "logfile.txt". The environmental variable is EPIDATR_CACHE_LOGFILE.

confirm whether to confirm directory creation. default is TRUE; should only be set in non-interactive scripts

startup indicates whether the function is being called on startup. Affects suppressability of the messages. Default is FALSE.

disable instead of setting a new cache, disable caching entirely; defaults to FALSE

Value

NULL no return value, all effects are stored in the package environment

See Also

set_cache to start a new cache (and general caching info), disable_cache to only disable without deleting, and cache_info

covidcast_epidata

Creates the COVIDcast Epidata autocomplete helper

Description

Creates a helper object that can use auto-complete to help find COVIDcast sources and signals. The COVIDcast endpoint of the Epidata API contains many separate data sources and signals. It can be difficult to find the name of the signal you're looking for, so you can use covidcast_epidata to get help with finding sources and functions without leaving R.

The covidcast_epidata() function fetches a list of all signals, and returns an object containing fields for every signal:

```
epidata <- covidcast_epidata()</pre>
epidata$signals
#> # A tibble: 508 x 3
#>
                                                   short_description
      source
                    signal
                    <chr>
#>
      <chr>
                                                   <chr>
#> 1 chng
                  smoothed_outpatient_cli
                                                Estimated percentage of outpatie~
                                                Estimated percentage of outpatie~
#> 2 chng
                 smoothed_adj_outpatient_cli
                    {\tt smoothed\_outpatient\_covid}
#> 3 chng
                                                   COVID-Confirmed Doctor Visits
#> 4 chng
                    smoothed_adj_outpatient_covid COVID-Confirmed Doctor Visits
                                                Estimated percentage of outpatie~
#> 5 chng
                  smoothed_outpatient_flu
#> 6 chng
                 smoothed_adj_outpatient_flu
                                               Estimated percentage of outpatie~
#> 7 chng
                                                Ratio of inpatient hospitalizati~
                  7dav_inpatient_covid
                  7dav_outpatient_covid
#> 8 chng
                                                Ratio of outpatient doctor visit~
#> 9 covid-act-now pcr_specimen_positivity_rate Proportion of PCR specimens test~
#> 10 covid-act-now pcr_specimen_total_tests
                                                Total number of PCR specimens te~
#> # i 498 more rows
```

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If you use an editor that supports tab completion, such as RStudio, type epidata\$signals\$ and wait for the tab completion popup. You will be able to type the name of signals and have the autocomplete feature select them from the list for you. Note that some signal names have dashes in them, so to access them we rely on the backtick operator:

```
epidata$signals$`fb-survey:smoothed_cli`
#> [1] "COVID-Like Symptoms (Unweighted 7-day average)"
#> [1] "fb-survey:smoothed_cli"
#> [1] "Estimated percentage of people with COVID-like illness "
```

These objects can be used directly to fetch data, without requiring us to use the pub_covidcast() function. Simply use the \$call attribute of the object:

```
epidata$signals$`fb-survey:smoothed_cli`$call("state", "pa",
                                              epirange(20210405, 20210410))
#> # A tibble: 6 x 15
#>
     geo_value signal
                          source geo_type time_type time_value direction issue
#>
     <chr>
               <chr>
                          <chr> <fct>
                                          <fct>
                                                    <date>
                                                                   <dbl> <date>
#> 1 pa
             smoothed_~ fb-su~ state
                                                  2021-04-05
                                                                   NA 2021-04-10
                                        day
             smoothed_~ fb-su~ state
#> 2 pa
                                        day
                                                  2021-04-06
                                                                   NA 2021-04-11
             smoothed_~ fb-su~ state
                                                  2021-04-07
                                                                   NA 2021-04-12
#> 3 pa
                                        day
#> 4 pa
             smoothed_~ fb-su~ state
                                        day
                                                  2021-04-08
                                                                   NA 2021-04-13
                                                                   NA 2021-04-14
#> 5 pa
             smoothed_~ fb-su~ state
                                        day
                                                  2021-04-09
#> 6 pa
             smoothed_{-} fb-su- state
                                        day
                                                  2021-04-10
                                                                   NA 2021-04-15
#> # i 7 more variables: lag <dbl>, missing_value <dbl>, missing_stderr <dbl>,
      missing_sample_size <dbl>, value <dbl>, stderr <dbl>, sample_size <dbl>
```

Usage

```
covidcast_epidata(base_url = global_base_url, timeout_seconds = 30)
```

Arguments

```
base_url optional alternative API base url

timeout_seconds

the maximum amount of time to wait for a response
```

Value

An instance of covidcast_epidata

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create_epidata_call An abstraction that holds information needed to make an epidata request

Description

epidata_call objects are generated internally by endpoint functions like pub_covidcast; by default, they are piped directly into the fetch function to fetch and format the data. For most endpoints this will return a tibble, but a few non-COVIDCAST endpoints will return a JSON-like list instead.

Usage

```
create_epidata_call(
  endpoint,
  params,
  meta = NULL,
  only_supports_classic = FALSE
)

fetch(epidata_call, fetch_args = fetch_args_list())
```

Arguments

endpoint the epidata endpoint to call

params the parameters to pass to the epidata endpoint

meta meta data to attach to the epidata call

only_supports_classic

if true only classic format is supported

epidata_call an instance of epidata_call

fetch_args a fetch_args object

Details

create_epidata_call is the constructor for epidata_call objects, but you should not need to use it directly; instead, use an endpoint function, e.g., pub_covidcast, to generate an epidata_call for the data of interest.

