

Package ‘CohortDiagnostics’

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Type Package

Title Diagnostics for OHDSI Cohorts

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Description Diagnostics for cohorts that use the OMOP Common Data Model and the OHDSI tools.

Depends DatabaseConnector (>= 4.0.0),
FeatureExtraction (>= 3.1.0),
R (>= 4.0.0)

Imports Andromeda,
checkmate,
CirceR,
digest,
dplyr (>= 1.0.0),
ParallelLogger (>= 2.0.0),
readr (>= 1.4.0),
rlang,
RJSONIO,
ROhdsiWebApi (>= 1.2.0),
SqlRender (>= 1.7.0),
stringr,
tidyr (>= 1.0.0),
methods

Suggests purrr,
shiny,
shinydashboard,
shinyWidgets,
ggplot2,
ggiraph,
DT,
plotly,
htmltools,
RColorBrewer,
scales,
knitr,
rmarkdown,
Eunomia,
testthat,

RSQLite ($\geq 2.2.1$),
zip
Remotes ohdsi/Eunomia,
ohdsi/FeatureExtraction,
ohdsi/ROhdsiWebApi,
ohdsi/CirceR
License Apache License
VignetteBuilder knitr
URL <https://ohdsi.github.io/CohortDiagnostics>, <https://github.com/OHDSI/CohortDiagnostics>
BugReports <https://github.com/OHDSI/CohortDiagnostics/issues>
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Encoding UTF-8
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R topics documented:

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checkInputFileEncoding
Check character encoding of input file

Description

For its input files, CohortDiagnostics only accepts UTF-8 or ASCII character encoding. This function can be used to check whether a file meets these criteria.

Usage

checkInputFileEncoding(fileName)

Arguments

fileName The path to the file to check

Value

Throws an error if the input file does not have the correct encoding.

| | |
|-------------------|-------------------------------|
| createCohortTable | <i>Create cohort table(s)</i> |
|-------------------|-------------------------------|

Description

This function creates an empty cohort table. Optionally, additional empty tables are created to store statistics on the various inclusion criteria.

Usage

```
createCohortTable(
  connectionDetails = NULL,
  connection = NULL,
  cohortDatabaseSchema,
  cohortTable = "cohort",
  createInclusionStatsTables = FALSE,
  resultsDatabaseSchema = cohortDatabaseSchema,
  cohortInclusionTable = paste0(cohortTable, "_inclusion"),
  cohortInclusionResultTable = paste0(cohortTable, "_inclusion_result"),
  cohortInclusionStatsTable = paste0(cohortTable, "_inclusion_stats"),
  cohortSummaryStatsTable = paste0(cohortTable, "_summary_stats")
)
```

Arguments

| | |
|----------------------------|--|
| connectionDetails | An object of type connectionDetails as created using the createConnectionDetails function in the DatabaseConnector package. Can be left NULL if connection is provided. |
| connection | An object of type connection as created using the connect function in the DatabaseConnector package. Can be left NULL if connectionDetails is provided, in which case a new connection will be opened at the start of the function, and closed when the function finishes. |
| cohortDatabaseSchema | Schema name where your cohort table resides. Note that for SQL Server, this should include both the database and schema name, for example 'scratch.dbo'. |
| cohortTable | Name of the cohort table. |
| createInclusionStatsTables | Create the four additional tables for storing inclusion rule statistics? |
| resultsDatabaseSchema | Schema name where the statistics tables reside. Note that for SQL Server, this should include both the database and schema name, for example 'scratch.dbo'. |
| cohortInclusionTable | Name of the inclusion table, one of the tables for storing inclusion rule statistics. |
| cohortInclusionResultTable | Name of the inclusion result table, one of the tables for storing inclusion rule statistics. |

cohortInclusionStatsTable
 Name of the inclusion stats table, one of the tables for storing inclusion rule statistics.

cohortSummaryStatsTable
 Name of the summary stats table, one of the tables for storing inclusion rule statistics.

createResultsDataModel

Create the results data model tables on a database server.

Description

Create the results data model tables on a database server.

