Package 'disastr.api'

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Title Wrapper for the UN OCHA ReliefWeb Disaster Events API

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Author Christoph Dworschak [aut, cre] (ORCID:
<https://orcid.org/0000-0003-0196-9545>)

Maintainer Christoph Dworschak <dworschak@posteo.de>

Description Access and manage the application programming interface (API) of the United Nations Office for the Coordination of Humanitarian Affairs' (OCHA) ReliefWeb disaster events at <https://reliefweb.int/disasters>. The package requires a minimal number of dependencies. It offers functionality to retrieve a user-defined sample of disaster events from ReliefWeb, providing an easy alternative to scraping the ReliefWeb website. It enables a seamless integration of regular data updates into the research work flow.

License GPL-3

Encoding UTF-8

Language en-US

RoxygenNote 7.2.3

Imports httr, jsonlite

Suggests testthat

NeedsCompilation no

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disastr.api   *Wrapper for the UN OCHA ReliefWeb Disaster Events API*

Description

The function disastr.api() gives access to the OCHA ReliefWeb API to retrieve a user-defined sample of disaster events, enabling a seamless integration of regular data updates into the research work flow.

Usage

```
disastr.api(
  limit = NULL,
  date.start = NULL,
  date.end = NULL,
  disaster = NULL,
  country = NULL,
  status = NULL,
  exact.match = FALSE,
  ascending = FALSE,
  other.query = NULL
)
```

Arguments

limit	numeric. Provide the number of events you wish to retrieve. When set to NULL (default), 100 events are returned. The ReliefWeb API does not support the retrieval of more than 1000 events at once. If you wish to retrieve more than 1000 disaster events, you need to distribute this over multiple calls (e.g., using a loop). Note however that the ReliefWeb API has a call quota of 1000 data requests a day.
date.start	character string. Enter the earliest date from which events should be retrieved. The date string must be formatted as "yyyy-mm-dd". When set to NULL (default), the sample starts with the earliest possible event.
date.end	character string. Enter the latest date up to which (and including) events should be retrieved. The date string must be formatted as "yyyy-mm-dd". When set to NULL (default), data are retrieved up to the latest event.
disaster	character vector. To return only specific disaster events, this argument takes a character vector of disaster names. Examples of typical names are "earthquake", "flood", "land slide", "wild fire". See https://reliefweb.int/disasters for more disaster names that can be queried. Names are matched with loose OR operators, so that querying "land slide" also returns events for "mud slide". To do exact matching, set the global *exact.match* argument to TRUE. In this case, only one disaster type and one country at a time can be queried.

country	character vector. To return only specific countries, this argument takes a character vector of country names. Names are matched with loose OR operators, so that querying "South Sudan" also returns events for the countries "South Africa" and "Sudan". To do exact matching, set the global *exact.match* argument to TRUE. In this case, only one country and one disaster type at a time can be queried.
status	character vector. To only return events with a specific status, this argument takes a character vector of status terms. Possible terms are "alert", "current", and "past".
exact.match	logical. This is a rudimentary AND/OR switch. If set to FALSE (default), all terms and words in country, disaster, and status arguments will be matched with OR operators (possibly yielding many false positive queries). If set to TRUE, all terms are matched exactly, and only one term per argument at a time can be queried. Use *other.query* for more complex AND/OR operations.
ascending	logical. If set to FALSE (default), events will be returned in decreasing order starting from the most recent. If set to TRUE, events will be returned in ascending order starting from the oldest record.
other.query	character vector. Allows users to add their own ReliefWeb API queries to the GET call. See the ReliefWeb documentation for query details. Vector elements are assumed to be individual queries, and are automatically separated by an & sign.

Details

The function `disastr.api()` is an R wrapper for the United Nations Office for the Coordination of Humanitarian Affairs' OCHA ReliefWeb disaster events API. Internally it uses `httr` to access the API, and `jsonlite` to manage the JSON content that the call returns. The JSON data are converted into the base class `data.frame`. Variables are of class `character` by default. Variables which only contain numbers as recognized by the regular expression `^[0-9]+$` are coerced into `numeric` before the `data.frame` object is returned.

Value

A data frame containing OCHA ReliefWeb disaster events.

Author(s)

Christoph Dworschak
Website: https://www.chrisdworschak.com/

References

United Nations Office for the Coordination of Humanitarian Affairs. *ReliefWeb Disasters*. https://reliefweb.int/disasters

Examples

```
my.data.frame1 <- disastr.api()
head(my.data.frame1)

my.data.frame2 <- disastr.api(limit = 20,
date.start = "2020-01-31",
date.end = "2020-04-15")
head(my.data.frame2)
```

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