There are some other functions available for debugging and advanced usage: - request_url (for debugging): outputs the request URL from which data would be fetched (note additional parameters below)

fetch usually returns the data in tibble format, but a few of the endpoints only support the JSON classic format (pub_delphi, pvt_meta_norostat, and pub_meta). In that case a JSON-like nested list structure is returned instead.

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Value

- For create_epidata_call: an epidata_call object
- For fetch: a tibble or a JSON-like list

Examples

```
## Not run:
call <- pub_covidcast(
    source = "jhu-csse",
    signals = "confirmed_7dav_incidence_prop",
    time_type = "day",
    geo_type = "state",
    time_values = epirange(20200601, 20200801),
    geo_values = c("ca", "fl"),
    fetch_args = fetch_args_list(dry_run = TRUE)
)
call %>% fetch()
## End(Not run)
```

disable_cache

Turn off the caching for this session

Description

Disable caching until you call set_cache or restart R. The files defining the cache are untouched. If you are looking to disable the caching more permanently, set $EPIDATR_USE_CACHE=FALSE$ as environmental variable in your .Renviron.

Usage

```
disable_cache()
```

Value

NULL no return value, all effects are stored in the package environment

See Also

set_cache to start a new cache (and general caching info), clear_cache to delete the cache and set a new one, and cache_info

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Specify a range of days or weeks for API requests

Description

Specify a date range (in days or epiweeks) for an API request.

Usage

```
epirange(from, to)
```

Arguments

from The first date to request. Can be specified as a Date or as an integer or integer-

like string in the format YYYYMMDD for dates or YYYYWW for epiweeks.

to The final date to request (inclusive), specified the same way as from.

Details

Epiweeks, also known as MMWR weeks number the weeks of the year from 1 to 53, each week spanning from Sunday to Saturday. The numbering is defined by the CDC.

Value

An EpiRange object.

Examples

```
# Represents 2021-01-01 to 2021-01-07, inclusive
epirange(20210101, 20210107)

# The same, but using Date objects
epirange(as.Date("2021-01-01"), as.Date("2021-01-07"))

# Represents epiweeks 2 through 4 of 2022, inclusive
epirange(202202, 202204)
```

fetch_args_list

Set custom API request parameters

Description

Used to specify custom options when making API requests, such as to set timeouts or change data formats. These options are used by fetch() when it makes calls to the Epidata API.

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Usage

```
fetch_args_list(
    ...,
    fields = NULL,
    disable_date_parsing = FALSE,
    disable_data_frame_parsing = FALSE,
    return_empty = FALSE,
    timeout_seconds = 15 * 60,
    base_url = NULL,
    dry_run = FALSE,
    debug = FALSE,
    format_type = c("json", "classic", "csv"),
    refresh_cache = FALSE,
    reference_week_day = 1
)
```

Arguments

... not used for values, forces later arguments to bind by name

fields a list of epidata fields to return, or NULL to return all fields (default). e.g.

c("time_value", "value") to return only the time_value and value fields

or c("-direction") to return everything except the direction field

disable_date_parsing

disable automatic date parsing

disable_data_frame_parsing

disable automatic conversion to data frame; this is only supported by endpoints

that only support the 'classic' format (non-tabular)

return_empty boolean that allows returning an empty tibble if there is no data

timeout_seconds

base_url

the maximum amount of time (in seconds) to wait for a response from the API

base URL to use; by default NULL, which means the global base URL "https://api.delphi.cmu.edu/e

server

dry_run if TRUE, skip the call to the API and instead return the epidata_call object

(useful for debugging)

debug if TRUE, return the raw response from the API

format_type the format to request from the API, one of classic, json, csv; this is only used by

fetch_debug, and by default is "json"

refresh_cache if TRUE, ignore the cache, fetch the data from the API, and update the cache, if

it is enabled

reference_week_day

the day of the week to use as the reference day when parsing epiweeks to dates (happens if disable_date_parsing is FALSE) Defaults to 1 Sunday (the first

day of the week).

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Value

A fetch_args object containing all the specified options

get_api_key

Get and set API keys

Description

Get and set the API key used to make requests to the Epidata API. Without a key, requests may be subject to rate limits and other limitations.

Usage

```
get_api_key()
save_api_key()
```

Details

We recommend you register for an API key. While most endpoints are available without one, there are limits on API usage for anonymous users, including a rate limit. If you regularly request large amounts of data, please consider registering for an API key.

API keys are strings read from the environment variable DELPHI_EPIDATA_KEY. We recommend setting your key with save_api_key(), which will modify an applicable .Renviron file, which will be read in automatically when you start future R sessions (see ?Startup for details on .Renviron files). Alternatively, you can modify the environment variable at the command line before/while launching R, or inside an R session with Sys.setenv(), but these will not persist across sessions.

Once an API key is set, it is automatically used for all requests made by functions in this package.

Value

For get_api_key(), returns the current API key as a string, or "" if none is set.

References

- Delphi Epidata API Keys documentation.
- Delphi Epidata API Registration Form.

pub_covidcast

pub_covidcast

Various COVID and flu signals via the COVIDcast endpoint

Description

API docs: https://cmu-delphi.github.io/delphi-epidata/api/covidcast_signals.html

The primary endpoint for fetching COVID-19 data, providing access to a wide variety of signals from a wide variety of sources. See the API documentation link above for more. Delphi's COVID-cast public dashboard is powered by this endpoint.