Usage

```
createResultsDataModel(connection = NULL, connectionDetails = NULL, schema)
```

Arguments

connection An object of type connection as created using the [connect](#) function in the DatabaseConnector package. Can be left NULL if connectionDetails is provided, in which case a new connection will be opened at the start of the function, and closed when the function finishes.

connectionDetails An object of type connectionDetails as created using the [createConnectionDetails](#) function in the DatabaseConnector package. Can be left NULL if connection is provided.

schema The schema on the postgres server where the tables will be created.

Details

Only PostgreSQL servers are supported.

getCohortCounts *Count the cohort(s)*

Description

Computes the subject and entry count per cohort

Usage

```
getCohortCounts(
  connectionDetails = NULL,
  connection = NULL,
  cohortDatabaseSchema,
  cohortTable = "cohort",
  cohortIds = c()
)
```

Arguments

| | |
|----------------------|--|
| connectionDetails | An object of type connectionDetails as created using the createConnectionDetails function in the DatabaseConnector package. Can be left NULL if connection is provided. |
| connection | An object of type connection as created using the connect function in the DatabaseConnector package. Can be left NULL if connectionDetails is provided, in which case a new connection will be opened at the start of the function, and closed when the function finishes. |
| cohortDatabaseSchema | Schema name where your cohort table resides. Note that for SQL Server, this should include both the database and schema name, for example 'scratch.dbo'. |
| cohortTable | Name of the cohort table. |
| cohortIds | The cohort Id(s) used to reference the cohort in the cohort table. If left empty, all cohorts in the table will be included. |

Value

A tibble with cohort counts

getResultsDataModelSpecifications

Get specifications for Cohort Diagnostics results data model

Description

Get specifications for Cohort Diagnostics results data model

Usage

```
getResultsDataModelSpecifications()
```

Value

A tibble data frame object with specifications

instantiateCohort

Instantiate a cohort

Description

This function instantiates the cohort in the cohort table. Optionally, the inclusion rule statistics are computed and stored in the inclusion rule statistics tables described in [createCohortTable](#)).

Usage

```

instantiateCohort(
  connectionDetails = NULL,
  connection = NULL,
  cdmDatabaseSchema,
  oracleTempSchema = NULL,
  tempEmulationSchema = NULL,
  OracleTempSchema = NULL,
  cohortDatabaseSchema = cdmDatabaseSchema,
  cohortTable = "cohort",
  baseUrl = NULL,
  cohortJson = NULL,
  cohortSql = NULL,
  cohortId = NULL,
  generateInclusionStats = FALSE,
  resultsDatabaseSchema = cohortDatabaseSchema,
  vocabularyDatabaseSchema = cdmDatabaseSchema,
  cohortInclusionTable = paste0(cohortTable, "_inclusion"),
  cohortInclusionResultTable = paste0(cohortTable, "_inclusion_result"),
  cohortInclusionStatsTable = paste0(cohortTable, "_inclusion_stats"),
  cohortSummaryStatsTable = paste0(cohortTable, "_summary_stats")
)

```

Arguments

| | |
|----------------------|--|
| connectionDetails | An object of type connectionDetails as created using the createConnectionDetails function in the DatabaseConnector package. Can be left NULL if connection is provided. |
| connection | An object of type connection as created using the connect function in the DatabaseConnector package. Can be left NULL if connectionDetails is provided, in which case a new connection will be opened at the start of the function, and closed when the function finishes. |
| cdmDatabaseSchema | Schema name where your patient-level data in OMOP CDM format resides. Note that for SQL Server, this should include both the database and schema name, for example 'cdm_data.dbo'. |
| oracleTempSchema | DEPRECATED by DatabaseConnector: use tempEmulationSchema instead. |
| tempEmulationSchema | Some database platforms like Oracle and Impala do not truly support temp tables. To emulate temp tables, provide a schema with write privileges where temp tables can be created. |
| cohortDatabaseSchema | Schema name where your cohort table resides. Note that for SQL Server, this should include both the database and schema name, for example 'scratch.dbo'. |
| cohortTable | Name of the cohort table. |
| baseUrl | The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI". Needn't be provided if cohortJson and cohortSql are provided. |
| cohortJson | A character string containing the JSON of a cohort definition. Needn't be provided if baseUrl and cohortId are provided. |

