

Package: readepi (via r-universe)

September 9, 2024

Title Read Data from Health Information Systems

Version 0.1.0

Description Data import from several health information systems ('HIS'). The current version of the package covers 'HIS' such as 'MS SQL', 'MySQL', and 'PostGRESQL' servers, 'REDCap', 'DHIS2' and 'Fingertips'.

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URL <https://epiverse-trace.github.io/readepi/>,
<https://github.com/epiverse-trace/readepi/>

BugReports <https://github.com/epiverse-trace/readepi/issues>

Imports checkmate, DBI, dplyr, fingertipsR (>= 1.0.10.9001), glue, httr2, magrittr, odbc, pool, REDCapR, RMySQL

Suggests DiagrammeR, httpptest, knitr, rmarkdown, testthat (>= 3.0.0)

VignetteBuilder knitr

Remotes rOpenSci/fingertipsR

Config/Needs/website epiverse-trace/epiversetheme

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SystemRequirements odbc, libmariadbclient-dev

Encoding UTF-8

Roxygen list(markdown = TRUE)

RoxygenNote 7.3.1

Repository <https://epiverse-trace.r-universe.dev>

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dhis2_get_attributes *Get the target DHIS2 attribute identifiers and names*

Description

Get the target DHIS2 attribute identifiers and names

Usage

```
dhis2_get_attributes(base_url, user_name, password, which = "dataSets")
```

Arguments

base_url	the base URL of the DHIS2 server
user_name	the user name
password	the user's password
which	the target DHIS2 attribute name.

Value

an object of type data.frame with details about the DHIS2 attributes of interest.

Examples

```
## Not run:
datasets <- dhis2_get_attributes(
  base_url = "https://play.dhis2.org/demo/",
  user_name = "admin",
  password = "district",
  which = "dataSets"
)

## End(Not run)
```

`readepi`*Import data from different data_sources into R*

Description

the function allows import of data from Health Information Systems (HIS), files, and folders. The HIS consist of database management systems (DBMS) and website of public data collection.

Usage

```
readepi(  
  data_source = NULL,  
  records = NULL,  
  fields = NULL,  
  id_position = NULL,  
  id_col_name = NULL,  
  ...  
)
```

Arguments

<code>data_source</code>	the URL of the HIS
<code>records</code>	a vector or a comma-separated string of subject IDs. When specified, only these records will be imported.
<code>fields</code>	a vector or a comma-separated string of column names. If provided, only those columns will be imported.
<code>id_position</code>	the column position of the variable that unique identifies the subjects. When the name of the column with the subject IDs is known, this can be provided using the <code>id_col_name</code> argument
<code>id_col_name</code>	the column name with the subject IDs.
<code>...</code>	additional arguments passed to the <code>readepi()</code> function. These are enumerated and described in the vignette.

Value

a list of 1 or several object(s) of type `data frame`.

a list of 2 or more object(s) of type `data frame`.

Examples

```
# reading from a MySQL server  
## Not run:  
data <- readepi(  
  data_source = "mysql-rfam-public.ebi.ac.uk",  
  credentials_file = system.file("extdata", "test.ini", package = "readepi"),  
  driver_name = "",
```

```

    from          = "author"
)
## End(Not run)

```

show_example_file *Display the structure of the credentials file*

Description

Display the structure of the credentials file

Usage

```
show_example_file()
```

Value

Displays the content of the template credential file.

Examples

```
show_example_file()
```

show_tables *Display the list of tables in a database*

Description

Display the list of tables in a database

Usage

```
show_tables(data_source, driver_name, credentials_file = NULL)
```

Arguments

data_source the URL of the server of interest

driver_name the name of the MS driver. use odbc::odbcListDrivers() to display the list of installed drivers

credentials_file the path to the file with the user-specific credential details for the projects of interest. See the help of the readepi function for more details.

Value

a character that contains the list of all tables found in the specified database.

Examples

```
## Not run:
show_tables(
  data_source      = "mysql-rfam-public.ebi.ac.uk",
  credentials_file = system.file("extdata", "test.ini", package = "readepi"),
  driver_name      = ""
)

## End(Not run)
```

visualise_table	<i>Visualize the first 5 rows of the data from a table</i>
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Description

Visualize the first 5 rows of the data from a table

Usage

```
visualise_table(data_source, credentials_file, from, driver_name)
```

Arguments

data_source	the the URL of the HIS
credentials_file	the path to the file with the user-specific credential details for the projects of interest
from	the table name
driver_name	the name of the MS driver

Value

prints the first 5 rows of the specified table.

Examples

```
## Not run:
result <- visualise_table(
  data_source      = "mysql-rfam-public.ebi.ac.uk",
  credentials_file = system.file("extdata", "test.ini",
                                package = "readepi"),
  from             = "author",
  driver_name      = ""
)
```

```
## End(Not run)
```

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