dbgap2x

April 8, 2019

Title Create Sandboxes of Phenotypics Data From dbGap

Version 1.0

Description This package has been created to help users creating sandboxes of phenotypics data from dbGap studies.

Depends R (>= 3.1.1)

License Apache 2

Encoding UTF-8

LazyData true

RoxygenNote 6.1.1

R topics documented:

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browse.dbgap   *Open the dbGap webpag of your study in your browser*

Description

Open the dbGap webpag of your study in your browser

Usage

```
browse.dbgap(phs, no.browser = FALSE)
```

Arguments

phs   dbGap study ID (phs00xxxx, or 00xxxx, or xxx)

jupyter   set on TRUE if you are in a jypyterhub environment

Value

Open the dbGap webpag of your study in your browser

Author(s)

Gregoire Versmee, Laura Versmee, Mikael Dusenne, Niloofar Jalali

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browse.study   *Open the study webpage in a web browser*

Description

Open the study webpage in a web browser

Usage

```
browse.study(phs, no.browser = FALSE)
```

Arguments

phs   dbGap study ID (phs00xxxx, or 00xxxx, or xxx)

jupyter   set on TRUE if you are in a jypyterhub environment

Value

Open the study webpage in a web browser

Author(s)

Gregoire Versmee, Laura Versmee, Mikael Dusenne, Niloofar Jalali

consent.groups	*Gets you the list of the consent groups of the study*

Description

Gets you the list of the consent groups of the study

Usage

```
consent.groups(phs)
```

Arguments

phs   dbGap study ID (phs00xxxx, or 00xxxx, or xxx)

Value

Returns a data frame with 3 cols : "consent group number", "cg short name" and "cg long name"

Author(s)

Gregoire Versmee, Laura Versmee, Mikael Dusenne, Niloofar Jalali

datatables.dict	*Create a tables dictionnary of your study*

Description

This function extracts informations from data.dict.xml files from the dbgap ftp server to create a table dictionnary.

Usage

```
datatables.dict(phs)
```

Arguments

phs   dbGap ID of your study "phs000000". No version please, as it will automatically return the latest one.

Value

a data.frame with 3 cols : XXXXX

Author(s)

Gregoire Versmee, Laura Versmee, Mikael Dusenne, Niloofar Jalali

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dbgap.data_dict	*Create a table dictionnary and a variable dictionnary*

Description

This function extracts informations from data.dict xml files in dbgap to create table dictionnary and a variable dictionnary.

Usage

```
dbgap.data_dict(xml, dest)
```

Arguments

xml	Folder where the xml files are located
dest	Folder where the data dictionnary and the table dictionnary will be extracted

Value

2 csv files "phs_tables_dict.csv" and "phs_variables_dict.csv"

Author(s)

Gregoire Versmee, Laura Versmee, Mikael Dusenne, Niloofar Jalali

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dbgap.decrypt	*Decrypt ncbi_enc files*

Description

This function decrypts dbGap files (*ncbi_enc) using your personnal key. Be careful, it can replace the settings of your "vdb-info" file

Usage

```
dbgap.decrypt(files, key = FALSE)
```

Arguments

file	file or folder where your encrypted files are located

Value

Decrypt the file(s) and replace it in the same folder

Author(s)

Gregoire Versmee, Laura Versmee, Mikael Dusenne, Niloofar Jalali

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dbgap.download *Decrypt ncbi_enc files*

Description

This function decrypts dbGap files (*ncbi_enc) using your personnal key. Be careful, it can replace the settings of your "vdb-info" file

Usage

```
dbgap.download(krt, key = FALSE)
```

Arguments

file   file or folder where your encrypted files are located

Value

Decrypt the file(s) and replace it in the same folder

Author(s)

Gregoire Versmee, Laura Versmee, Mikael Dusenne, Niloofar Jalali

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is.parent *Is the study a parent or a child study*

Description

Is the study a parent or a child study

Usage

```
is.parent(phs)
```

Arguments

phs   dbGap study ID (phs00xxxx, or 00xxxx, or xxx)

Value

Returns a logical TRUE if the study is a parent, and false if the study is a child

Author(s)

Gregoire Versmee, Laura Versmee, Mikael Dusenne, Niloofar Jalali

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n.pop   *Gets the population number of the study*

Description

This function extracts informations from data.dict.xml files from the dbgap ftp server to get the population characteristics. Works only for parents studies.