| | |
|----------------------------|---|
| cohortSql | The OHDSI SQL representation of the same cohort definition. Needn't be provided if baseUrl and cohortId are provided. |
| cohortId | The cohort ID used to reference the cohort in the cohort table. |
| generateInclusionStats | Compute and store inclusion rule statistics? |
| resultsDatabaseSchema | Schema name where the statistics tables reside. Note that for SQL Server, this should include both the database and schema name, for example 'scratch.dbo'. |
| vocabularyDatabaseSchema | Schema name where your OMOP vocabulary data resides. This is commonly the same as cdmDatabaseSchema. Note that for SQL Server, this should include both the database and schema name, for example 'vocabulary.dbo'. |
| cohortInclusionTable | Name of the inclusion table, one of the tables for storing inclusion rule statistics. |
| cohortInclusionResultTable | Name of the inclusion result table, one of the tables for storing inclusion rule statistics. |
| cohortInclusionStatsTable | Name of the inclusion stats table, one of the tables for storing inclusion rule statistics. |
| cohortSummaryStatsTable | Name of the summary stats table, one of the tables for storing inclusion rule statistics. |

instantiateCohortSet *Instantiate a set of cohort*

Description

This function instantiates a set of cohort in the cohort table, using definitions that are fetched from a WebApi interface. Optionally, the inclusion rule statistics are computed and stored in the inclusionStatisticsFolder.

Usage

```
instantiateCohortSet(
  connectionDetails = NULL,
  connection = NULL,
  cdmDatabaseSchema,
  vocabularyDatabaseSchema = cdmDatabaseSchema,
  tempEmulationSchema = NULL,
  oracleTempSchema = NULL,
  cohortDatabaseSchema = cdmDatabaseSchema,
  cohortTable = "cohort",
  cohortIds = NULL,
  packageName = NULL,
  cohortToCreateFile = "settings/CohortsToCreate.csv",
  baseUrl = NULL,
  cohortSetReference = NULL,
  generateInclusionStats = FALSE,
```

```

inclusionStatisticsFolder = NULL,
createCohortTable = FALSE,
incremental = FALSE,
incrementalFolder = NULL
)

```

Arguments

connectionDetails

An object of type `connectionDetails` as created using the `createConnectionDetails` function in the `DatabaseConnector` package. Can be left `NULL` if connection is provided.

connection

An object of type `connection` as created using the `connect` function in the `DatabaseConnector` package. Can be left `NULL` if `connectionDetails` is provided, in which case a new connection will be opened at the start of the function, and closed when the function finishes.

cdmDatabaseSchema

Schema name where your patient-level data in OMOP CDM format resides. Note that for SQL Server, this should include both the database and schema name, for example `'cdm_data.dbo'`.

vocabularyDatabaseSchema

Schema name where your OMOP vocabulary data resides. This is commonly the same as `cdmDatabaseSchema`. Note that for SQL Server, this should include both the database and schema name, for example `'vocabulary.dbo'`.

tempEmulationSchema

Some database platforms like Oracle and Impala do not truly support temp tables. To emulate temp tables, provide a schema with write privileges where temp tables can be created.

oracleTempSchema

DEPRECATED by `DatabaseConnector`: use `tempEmulationSchema` instead.

cohortDatabaseSchema

Schema name where your cohort table resides. Note that for SQL Server, this should include both the database and schema name, for example `'scratch.dbo'`.

cohortTable

Name of the cohort table.

cohortIds

Optionally, provide a subset of cohort IDs to restrict the construction to.

packageName

The name of the package containing the cohort definitions. Can be left `NULL` if `baseUrl` and `cohortSetReference` have been specified.

cohortToCreateFile

The location of the `cohortToCreate` file within the package. Is ignored if `baseUrl` and `cohortSetReference` have been specified. The `cohortToCreateFile` must be `.csv` file that is expected to be read into a `dataframe` object identical to requirements for `cohortSetReference` argument. This `csv` file is expected to be encoded in either ASCII or UTF-8, if not, an error message will be displayed and process stopped.

