Package: rfema (via r-universe)

October 29, 2026

Title Access the openFEMA API

Version 1.0.1

Description `rfema` allows users to access The Federal Emergency Management Agency's (FEMA) publicly available data through their API. The package provides a set of functions to easily navigate and access data from the National Flood Insurance Program along with FEMA's various disaster aid programs, including the Hazard Mitigation Grant Program, the Public Assistance Grant Program, and the Individual Assistance Grant Program.

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Encoding UTF-8

LazyData true

Roxygen list(markdown = TRUE)

RoxygenNote 7.3.2

Imports dplyr, memoise, utils, httr, plyr, tibble

Suggests rmarkdown, knitr, testthat (>= 3.0.0), covr, vcr (>= 0.6.0)

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VignetteBuilder knitr

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BugReports https://github.com/dylan-turner25/rfema/issues

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`bulk_dl` *Bulk download full open FEMA data sets as .csv files*

Description

Deprecated function for downloading full open FEMA data sets as .csv files.

Usage

```
bulk_dl(data_set, output_dir = NULL, file_name = NULL, size_warning = TRUE)
```

Arguments

`data_set`	A character string indicating the name of the data set to download
`output_dir`	An optional character string indicating the directory (defaults to working directory)
`file_name`	An optional character string indicating the file name (defaults to data set name with time stamp)
`size_warning`	A logical indicating whether to issue a warning before proceeding with downloading a large file (default is TRUE)

Value

Returns a downloaded csv file of the data set to the specified output directory.

Examples

```
## Not run:
bulk_dl("femaregions") # download the file

## End(Not run)
## Not run:
file.remove("FemaRegions.csv") # clean up directory after file downloads

## End(Not run)
```

fema_data_fields *Get data fields and descriptions for a given FEMA data set*

Description

Get data fields and descriptions for a given FEMA data set

Usage

```
fema_data_fields(data_set)
```

Arguments

data_set	a character string indicating the data set of interest

Value

Returns a tibble consisting of the data fields name, along with information about each data field including the data type, a description of the data field, and whether the data field is "searchable" (i.e. can it be used to filter the returned data in an API query)

Examples

```
## Not run:
fema_data_fields("FimaNfipClaims")

## End(Not run)
## Not run:
fema_data_fields("FimaNfipPolicies")

## End(Not run)
```

fema_data_sets *Get a tibble of available FEMA data sets*

Description

Get a tibble of available FEMA data sets

Usage

```
fema_data_sets()
```

Value

Returns a tibble containing meta data about each data set available through the FEMA API. For more information see the FEMA documentation page: https://www.fema.gov/about/openfema/data-sets.

Examples

```
## Not run:
fema_data_sets()

## End(Not run)
```

`open_fema` *Get data from the FEMA API*

Description

The function allows users to pull data directly from the FEMA API and have it returned as a data frame natively within R.The FEMA API limits a single query to 1000 records, thus for a query resulting in more than 1000 records, an iterative approach is necessary to get all of the records. The function handles this and will, by default, warn the user of how many iterations are needed to get all the records matching their query, letting the user decide choose whether to continue.

Usage

```
open_fema(
  data_set,
  top_n = NULL,
  filters = NULL,
  select = NULL,
  ask_before_call = TRUE,
  file_type = NULL,
  output_dir = NULL
)
```

Arguments

`data_set`	a character string indicating the data set to get data from
`top_n`	an optional integer value to specify the maximum number of matching records to return
`filters`	an optional list containing values of the data fields contained in the data set to construct filters from
`select`	an optional character vector to specify which data fields to return (default is to return all data fields)
`ask_before_call`	a logical indicating if users should be asked if they would like to proceed when an API call results in a large number of records (default is T).
`file_type`	an optional character string that specifies a file type to save the data as (options are "csv" and "rds"). If a file is specified, the function will not return the api call as a data frame
`output_dir`	an optional character string specifying the directory to save the exported file if the file_type is specified (defaults to working directory).

Value

Returns a tibble containing the data from the FEMA API.

Examples

```
## Not run:
data <- open_fema(
  data_set = "fimaNfipClaims", top_n = 100,
  filters = list(state = "FL")
)

## End(Not run)
```

`parameter_values` *Returns examples of data field values along with a description of the data field*

Description

Returns examples of data field values along with a description of the data field

Usage

```
parameter_values(data_set = NULL, data_field = NULL, message = TRUE)
```

Arguments

`data_set`	a character vector specifying the data set
`data_field`	a character vector specifying the data field
`message`	a logical value that is TRUE by default. When TRUE, the function will return information as a console message. When set to FALSE, the function will return the same information as a tibble.

Value

returns a consoles message providing a description of the data field and several example values of the data field within the data set.

Examples

```
## Not run:
parameter_values(
  data_set = "fimaNfipClaims",
  data_field = "totalBuildingInsuranceCoverage"
)

## End(Not run)
```

`valid_parameters` *Get all valid API parameters for a given FEMA data set*

Description

Get all valid API parameters for a given FEMA data set

Usage

```
valid_parameters(data_set = NULL)
```

Arguments

`data_set`	A character string indicating the data set to return valid parameters for

Value

Returns a tibble of parameter names that can be used to filter an API call for a given open FEMA data set

Examples

```
## Not run:
valid_parameters("fimaNfipPolicies")

## End(Not run)
```

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