Usage

```
n.pop(phs, consentgroups = TRUE, gender = TRUE)
```

Arguments

phs   dbGap study ID (phs00xxxx, or 00xxxx, or xxx)

consentgroup   if false, will return only the total number of participants

Value

a data.frame with 2 cols : name of the consent group and n total. Possibility to add the breakdown by gender

Author(s)

Gregoire Versmee, Laura Versmee, Mikael Dusenne, Niloofar Jalali

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n.tables   *Gets the number of phenotypic datatables in the study*

Description

This function extracts informations from data.dict.xml files from the dbgap ftp server to get the study characteristics. Works only for a parent study.

Usage

```
n.tables(phs)
```

Arguments

phs   dbGap study ID (phs00xxxx, or 00xxxx, or xxx)

Value

Return the number of phenotypic datatables in the study

Author(s)

Gregoire Versmee, Laura Versmee, Mikael Dusenne, Niloofar Jalali

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n.variables | *Gets the number of phenotypic variables in the study*

Description

This function extracts informations from data.dict.xml files from the dbgap ftp server to get the study characteristics. Works only for a parent study.

Usage

```
n.variables(phs)
```

Arguments

phs   dbGap study ID (phs00xxxx, or 00xxxx, or xxx)

Value

Return the number of phenotypic datatables in the study

Author(s)

Gregoire Versmee, Laura Versmee, Mikael Dusenne, Niloofar Jalali

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parent.study | *Gets you the parent study of the specified study*

Description

Gets you the parent study of the specified study

Usage

```
parent.study(phs)
```

Arguments

phs   dbGap study ID (phs00xxxx, or 00xxxx, or xxx)

Value

Returns the phs id of the latest version of the parent study, and its full name. If the study is it's parent itself, will return the phs id and the name of the study.

Author(s)

Gregoire Versmee, Laura Versmee, Mikael Dusenne, Niloofar Jalali

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| phs.version | *Gets you the full dbGap study ID of your study, with the latest version* |

Description

Gets you the full dbGap study ID of your study, with the latest version

Usage

```
phs.version(phs)
```

Arguments

phs   dbGap study ID (phs00xxxx, or 00xxxx, or xxx)

Value

Returns the full ID of the latest version of your study

Author(s)

Gregoire Versmee, Laura Versmee, Mikael Dusenne, Niloofar Jalali

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| search.dbgap | *Open the results of your search on dbGap* |

Description

Open the results of your search on dbGap

Usage

```
search.dbgap(term, no.browser = FALSE)
```

Arguments

term   Term of your search
jupyter   set on TRUE if you are in a jypyterhub environment

Value

Open the results of your search on dbGap

Author(s)

Gregoire Versmee, Laura Versmee, Mikael Dusenne, Niloofar Jalali

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study.name *Gets you the full name of the study on dbGap*

Description

Gets you the full name of the study on dbGap

Usage

```
study.name(phs)
```

Arguments

phs   dbGap study ID (phs00xxxx, or 00xxxx, or xxx)

Value

Returns the full name of the study

Author(s)

Gregoire Versmee, Laura Versmee, Mikael Dusenne, Niloofar Jalali

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sub.study *Gives the substudies associated with the one selected*

Description

Gives the substudies associated with the one selected

Usage

```
sub.study(phs)
```

Arguments

phs   dbGap study ID (phs00xxxx, or 00xxxx, or xxx)

Value

Returns a dataframe with 2 cols : the phs id and the name of the substudy

Author(s)

Gregoire Versmee, Laura Versmee, Mikael Dusenne, Niloofar Jalali

variables.dict	*Create a variables dictionnary of your study*

Description

This function extracts informations from data.dict.xml files from the dbgap ftp server to create a variable dictionnary.

Usage

```
variables.dict(phs)
```

Arguments

phs   dbGap study ID (phs00xxxx, or 00xxxx, or xxx)

Value

a data.frame with 4 cols : variable identifier (dbGap), table name, variable name, variable description

Author(s)

Gregoire Versmee, Laura Versmee, Mikael Dusenne, Niloofar Jalali

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