baseUrl

The base URL for the `WebApi` instance, for example: `"http://server.org:80/WebAPI"`. Can be left `NULL` if `packageName` and `cohortToCreateFile` have been specified.

cohortSetReference

A data frame with four columns, as described in the details. Can be left `NULL` if `packageName` and `cohortToCreateFile` have been specified.

| | |
|--|--|
| <code>generateInclusionStats</code> | Compute and store inclusion rule statistics? |
| <code>inclusionStatisticsFolder</code> | The folder where the inclusion rule statistics are stored. Can be left NULL if <code>generateInclusionStats = FALSE</code> . |
| <code>createCohortTable</code> | Create the cohort table? If <code>incremental = TRUE</code> and the table already exists this will be skipped. |
| <code>incremental</code> | Create only cohorts that haven't been created before? |
| <code>incrementalFolder</code> | If <code>incremental = TRUE</code> , specify a folder where records are kept of which definition has been executed. |

Details

Currently two ways of executing this function are supported, either (1) [Package Mode] embedded in a study package, assuming the cohort definitions are stored in that package using the `ROhdsiWebApi::insertCohortD` or (2) [WebApi Mode] By using a WebApi interface to retrieve the cohort definitions.

When using this function in Package Mode: Use the `packageName` and `cohortToCreateFile` to specify the name of the study package, and the name of the cohortToCreate file within that package, respectively

When using this function in WebApi Mode: use the `baseUrl` and `cohortSetReference` to specify how to connect to the WebApi, and which cohorts to fetch, respectively.

Note: if the parameters for both Package Mode and WebApi Mode are provided, then Package mode is preferred.

The `cohortSetReference` argument must be a data frame with the following columns:

- referentConceptId** A standard omop concept id that serves as the referant phenotype definition for the cohort Id.
- cohortId** The cohort Id is the id used to identify a cohort definition. This is required to be unique. It will be used to create file names. It is recommended to be $(\text{referentConceptId} * 1000) + \text{a number between 3 to 999}$
- webApiCohortId** Cohort Id in the webApi/atlas instance. It is a required field to run Cohort Diagnostics in WebApi mode. It is discarded in package mode.
- cohortName** The full name of the cohort. This will be shown in the Shiny app.
- logicDescription** A human understandable brief description of the cohort definition. This logic does not have to a fully specified description of the cohort definition, but should provide enough context to help user understand the meaning of the cohort definition

Value

A data frame with cohort counts

| | |
|----------------------|--|
| launchCohortExplorer | <i>Launch the CohortExplorer Shiny app</i> |
|----------------------|--|

Description

Launch the CohortExplorer Shiny app

Usage

```
launchCohortExplorer(  
  connectionDetails,  
  cdmDatabaseSchema,  
  cohortDatabaseSchema,  
  cohortTable,  
  cohortId,  
  sampleSize = 100,  
  subjectIds = NULL  
)
```

Arguments

| | |
|----------------------|--|
| connectionDetails | An object of type connectionDetails as created using the createConnectionDetails function in the DatabaseConnector package. |
| cdmDatabaseSchema | Schema name where your patient-level data in OMOP CDM format resides. Note that for SQL Server, this should include both the database and schema name, for example 'cdm_data.dbo'. |
| cohortDatabaseSchema | Schema name where your cohort table resides. Note that for SQL Server, this should include both the database and schema name, for example 'scratch.dbo'. |
| cohortTable | Name of the cohort table. |
| cohortId | The ID of the cohort. |
| sampleSize | Number of subjects to sample from the cohort. Ignored if subjectIds is specified. |
| subjectIds | A vector of subject IDs to view. |

Details

Launches a Shiny app that allows the user to explore a cohort of interest.

launchDiagnosticsExplorer

Launch the Diagnostics Explorer Shiny app

Description

Launch the Diagnostics Explorer Shiny app

Usage

```
launchDiagnosticsExplorer(
  dataFolder = "data",
  dataFile = "PreMerged.RData",
  connectionDetails = NULL,
  resultsDatabaseSchema = NULL,
  vocabularyDatabaseSchema = resultsDatabaseSchema,
  aboutText = NULL,
  runOverNetwork = FALSE,
  port = 80,
  launch.browser = FALSE
)
```