Usage

```
pub_covidcast(
   source,
   signals,
   geo_type,
   time_type,
   geo_values = "*",
   time_values = "*",
   ...,
   as_of = NULL,
   issues = NULL,
   lag = NULL,
   fetch_args = fetch_args_list()
)
```

Arguments

source	string. The data source to query (see: https://cmu-delphi.github.io/delphi-epidata/api/covidcast_signals.html).
signals	string. The signals to query from a specific source (see: https://cmu-delphi.github.io/delphi-epidata/api/covidcast_signals.html).
geo_type	string. The geographic resolution of the data (see: https://cmu-delphi.github.io/delphi-epidata/api/covidcast_geography.html).
time_type	string. The temporal resolution of the data (either "day" or "week", depending on signal).
geo_values	character. The geographies to return. Defaults to all ("*") geographies within requested geographic resolution (see: https://cmu-delphi.github.io/delphi-epidata/api/covidcast_geography.html.).
time_values	timeset. Dates to fetch. Defaults to all ("*") dates.
	not used for values, forces later arguments to bind by name
as_of	Date. Optionally, the as of date for the issues to fetch. If not specified, the most recent data is returned. Mutually exclusive with issues or lag.
issues	timeset. Optionally, the issue of the data to fetch. If not specified, the most recent issue is returned. Mutually exclusive with as_of or lag.

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lag integer. Optionally, the lag of the issues to fetch. If not set, the most recent issue

is returned. Mutually exclusive with as_of or issues.

fetch_args fetch_args. Additional arguments to pass to fetch().

Value

```
tibble::tibble
```

See Also

```
pub_covidcast_meta(), covidcast_epidata(), epirange()
```

Examples

```
## Not run:
pub_covidcast(
  source = "jhu-csse",
  signals = "confirmed_7dav_incidence_prop",
  geo_type = "state",
  time_type = "day",
  geo_values = c("ca", "fl"),
  time_values = epirange(20200601, 20200801)
pub_covidcast(
  source = "jhu-csse",
  signals = "confirmed_7dav_incidence_prop",
  geo_type = "state",
  time_type = "day",
  geo_values = "*",
  time_values = epirange(20200601, 20200801)
)
## End(Not run)
```

pub_covidcast_meta

Metadata for the COVIDcast endpoint

Description

```
API docs: https://cmu-delphi.github.io/delphi-epidata/api/covidcast_meta.html.
```

Fetch a summary of metadata for all sources and signals that are available in the API, along with basic summary statistics such as the dates they are available, the geographic levels at which they are reported, and etc.

Usage

```
pub_covidcast_meta(fetch_args = fetch_args_list())
```

Arguments

```
fetch_args fetch_args. Additional arguments to pass to fetch().
```

Value

```
tibble::tibble
```

See Also

```
pub_covidcast(),covidcast_epidata()
```

Examples

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

Description

API docs: https://cmu-delphi.github.io/delphi-epidata/api/covid_hosp_facility.html

Obtains the COVID-19 reported patient impact and hospital capacity data by facility. This dataset is provided by the US Department of Health & Human Services. The companion function pub_covid_hosp_facility_lookup can be used to look up facility identifiers in a variety of ways.

Usage

```
pub_covid_hosp_facility(
  hospital_pks,
  collection_weeks = "*",
  ...,
  publication_dates = NULL,
  fetch_args = fetch_args_list()
)
```

Arguments

```
pub_covid_hosp_facility_lookup
```

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Details

Starting October 1, 2022, some facilities are only required to report annually.

Value

```
tibble::tibble
```

See Also

```
pub_covid_hosp_facility(), epirange()
```

Examples

```
## Not run:
pub_covid_hosp_facility(
  hospital_pks = "100075",
  collection_weeks = epirange(20200101, 20200501)
)
pub_covid_hosp_facility(
  hospital_pks = "050063",
  collection_weeks = epirange(20240101, 20240301)
)
## End(Not run)
```

```
pub_covid_hosp_facility_lookup
```

Helper for finding COVID hospitalization facilities

Description

```
API \ docs: \ https://cmu-delphi.github.io/delphi-epidata/api/covid\_hosp\_facility\_lookup. \\ html
```

Obtains unique identifiers and other metadata for COVID hospitalization facilities of interest. This is a companion endpoint to the pub_covid_hosp_facility() endpoint.

Usage

```
pub_covid_hosp_facility_lookup(
    ...,
    state = NULL,
    ccn = NULL,
    city = NULL,
    zip = NULL,
    fips_code = NULL,
    fetch_args = fetch_args_list()
)
```

Arguments

```
not used for values, forces later arguments to bind by name state string. A two-letter character state abbreviation.

ccn string. A facility CMS certification number.

city string. A city name.

zip string. A 5-digit zip code.

fips_code string. A 5-digit fips county code, zero-padded.

fetch_args fetch_args. Additional arguments to pass to fetch().
```

Details

Only one location argument needs to be specified. Combinations of the arguments are not currently supported.

Value

```
tibble::tibble
```

See Also

```
pub_covid_hosp_facility()
```

```
## Not run:
pub_covid_hosp_facility_lookup(state = "fl")
pub_covid_hosp_facility_lookup(city = "southlake")
## End(Not run)
```

Description

```
API docs: https://cmu-delphi.github.io/delphi-epidata/api/covid_hosp.html.
```

Obtains the COVID-19 reported patient impact and hospital capacity data by state. This dataset is provided by the US Department of Health & Human Services.

Usage

```
pub_covid_hosp_state_timeseries(
   states,
   dates = "*",
    ...,
   as_of = NULL,
   issues = NULL,
   fetch_args = fetch_args_list()
)
```

Arguments

states	character. Two letter state abbreviations.
dates	timeset. Dates to fetch. Defaults to all ("*") dates.
	not used for values, forces later arguments to bind by name
as_of	Date. Optionally, the as of date for the issues to fetch. If not specified, the most recent data is returned. Mutually exclusive with issues.
issues	timeset. Optionally, the issue of the data to fetch. If not specified, the most recent issue is returned. Mutually exclusive with as_of or lag.
fetch_args	fetch_args. Additional arguments to pass to fetch().

