Package 'dhis2r'

February 15, 2023

Title Client for the 'DHIS2' Web API

Version 0.1.1

Description
Connect and pull data from a 'DHIS2 (District Health Information Software 2)' instance into R.

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URL https://github.com/amanyiraho/dhis2r

BugReports https://github.com/amanyiraho/dhis2r/issues

Imports attempt (>= 0.3.1), curl (>= 4.3.3), dplyr (>= 1.0.10), httr2 (>= 0.2.2), R6 (>= 2.5.1)

Suggests covr, knitr, rmarkdown, testthat

Depends R (>= 4.1.0)

Encoding UTF-8

VignetteBuilder knitr

RoxygenNote 7.2.3

LazyData true

NeedsCompilation no

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R topics documented:

Dhis2r   *Connect and pull/get data from a DHIS2 instance*

Description

To create a DHIS2 connection, you need a DHIS2 base URL, username, password, and an API version The R6 Class called 'Dhis2r' representing a DHIS2 instance connection

Format

An R6 class called Dhis2r.

Details

You can use a DHIS2 instance connection to get data several times without needing to manually supply your user credentials on each API call.

Public fields

request_sent The request used to perform an API call

name Name of the user

access_rights The access rights the user has on the DHIS2 instance

account_info Information of the logged account credentials

Methods

Public methods:

- [Dhis2r$new()](#)
- [Dhis2r$get_user_info()](#)
- [Dhis2r$get_metadata()](#)
- [Dhis2r$get_metadata_fields()](#)
- [Dhis2r$get_analytics()](#)
- [Dhis2r$clone()](#)

Method new(): Create a connection to a DHIS2 instance using basic authentication

Usage:
```
Dhis2r$new(
  base_url,
  username,
  password,
  api_version = NULL,
  api_version_position = c("after", "before")
)
```
Arguments:

base_url Base url e.g https://play.dhis2.org/

username Registered username e.g "admin"

password Registered password e.g "district"

api_version The api version e.g "33"

api_version_position position where the api_version is after or before in web API url i.e /api/

Returns: A new 'Dhis2r' object

Method get_user_info(): Get information of the logged in user

Usage:

Dhis2r$get_user_info()

Returns: A vector

Method get_metadata(): Get metadata about any available resource from a DHIS2 instance e.g "dataElements", "organisationUnits", "indicators", "periodTypes"

Usage:

Dhis2r$get_metadata(endpoint = NULL, fields = c("name", "id"))

Arguments:

endpoint a resource, get the available resources using 'get_metadata()' without any arguments

fields The specific columns to be return in the dataframe e.g c("name","id")

Returns: A data frame

Method get_metadata_fields(): Get all possible fields for a specific metadata resource from a DHIS2 instance

Usage:

Dhis2r$get_metadata_fields(endpoint = NULL)

Arguments:

endpoint a resource, get the available resources using 'get_metadata()' without any arguments

Returns: A vector of all possible fields for a specific metadata

Method get_analytics(): Get all possible analytics resources from a DHIS2 instance i.e

Usage:

```
Dhis2r$get_analytics(
  analytic,
  org_unit,
  period,
  output_scheme = c("UID", "NAME")
)
```

Arguments:

analytic vector of ID of specific analytic(s) from a DHIS2 instance

org_unit vector of ID of specific organisation unit(s) from a DHIS2 instance

period vector of relative or fixed periods from a DHIS2 instance

output_scheme Output type ID or Names of fields

Returns: A vector of all possible fields for a specific metadata

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
Dhis2r$clone(deep = FALSE)
```

Arguments:

deep Whether to make a deep clone.

Examples

```
## Not run:
# connect to the DHIS2 instance
dhis2_play_connection <- Dhis2r$new(base_url = "https://play.dhis2.org/",
 username = "admin",  password = "district",api_version = "2.39.0.1")

# get all the available resources
dhis2_play_connection$get_metadata()

# get organisation Units with the default fields i.e c("name","id")

dhis2_play_connection$get_metadata(endpoint = "organisationUnits")

# get a vector of all possible fields of a organisation unit resource
dhis2_play_connection$get_metadata_fields(endpoint = "organisationUnits")

# get organisation Units with additional fields i.e c("name","id", "level")

dhis2_play_connection$get_metadata(endpoint = "organisationUnits",
fields =  c("name","id", "level"))

dhis2_play_connection$get_analytics(analytic = c("Uvn6LCg7dVU"),
org_unit =   c("O6uvpzGd5pu", "fdc6uOvgoji"),
period = "LAST_12_MONTHS",
 output_scheme = "NAME")


## End(Not run)
```

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relative_periods   *Relative periods in DHIS2*

Description

The relative periods are relative to the current date and allow e.g. for creating dynamic reports

Usage

```
data(relative_periods)
```

Format

A data frame with 30 rows and 2 columns:

period_type Period type

period Relative period to be used

Source

"https://docs.dhis2.org/en/develop/using-the-api/dhis-core-version-239/introduction.html"

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