Arguments

| | |
|--------------------------|--|
| dataFolder | A folder where the premerged file is stored. Use the preMergeDiagnosticsFiles function to generate this file. |
| dataFile | (Optional) The name of the .RData file with results. It is commonly known as the Premerged file. |
| connectionDetails | An object of type connectionDetails as created using the createConnectionDetails function in the DatabaseConnector package, specifying how to connect to the server where the CohortDiagnostics results have been uploaded using the uploadResults function. |
| resultsDatabaseSchema | The schema on the database server where the CohortDiagnostics results have been uploaded. |
| vocabularyDatabaseSchema | The schema on the database server where the vocabulary tables are located. |
| aboutText | Text (using HTML markup) that will be displayed in an About tab in the Shiny app. If not provided, no About tab will be shown. |
| runOverNetwork | (optional) Do you want the app to run over your network? |
| port | (optional) Only used if runOverNetwork = TRUE. |
| launch.browser | Should the app be launched in your default browser, or in a Shiny window. Note: copying to clipboard will not work in a Shiny window. |

Details

Launches a Shiny app that allows the user to explore the diagnostics

```
preMergeDiagnosticsFiles
```

Premerge Shiny diagnostics files

Description

This function combines diagnostics results from one or more databases into a single file. The result is a single file that can be used as input for the Diagnostics Explorer Shiny app.

It also checks whether the results conform to the results data model specifications.

Usage

```
preMergeDiagnosticsFiles(dataFolder, tempFolder = tempdir())
```

Arguments

| | |
|------------|--|
| dataFolder | folder where the exported zip files for the diagnostics are stored. Use the runCohortDiagnostics function to generate these zip files. Zip files containing results from multiple databases may be placed in the same folder. |
| tempFolder | A folder on the local file system where the zip files are extracted to. Will be cleaned up when the function is finished. Can be used to specify a temp folder on a drive that has sufficient space if the default system temp space is too limited. |

```
runCohortDiagnostics
```

Run cohort diagnostics

Description

Runs the cohort diagnostics on all (or a subset of) the cohorts instantiated using the `ROhdsiWebApi::insertCohortDefinition` function. Assumes the cohorts have already been instantiated.

Characterization: If `runTemporalCohortCharacterization` argument is `TRUE`, then the following default covariateSettings object will be created using `RFeatureExtraction::createTemporalCovariateSettings`. Alternatively, a covariate setting object may be created using the above as an example.

Usage

```
runCohortDiagnostics(
  packageName = NULL,
  cohortToCreateFile = "settings/CohortsToCreate.csv",
  baseUrl = NULL,
  cohortSetReference = NULL,
  phenotypeDescriptionFile = NULL,
  connectionDetails = NULL,
  connection = NULL,
  cdmDatabaseSchema,
  oracleTempSchema = NULL,
  tempEmulationSchema = NULL,
  cohortDatabaseSchema,
```

```

vocabularyDatabaseSchema = cdmDatabaseSchema,
cohortTable = "cohort",
cohortIds = NULL,
inclusionStatisticsFolder = file.path(exportFolder, "inclusionStatistics"),
exportFolder,
databaseId,
databaseName = databaseId,
databaseDescription = databaseId,
cdmVersion = 5,
runInclusionStatistics = TRUE,
runIncludedSourceConcepts = TRUE,
runOrphanConcepts = TRUE,
runTimeDistributions = TRUE,
runVisitContext = TRUE,
runBreakdownIndexEvents = TRUE,
runIncidenceRate = TRUE,
runCohortOverlap = TRUE,
runCohortCharacterization = TRUE,
covariateSettings = createDefaultCovariateSettings(),
runTemporalCohortCharacterization = TRUE,
temporalCovariateSettings = createTemporalCovariateSettings(useConditionOccurrence =
  TRUE, useDrugEraStart = TRUE, useProcedureOccurrence = TRUE, useMeasurement = TRUE,
  temporalStartDays = c(-365, -30, 0, 1, 31), temporalEndDays = c(-31, -1, 0, 30, 365)),
minCellCount = 5,
incremental = FALSE,
incrementalFolder = file.path(exportFolder, "incremental")
)