Details

Starting October 1, 2022, some facilities are only required to report annually.

Value

```
tibble::tibble
```

pub_delphi

Examples

```
## Not run:
pub_covid_hosp_state_timeseries(
   states = "fl",
   dates = epirange(20200101, 20200501)
)
## End(Not run)
```

pub_delphi

Delphi's ILINet outpatient doctor visits forecasts

Description

```
API docs: https://cmu-delphi.github.io/delphi-epidata/api/delphi.html
```

Usage

```
pub_delphi(system, epiweek, fetch_args = fetch_args_list())
```

Arguments

system character. System name to fetch.

epiweek timeset. Epiweek to fetch. Does not support multiple dates. Make separate

calls to fetch data for multiple epiweeks.

fetch_args fetch_args. Additional arguments to pass to fetch().

Value

list

```
## Not run:
pub_delphi(system = "ec", epiweek = 201501)
## End(Not run)
```

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pub_dengue_nowcast

Delphi's PAHO dengue nowcasts (North and South America)

Description

```
API docs: https://cmu-delphi.github.io/delphi-epidata/api/dengue_nowcast.html
```

Usage

```
pub_dengue_nowcast(locations, epiweeks = "*", fetch_args = fetch_args_list())
```

Arguments

locations character. Locations to fetch.

epiweeks timeset. Epiweeks to fetch. Defaults to all ("*") dates. fetch_args fetch_args. Additional arguments to pass to fetch().

Value

```
tibble::tibble
```

Examples

```
## Not run:
pub_dengue_nowcast(
  locations = "pr",
  epiweeks = epirange(201401, 202301)
)
## End(Not run)
```

pub_ecdc_ili

ECDC ILI incidence (Europe)

Description

API docs: https://cmu-delphi.github.io/delphi-epidata/api/ecdc_ili.html.

Obtain information on influenza-like-illness from the European Centre for Disease Prevention and Control.

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Usage

```
pub_ecdc_ili(
  regions,
  epiweeks = "*",
    ...,
  issues = NULL,
  lag = NULL,
  fetch_args = fetch_args_list()
)
```

Arguments

regions character. Regions to fetch.

epiweeks timeset. Epiweeks to fetch. Defaults to all ("*") dates.

... not used for values, forces later arguments to bind by name

timeset. Optionally, the issues to fetch. If not set, the most recent issue is returned. Mutually exclusive with lag.

lag integer. Optionally, the lag of the issues to fetch. If not set, the most recent issue is returned. Mutually exclusive with issues.

fetch_args fetch_args. Additional arguments to pass to fetch().

Details

The list of location argument can be found in https://github.com/cmu-delphi/delphi-epidata/blob/main/labels/ecdc_regions.txt.

Value

```
tibble::tibble
```

Examples

```
## Not run:
pub_ecdc_ili(regions = "austria", epiweeks = epirange(201901, 202001))
## End(Not run)
```

pub_flusurv

CDC FluSurv flu hospitalizations

Description

```
API docs: https://cmu-delphi.github.io/delphi-epidata/api/flusurv.html. Obtain information on influenza hospitalization rates from the Center of Disease Control. See also https://gis.cdc.gov/GRASP/Fluview/FluHospRates.html.
```

pub_fluview 21

Usage

```
pub_flusurv(
  locations,
  epiweeks = "*",
    ...,
  issues = NULL,
  lag = NULL,
  fetch_args = fetch_args_list()
)
```

Arguments

locations character. Character vector indicating location.
epiweeks timeset. Epiweeks to fetch. Defaults to all ("*") dates.
... not used for values, forces later arguments to bind by name
issues timeset. Optionally, the issues to fetch. If not set, the most recent issue is returned. Mutually exclusive with lag.
lag integer. Optionally, the lag of the issues to fetch. If not set, the most recent issue is returned. Mutually exclusive with issues.
fetch_args fetch_args. Additional arguments to pass to fetch().

Details

The list of location argument can be found in https://github.com/cmu-delphi/delphi-epidata/blob/main/labels/flusurv_locations.txt.

Value

```
tibble::tibble
```

Examples

```
## Not run:
pub_flusurv(locations = "CA", epiweeks = epirange(201701, 201801))
## End(Not run)
```

pub_fluview

CDC FluView ILINet outpatient doctor visits

Description

API docs: https://cmu-delphi.github.io/delphi-epidata/api/fluview.html. For

Obtains information on outpatient inluenza-like-illness (ILI) from U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet).

more information on ILINet, see https://gis.cdc.gov/grasp/fluview/fluportaldashboard.html.

pub_fluview

Usage

```
pub_fluview(
  regions,
  epiweeks = "*",
    ...,
  issues = NULL,
  lag = NULL,
  auth = NULL,
  fetch_args = fetch_args_list()
)
```

Arguments

regions	character. Locations to fetch. Can be any string IDs in national, HHS region, census division, most states and territories, and so on. Full list link below.
epiweeks	timeset. Epiweeks to fetch in the form epirange(startweek, endweek), where startweek and endweek are of the form YYYYWW (string or numeric). Defaults to all ("*") dates.
	not used for values, forces later arguments to bind by name
issues	timeset. Optionally, the issues to fetch. If not set, the most recent issue is returned. Mutually exclusive with lag.
lag	integer. Optionally, the lag of the issues to fetch. If not set, the most recent issue is returned. Mutually exclusive with issues.
auth	string. Optionally, restricted access key (not the same as API key).
fetch_args	fetch_args. Additional arguments to pass to fetch().

Details

The full list of location inputs can be accessed at https://github.com/cmu-delphi/delphi-epidata/blob/main/src/acquisition/fluview/fluview_locations.py.

Value

```
tibble::tibble
```

```
## Not run:
pub_fluview(regions = "nat", epiweeks = epirange(201201, 202005))
## End(Not run)
```

pub_fluview_clinical 23

```
pub_fluview_clinical CDC FluView flu tests from clinical labs
```

Description

```
API docs: https://cmu-delphi.github.io/delphi-epidata/api/fluview_clinical.html
```

Usage

```
pub_fluview_clinical(
  regions,
  epiweeks = "*",
    ...,
  issues = NULL,
  lag = NULL,
  fetch_args = fetch_args_list()
)
```

Arguments

regions	character. Regions to fetch.
epiweeks	timeset. Epiweeks to fetch in the form epirange(startweek,endweek), where startweek and endweek are of the form YYYYWW (string or numeric). Defaults to all ("*") dates.
	not used for values, forces later arguments to bind by name
issues	timeset. Optionally, the issues to fetch. If not set, the most recent issue is returned. Mutually exclusive with lag.
lag	integer. Optionally, the lag of the issues to fetch. If not set, the most recent issue is returned. Mutually exclusive with issues.
fetch_args	fetch_args. Additional arguments to pass to fetch().

Value

```
tibble::tibble
```

```
## Not run:
pub_fluview_clinical(regions = "nat", epiweeks = epirange(201601, 201701))
## End(Not run)
```

pub_gft

pub_fluview_meta

Metadata for the FluView endpoint

Description

```
API docs: https://cmu-delphi.github.io/delphi-epidata/api/fluview_meta.html
```

Usage

```
pub_fluview_meta(fetch_args = fetch_args_list())
```

Arguments

```
fetch_args fetch_args. Additional arguments to pass to fetch().
```

Value

```
tibble::tibble
```

See Also

```
pub_fluview()
```

Examples

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

pub_gft

Google Flu Trends flu search volume

Description

```
API docs: https://cmu-delphi.github.io/delphi-epidata/api/gft.html

Obtains estimates of inluenza activity based on volume of certain search queries from Google.
```

Usage

```
pub_gft(locations, epiweeks = "*", fetch_args = fetch_args_list())
```

pub_kcdc_ili 25

Arguments

```
locations character. Locations to fetch.

epiweeks timeset Epiweeks to fetch. Defaults to all ("*") dates.

fetch_args fetch_args. Additional arguments to pass to fetch().
```

Details

Google has discontinued Flu Trends and this is now a static endpoint. Possibile input for locations can be found in https://github.com/cmu-delphi/delphi-epidata/blob/main/labels/regions.txt, https://github.com/cmu-delphi/delphi-epidata/blob/main/labels/states.txt, and https://github.com/cmu-delphi/delphi-epidata/blob/main/labels/cities.txt.

Value

```
tibble::tibble
```

Examples

```
## Not run:
pub_gft(locations = "hhs1", epiweeks = epirange(201201, 202001))
## End(Not run)
```

pub_kcdc_ili

KCDC ILI incidence (Korea)

Description

```
API docs: https://cmu-delphi.github.io/delphi-epidata/api/kcdc_ili.html
```

Usage

```
pub_kcdc_ili(
  regions,
  epiweeks = "*",
    ...,
  issues = NULL,
  lag = NULL,
  fetch_args = fetch_args_list()
)
```

pub_meta

Arguments

regions character. Regions to fetch.

epiweeks timeset. Epiweeks to fetch. Defaults to all ("*") dates.

... not used for values, forces later arguments to bind by name

issues timeset. Optionally, the issues to fetch. If not set, the most recent issue is

returned. Mutually exclusive with lag.

lag integer. Optionally, the lag of the issues to fetch. If not set, the most recent issue

is returned. Mutually exclusive with issues.

fetch_args fetch_args. Additional arguments to pass to fetch().

Value

```
tibble::tibble
```

Examples

```
## Not run:
pub_kcdc_ili(regions = "ROK", epiweeks = 200436)
## End(Not run)
```

pub_meta

Metadata for the Delphi Epidata API

Description

```
API docs: https://cmu-delphi.github.io/delphi-epidata/api/meta.html
```

Usage

```
pub_meta(fetch_args = fetch_args_list())
```

Arguments

fetch_args fetch_args. Additional arguments to pass to fetch().

Value

list

pub_nidss_dengue 27

pub_nidss_dengue NIDSS dengue cases (Taiwan)

Description

```
API docs: https://cmu-delphi.github.io/delphi-epidata/api/nidss_dengue.html
```

Obtains counts of confirmed dengue cases in Taiwan from Taiwan National Infectious Disease Statistical System.

Usage

```
pub_nidss_dengue(locations, epiweeks = "*", fetch_args = fetch_args_list())
```

Arguments

locations character. Locations to fetch.

epiweeks timeset. Epiweeks to fetch. Defaults to all ("*") dates.

fetch_args fetch_args. Additional arguments to pass to fetch().

Details

Possible location inputs can be found in https://github.com/cmu-delphi/delphi-epidata/blob/main/labels/nidss_regions.txt and https://github.com/cmu-delphi/delphi-epidata/blob/main/labels/nidss_locations.txt.