```

Arguments

- | | |
|--------------------------|--|
| packageName | The name of the package containing the cohort definitions. Can be left NULL if baseUrl and cohortSetReference have been specified. |
| cohortToCreateFile | The location of the cohortToCreate file within the package. Is ignored if baseUrl and cohortSetReference have been specified. The cohortToCreateFile must be .csv file that is expected to be read into a dataframe object identical to requirements for cohortSetReference argument. This csv file is expected to be encoded in either ASCII or UTF-8, if not, an error message will be displayed and process stopped. |
| baseUrl | The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI". Can be left NULL if packageName and cohortToCreateFile have been specified. |
| cohortSetReference | A data frame with four columns, as described in the details. Can be left NULL if packageName and cohortToCreateFile have been specified. |
| phenotypeDescriptionFile | (Optional) The location of the phenotype description file within the package. The file must be .csv file and have the following columns that may be read into following data types: phenotypeId (double), phenotypeName (character), referentConceptId (double), clinicalDescription (character), literatureReview (character), phenotypeNotes (character). Note: the field names are in snake_case. Also, character fields should not have 'NA' in it. 'NA's are commonly added |

by R when R functions exports data from dataframe into CSV. Instead please use "" (empty string) to represent absence of data. The literature_review field is expected to be a html link to page that contains resources related to literature review for the phenotype, and will be used to create link-out object. This csv file is expected to be encoded in either ASCII or UTF-8, if not, an error message will be displayed and process stopped.

| | |
|---------------------------|--|
| connectionDetails | An object of type connectionDetails as created using the createConnectionDetails function in the DatabaseConnector package. Can be left NULL if connection is provided. |
| connection | An object of type connection as created using the connect function in the DatabaseConnector package. Can be left NULL if connectionDetails is provided, in which case a new connection will be opened at the start of the function, and closed when the function finishes. |
| cdmDatabaseSchema | Schema name where your patient-level data in OMOP CDM format resides. Note that for SQL Server, this should include both the database and schema name, for example 'cdm_data.dbo'. |
| oracleTempSchema | DEPRECATED by DatabaseConnector: use tempEmulationSchema instead. |
| tempEmulationSchema | Some database platforms like Oracle and Impala do not truly support temp tables. To emulate temp tables, provide a schema with write privileges where temp tables can be created. |
| cohortDatabaseSchema | Schema name where your cohort table resides. Note that for SQL Server, this should include both the database and schema name, for example 'scratch.dbo'. |
| vocabularyDatabaseSchema | Schema name where your OMOP vocabulary data resides. This is commonly the same as cdmDatabaseSchema. Note that for SQL Server, this should include both the database and schema name, for example 'vocabulary.dbo'. |
| cohortTable | Name of the cohort table. |
| cohortIds | Optionally, provide a subset of cohort IDs to restrict the diagnostics to. |
| inclusionStatisticsFolder | The folder where the inclusion rule statistics are stored. Can be left NULL if runInclusionStatistics = FALSE. |
| exportFolder | The folder where the output will be exported to. If this folder does not exist it will be created. |
| databaseId | A short string for identifying the database (e.g. 'Synpuf'). |
| databaseName | The full name of the database. If NULL, defaults to databaseId. |
| databaseDescription | A short description (several sentences) of the database. If NULL, defaults to databaseId. |
| cdmVersion | The version of the OMOP CDM. Default 5. (Note: only 5 is supported.) |
| runInclusionStatistics | Generate and export statistic on the cohort inclusion rules? |
| runIncludedSourceConcepts | Generate and export the source concepts included in the cohorts? |