Value

```
tibble::tibble
```

```
## Not run:
pub_nidss_dengue(locations = "taipei", epiweeks = epirange(201201, 201301))
## End(Not run)
```

28 pub_nidss_flu

pub_nidss_flu

NIDSS flu doctor visits (Taiwan)

Description

```
API docs: https://cmu-delphi.github.io/delphi-epidata/api/nidss_flu.html
```

Obtains information on outpatient inluenza-like-illness from Taiwan National Infectious Disease Statistical System.

Usage

```
pub_nidss_flu(
  regions,
  epiweeks = "*",
    ...,
  issues = NULL,
  lag = NULL,
  fetch_args = fetch_args_list()
)
```

Arguments

```
regions character. Regions to fetch.

epiweeks timeset. Epiweeks to fetch. Defaults to all ("*") dates.

... not used for values, forces later arguments to bind by name

timeset. Optionally, the issues to fetch. If not set, the most recent issue is returned. Mutually exclusive with lag.

lag integer. Optionally, the lag of the issues to fetch. If not set, the most recent issue is returned. Mutually exclusive with issues.

fetch_args fetch_args. Additional arguments to pass to fetch().
```

Value

```
tibble::tibble
```

```
## Not run:
pub_nidss_flu(regions = "taipei", epiweeks = epirange(201501, 201601))
## End(Not run)
```

pub_nowcast 29

pub_nowcast

Delphi's ILI Nearby nowcasts

Description

```
API docs: https://cmu-delphi.github.io/delphi-epidata/api/nowcast.html. Obtains information on outpatient inluenza-like-illness (ILI) from Delphi's
```

Usage

```
pub_nowcast(locations, epiweeks = "*", fetch_args = fetch_args_list())
```

Arguments

locations character. Locations to fetch.

epiweeks timeset. Epiweeks to fetch. Defaults to all ("*") dates. fetch_args. Additional arguments to pass to fetch().

Details

The full list of location inputs can be accessed at https://github.com/cmu-delphi/delphi-epidata/blob/main/src/acquisition/fluview/fluview_locations.py.

Value

```
tibble::tibble
```

Examples

```
## Not run:
pub_nowcast(locations = "ca", epiweeks = epirange(201201, 201301))
## End(Not run)
```

pub_paho_dengue

PAHO dengue data (North and South America)

Description

API docs: https://cmu-delphi.github.io/delphi-epidata/api/paho_dengue.html

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Usage

```
pub_paho_dengue(
  regions,
  epiweeks = "*",
    ...,
  issues = NULL,
  lag = NULL,
  fetch_args = fetch_args_list()
)
```

Arguments

regions character. Regions to fetch.

epiweeks timeset. Epiweeks to fetch. Defaults to all ("*") dates.
... not used for values, forces later arguments to bind by name

issues timeset. Optionally, the issues to fetch. If not set, the most recent issue is

returned. Mutually exclusive with lag.

lag integer. Optionally, the lag of the issues to fetch. If not set, the most recent issue

is returned. Mutually exclusive with issues.

fetch_args fetch_args. Additional arguments to pass to fetch().

Value

```
tibble::tibble
```

Examples

```
## Not run:
pub_paho_dengue(regions = "ca", epiweeks = epirange(201401, 201501))
## End(Not run)
```

pub_wiki

Wikipedia webpage counts by article

Description

API docs: https://cmu-delphi.github.io/delphi-epidata/api/wiki.html Number of page visits for selected English, Influenza-related wikipedia articles.

Source: Wikimedia

• Temporal Resolution: Hourly, daily, and weekly from 2007-12-09 (2007w50)

• Spatial Resolution: N/A

• Other resolution: By article (54)

· Open access

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Usage

```
pub_wiki(
   articles,
   ...,
   time_type = c("day", "week"),
   time_values = "*",
   hours = NULL,
   language = "en",
   fetch_args = fetch_args_list()
)
```

Arguments

```
articles character. Articles to fetch.
... not used for values, forces later arguments to bind by name
time_type string. The temporal resolution of the data (either "day" or "week", depending on signal).

time_values timeset. Dates or epiweeks to fetch. Defaults to all ("*") dates.
hours integer. Optionally, the hours to fetch.
language string. Language to fetch.
fetch_args fetch_args. Additional arguments to pass to fetch().
```

Value

```
tibble::tibble
```

Examples

```
## Not run:
pub_wiki(
   articles = "avian_influenza",
   time_type = "week",
   time_values = epirange(201501, 201601)
)
## End(Not run)
```

pvt_cdc

CDC total and by topic webpage visits

Description

```
API docs: https://cmu-delphi.github.io/delphi-epidata/api/cdc.html
```

Usage

```
pvt_cdc(auth, locations, epiweeks = "*", fetch_args = fetch_args_list())
```

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Arguments

auth string. Restricted access key (not the same as API key).

locations character. Locations to fetch.

epiweeks timeset. Epiweeks to fetch. Defaults to all ("*") dates.

fetch_args fetch_args. Additional arguments to pass to fetch(). See fetch_args_list()

for details.

Value

```
tibble::tibble
```

Examples

```
## Not run:
pvt_cdc(
   auth = Sys.getenv("SECRET_API_AUTH_CDC"),
   locations = "fl,ca",
   epirange(201501, 201601)
)
## End(Not run)
```

pvt_dengue_sensors

PAHO dengue digital surveillance sensors (North and South America)

Description

```
API docs: https://cmu-delphi.github.io/delphi-epidata/api/dengue_sensors.html
```

Usage

```
pvt_dengue_sensors(
  auth,
  names,
  locations,
  epiweeks = "*",
  fetch_args = fetch_args_list()
)
```

Arguments

auth string. Restricted access key (not the same as API key).

names character. Names to fetch.
locations character. Locations to fetch.

epiweeks timeset. Epiweeks to fetch. Defaults to all ("*") dates. fetch_args. Additional arguments to pass to fetch().

pvt_ght 33

Value

```
tibble::tibble
```

Examples

```
## Not run:
pvt_dengue_sensors(
   auth = Sys.getenv("SECRET_API_AUTH_SENSORS"),
   names = "ght",
   locations = "ag",
   epiweeks = epirange(201501, 202001)
)
## End(Not run)
```

pvt_ght

Google Health Trends health topics search volume

Description

```
API docs: https://cmu-delphi.github.io/delphi-epidata/api/ght.html
```

Estimate of influenza activity based on volume of certain search queries. . . .

Usage

```
pvt_ght(auth, locations, epiweeks = "*", query, fetch_args = fetch_args_list())
```

Arguments

```
auth string. Restricted access key (not the same as API key).

locations character. Locations to fetch.
```

epiweeks timeset. Epiweeks to fetch. Defaults to all ("*") dates.

query string. The query to be fetched.

fetch_args fetch_args. Additional arguments to pass to fetch().

Value

```
tibble::tibble
```

34 pvt_meta_norostat

Examples

```
## Not run:
pvt_ght(
   auth = Sys.getenv("SECRET_API_AUTH_GHT"),
   locations = "ma",
   epiweeks = epirange(199301, 202304),
   query = "how to get over the flu"
)
## End(Not run)
```

pvt_meta_norostat

Metadata for the NoroSTAT endpoint

Description

```
API docs: https://cmu-delphi.github.io/delphi-epidata/api/meta_norostat.html
```

Usage

```
pvt_meta_norostat(auth, fetch_args = fetch_args_list())
```

Arguments

```
auth string. Restricted access key (not the same as API key).

fetch_args fetch_args. Additional arguments to pass to fetch().
```

Value

list

See Also

```
pvt_norostat()
```

```
## Not run:
pvt_meta_norostat(auth = Sys.getenv("SECRET_API_AUTH_NOROSTAT"))
## End(Not run)
```

pvt_norostat 35

pvt_norostat

CDC NoroSTAT norovirus outbreaks

Description

This is point data only, and does not include minima or maxima.

```
API docs: https://cmu-delphi.github.io/delphi-epidata/api/norostat.html
```

This is the documentation of the API for accessing the NoroSTAT endpoint of the Delphi's epidemiological data.

Usage

```
pvt_norostat(auth, locations, epiweeks = "*", fetch_args = fetch_args_list())
```

Arguments

```
auth string. Your authentication key.

locations character. Locations to fetch.
```

epiweeks timeset. Epiweeks to fetch. Defaults to all ("*") dates.

fetch_args fetch_args. Additional arguments to pass to fetch().

Value

```
tibble::tibble
```

```
## Not run:
pvt_norostat(
   auth = Sys.getenv("SECRET_API_AUTH_NOROSTAT"),
   locations = "Minnesota, Ohio, Oregon, Tennessee, and Wisconsin",
   epiweeks = 201233
)
## End(Not run)
```

pvt_sensors

pvt_quidel

Quidel COVID-19 and influenza testing data

Description

```
API docs: https://cmu-delphi.github.io/delphi-epidata/api/quidel.html Data provided by Quidel Corp., which contains flu lab test results.
```

Usage

```
pvt_quidel(auth, locations, epiweeks = "*", fetch_args = fetch_args_list())
```

Arguments

```
auth string. Restricted access key (not the same as API key).

locations character. Locations to fetch.

epiweeks timeset. Epiweeks to fetch. Defaults to all ("*") dates.

fetch_args fetch_args. Additional arguments to pass to fetch().
```

Value

```
tibble::tibble
```

Examples

```
## Not run:
pvt_quidel(
   auth = Sys.getenv("SECRET_API_AUTH_QUIDEL"),
   epiweeks = epirange(201201, 202001),
   locations = "hhs1"
)
## End(Not run)
```

pvt_sensors

Influenza and dengue digital surveillance sensors

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Description

```
API docs: https://cmu-delphi.github.io/delphi-epidata/api/sensors.html
```

This is the documentation of the API for accessing the Digital Surveillance Sensors endpoint of the Delphi's epidemiological. Note: this repository was built to support modeling and forecasting efforts surrounding seasonal influenza (and dengue). In the current COVID-19 pandemic, syndromic surveillance data, like ILI data (influenza-like illness) through FluView, will likely prove very useful. However, we urge caution to users examining the digital surveillance sensors, like ILI Nearby, Google Flu Trends, etc., during the COVID-19 pandemic, because these were designed to track ILI as driven by seasonal influenza, and were NOT designed to track ILI during the COVID-19 pandemic.