| | |
|-----------------------------------|--|
| runOrphanConcepts | Generate and export potential orphan concepts? |
| runTimeDistributions | Generate and export cohort time distributions? |
| runVisitContext | Generate and export index-date visit context? |
| runBreakdownIndexEvents | Generate and export the breakdown of index events? |
| runIncidenceRate | Generate and export the cohort incidence rates? |
| runCohortOverlap | Generate and export the cohort overlap? Overlaps are checked within cohortIds that have the same phenotype ID sourced from the CohortSetReference or cohortToCreateFile. |
| runCohortCharacterization | Generate and export the cohort characterization? Only records with values greater than 0.0001 are returned. |
| covariateSettings | Either an object of type covariateSettings as created using one of the createCovariateSettings function in the FeatureExtraction package, or a list of such objects. |
| runTemporalCohortCharacterization | Generate and export the temporal cohort characterization? Only records with values greater than 0.001 are returned. |
| temporalCovariateSettings | Either an object of type covariateSettings as created using one of the createTemporalCovariateSettings function in the FeatureExtraction package, or a list of such objects. |
| minCellCount | The minimum cell count for fields contains person counts or fractions. |
| incremental | Create only cohort diagnostics that haven't been created before? |
| incrementalFolder | If incremental = TRUE, specify a folder where records are kept of which cohort diagnostics has been executed. |

Details

Currently two ways of executing this function are supported, either (1) [Package Mode] embedded in a study package, assuming the cohort definitions are stored in that package using the `ROhdsiWebApi::insertCohortDefinitions` or (2) [WebApi Mode] By using a WebApi interface to retrieve the cohort definitions.

When using this function in Package Mode: Use the `packageName` and `cohortToCreateFile` to specify the name of the study package, and the name of the cohortToCreate file within that package, respectively

When using this function in WebApi Mode: use the `baseUrl` and `cohortSetReference` to specify how to connect to the WebApi, and which cohorts to fetch, respectively.

Note: if the parameters for both Package Mode and WebApi Mode are provided, then Package mode is preferred.

The `cohortSetReference` argument must be a data frame with the following columns:

referentConceptId A standard omop concept id that serves as the referant phenotype definition for the cohort Id.

cohortId The cohort Id is the id used to identify a cohort definition. This is required to be unique. It will be used to create file names. It is recommended to be (referrentConceptId * 1000) + a number between 3 to 999

webApiCohortId Cohort Id in the webApi/atlas instance. It is a required field to run Cohort Diagnostics in WebApi mode. It is discarded in package mode.

cohortName The full name of the cohort. This will be shown in the Shiny app.

logicDescription A human understandable brief description of the cohort definition. This logic does not have to a fully specified description of the cohort definition, but should provide enough context to help user understand the meaning of the cohort definition

| | |
|---------------------|---|
| uploadPrintFriendly | <i>Upload print-friendly cohort representations to the database server.</i> |
|---------------------|---|

Description

For all the cohorts in the 'cohort' table, this will generate print-friendly text and store it in a new table called 'cohort_extra'.

Usage

```
uploadPrintFriendly(connectionDetails = NULL, schema)
```

Arguments

| | |
|-------------------|---|
| connectionDetails | An object of type connectionDetails as created using the createConnectionDetails function in the DatabaseConnector package. |
| schema | The schema on the postgres server where the results are stored. |

| | |
|---------------|---|
| uploadResults | <i>Upload results to the database server.</i> |
|---------------|---|

Description

Requires the results data model tables have been created using the [createResultsDataModel](#) function.

Set the POSTGRES_PATH environmental variable to the path to the folder containing the psql executable to enable bulk upload (recommended).

Usage

```
uploadResults(
  connectionDetails = NULL,
  schema,
  zipFileName,
  forceOverWriteOfSpecifications = FALSE,
  purgeSiteDataBeforeUploading = TRUE,
  tempFolder = tempdir()
)
```


Arguments

| | |
|--------------------------------|--|
| connectionDetails | An object of type connectionDetails as created using the createConnectionDetails function in the DatabaseConnector package. |
| schema | The schema on the postgres server where the tables have been created. |
| zipFileName | The name of the zip file. |
| forceOverWriteOfSpecifications | If TRUE, specifications of the phenotypes, cohort definitions, and analysis will be overwritten if they already exist on the database. Only use this if these specifications have changed since the last upload. |
| purgeSiteDataBeforeUploading | If TRUE, before inserting data for a specific databaseId all the data for that site will be dropped. This assumes the input zip file contains the full data for that data site. |
| tempFolder | A folder on the local file system where the zip files are extracted to. Will be cleaned up when the function is finished. Can be used to specify a temp folder on a drive that has sufficient space if the default system temp space is too limited. |

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