Usage

```
pvt_sensors(
  auth,
  names,
  locations,
  epiweeks = "*",
  fetch_args = fetch_args_list()
)
```

Arguments

```
auth string. Restricted access key (not the same as API key).

names character. Sensor names to fetch.

locations character. Locations to fetch.

epiweeks timeset. Epiweeks to fetch. Defaults to all ("*") dates.

fetch_args fetch_args. Additional arguments to pass to fetch().
```

Value

```
tibble::tibble
```

```
## Not run:
pvt_sensors(
   auth = Sys.getenv("SECRET_API_AUTH_SENSORS"),
   names = "sar3",
   locations = "nat",
   epiweeks = epirange(201501, 202001)
)
## End(Not run)
```

38 pvt_twitter

pvt_twitter

HealthTweets total and influenza-related tweets

Description

```
API docs: https://cmu-delphi.github.io/delphi-epidata/api/twitter.html
```

This is the API documentation for accessing the Twitter Stream endpoint of Delphi's epidemiological data. Sourced from Healthtweets

Usage

```
pvt_twitter(
  auth,
  locations,
  ...,
  time_type = c("day", "week"),
  time_values = "*",
  fetch_args = fetch_args_list()
)
```

Arguments

```
auth string. Restricted access key (not the same as API key).

locations character. Locations to fetch.

... not used for values, forces later arguments to bind by name

time_type string. The temporal resolution of the data (either "day" or "week", depending on signal).

time_values timeset. Dates or epiweeks to fetch. Defaults to all ("*") dates.

fetch_args fetch_args. Additional arguments to pass to fetch().
```

Value

```
tibble::tibble
```

```
## Not run:
pvt_twitter(
   auth = Sys.getenv("SECRET_API_AUTH_TWITTER"),
   locations = "CA",
   time_type = "week",
   time_values = epirange(201501, 202001)
)
## End(Not run)
```

set_cache 39

set_cache

Create or renew a cache for this session

Description

By default, epidatr re-requests data from the API on every call of fetch. In case you find your-self repeatedly calling the same data, you can enable the cache using either this function for a given session, or environmental variables for a persistent cache. The typical recommended workflow for using the cache is to set the environmental variables EPIDATR_USE_CACHE=TRUE and EPIDATR_CACHE_DIRECTORY="/your/directory/here"in your .Renviron, for example by calling usethis::edit_r_environ(). See the parameters below for some more configurables if you're so inclined.

set_cache (re)defines the cache to use in a particular R session. This does not clear existing data at any previous location, but instead creates a handle to the new cache using cachem that seamlessly handles caching for you. Say your cache is normally stored in some default directory, but for the current session you want to save your results in ~/my/temporary/savedirectory, then you would call set_cache(dir = "~/my/temporary/savedirectory"). Or if you know the data from 2 days ago is wrong, you could call set_cache(days = 1) to clear older data whenever the cache is referenced. In both cases, these changes would only last for a single session (though the deleted data would be gone permanently!).

An important feature of the caching in this package is that only calls which specify either issues before a certain date, or as_of before a certain date will actually cache. For example the call

```
pub_covidcast(
  source = "jhu-csse",
  signals = "confirmed_7dav_incidence_prop",
  geo_type = "state",
  time_type = "day",
  geo_values = "ca,fl",
  time_values = epirange(20200601, 20230801)
)
```

won't cache, since it is possible for the cache to be invalidated by new releases with no warning. On the other hand, the call

```
pub_covidcast(
  source = "jhu-csse",
  signals = "confirmed_7dav_incidence_prop",
  geo_type = "state",
  time_type = "day",
  geo_values = "ca,fl",
  time_values = epirange(20200601, 20230801),
  as_of = "2023-08-01"
)
```

set_cache

will cache, since normal new versions of data can't invalidate it (since they would be as_of a later date). It is still possible that Delphi may patch such data, but the frequency is on the order of months rather than days. We are working on creating a public channel to communicate such updates. While specifying issues will usually cache, a call with issues="*" won't cache, since its subject to cache invalidation by normal versioning.

On the backend, the cache uses cachem, with filenames generated using an md5 encoding of the call url. Each file corresponds to a unique epidata-API call.

Usage

```
set_cache(
  cache_dir = NULL,
  days = NULL,
  max_size = NULL,
  logfile = NULL,
  confirm = TRUE,
  startup = FALSE
)
```

Arguments

cache_dir	the directory in which the cache is stored. By default, this is rappdirs::user_cache_dir("R", version = "epidatr"). The path can be either relative or absolute. The environmental variable is EPIDATR_CACHE_DIR.
days	the maximum length of time in days to keep any particular cached call. By default this is 1. The environmental variable is EPIDATR_CACHE_MAX_AGE_DAYS.
max_size	the size of the entire cache, in MB, at which to start pruning entries. By default this is 1024, or 1GB. The environmental variable is EPIDATR_CACHE_MAX_SIZE_MB.
logfile	where cachem's log of transactions is stored, relative to the cache directory. By default, it is "logfile.txt". The environmental variable is EPIDATR_CACHE_LOGFILE.
confirm	whether to confirm directory creation. default is TRUE; should only be set in non-interactive scripts
startup	indicates whether the function is being called on startup. Affects suppressability of the messages. Default is FALSE.

Value

NULL no return value, all effects are stored in the package environment

See Also

clear_cache to delete the old cache while making a new one, disable_cache to disable without deleting, and cache_info

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Examples

```
set_cache(
  cache_dir = tempdir(),
  days = 14,
  max_size = 512,
  logfile = "logs.txt"
)
```

timeset

Timeset formats for specifying dates

Description

Many API calls accept timesets to specify the time ranges of data being requested. Timesets can be specified with epirange(), as Date objects, or with wildcards.

Details

Timesets are not special R types; the term simply describes any value that is accepted by epidatr to specify the time value of an epidata query:

- Dates: Date instances.
- Date strings or integers: Strings or integers in the format YYYYMMDD.
- Epiweeks: Strings or integers in the format YYYYWW, where WW is the epiweek number.
- EpiRanges: A range returned by epirange(), or a list of multiple ranges.
- Wildcard: The string "*", which requests all available time values.

Refer to the specific endpoint documentation for guidance on using dates vs weeks. Most endpoints support only one or the other. Some (less commonly used) endpoints may not accept the "*" wildcard, but this can be simulated with a large epirange().

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