# Package 'CatalogueExport'

March 7, 2021

Type Package
Title Exports Descriptive Statistics Summary for the EHDEN Database Catalogue
Version 1.0.1
<b>Date</b> 2021-03-07
Maintainer Peter Rijnbeek <p.rijnbeek@erasmusmc.nl></p.rijnbeek@erasmusmc.nl>
LazyData true
<b>Description</b> Exports descriptive statistics summary for the EHDEN Database Catalogue.
<b>Depends</b> DatabaseConnector (>= 2.0.0)
Imports SqlRender (>= 1.6.0), dplyr, rjson, readr, ParallelLogger
Suggests testthat, R.utils, shiny, DT, shinydashboard, magrittr, tidyr, knitr, rmarkdown  VignetteBuilder knitr  License Apache License  Roxygen list(wrap = FALSE)  RoxygenNote 7.1.1  Encoding UTF-8
R topics documented:
catalogueExport       2         createIndices       4         dropAllScratchTables       5         exportResultsToCSV       5         getAnalysisDetails       6         printAnalysesSql       7

2 catalogueExport

Index 8

 ${\tt catalogueExport}$ 

The main CatalogueExport analyses (for v5.x)

## **Description**

CatalogueExport exports a set of descriptive statistics summary from the CDM, to be uploaded in the Database Catalogue.

## Usage

```
catalogueExport(
  connectionDetails,
  cdmDatabaseSchema,
  resultsDatabaseSchema = cdmDatabaseSchema,
  scratchDatabaseSchema = resultsDatabaseSchema,
  vocabDatabaseSchema = cdmDatabaseSchema,
 oracleTempSchema = resultsDatabaseSchema,
  sourceName = "",
  analysisIds = ""
  createTable = TRUE,
  smallCellCount = 5,
  cdmVersion = "5",
  createIndices = TRUE,
  numThreads = 1,
  tempPrefix = "tmpach",
  dropScratchTables = TRUE,
  sqlOnly = FALSE,
 outputFolder = "output",
  verboseMode = TRUE
)
```

#### **Arguments**

connectionDetails

An R object of type connectionDetails created using the function createConnectionDetails in the DatabaseConnector package.

cdmDatabaseSchema

Fully qualified name of database schema that contains OMOP CDM schema. On SQL Server, this should specify both the database and the schema, so for example, on SQL Server, 'cdm\_instance.dbo'.

resultsDatabaseSchema

Fully qualified name of database schema that we can write final results to. Default is cdmDatabaseSchema. On SQL Server, this should specify both the database and the schema, so for example, on SQL Server, 'cdm\_results.dbo'.

scratchDatabaseSchema

Fully qualified name of the database schema that will store all of the intermediate scratch tables, so for example, on SQL Server, 'cdm\_scratch.dbo'. Must be accessible to/from the cdmDatabaseSchema and the resultsDatabaseSchema. Default is resultsDatabaseSchema. Making this "#" will run CatalogueExport in single-threaded mode and use temporary tables instead of permanent tables.

catalogueExport 3

vocabDatabaseSchema

String name of database schema that contains OMOP Vocabulary. Default is cdmDatabaseSchema. On SQL Server, this should specify both the database and the schema, so for example 'results.dbo'.

oracleTempSchema

For Oracle only: the name of the database schema where you want all temporary tables to be managed. Requires create/insert permissions to this database.

sourceName String name of the data source name. If blank, CDM\_SOURCE table will be

queried to try to obtain this.

analysisIds (OPTIONAL) A vector containing the set of CatalogueExport analysisIds for

which results will be generated. If not specified, all analyses will be executed. Use getAnalysisDetails to get a list of all CatalogueExport analyses and their

Ids.

createTable If true, new results tables will be created in the results schema. If not, the tables

are assumed to already exist, and analysis results will be inserted (slower on

MPP).

smallCellCount To avoid patient identifiability, cells with small counts (<= smallCellCount) are

deleted. Set to NULL if you don't want any deletions.

cdmVersion Define the OMOP CDM version used: currently supports v5 and above. Use

major release number or minor number only (e.g. 5, 5.3)

createIndices Boolean to determine if indices should be created on the resulting CatalogueEx-

port tables. Default= TRUE

numThreads (OPTIONAL, multi-threaded mode) The number of threads to use to run Cata-

logueExport in parallel. Default is 1 thread.

tempPrefix (OPTIONAL, multi-threaded mode) The prefix to use for the scratch Catalogue-

Export analyses tables. Default is "tmpach"

drop Scratch Tables

(OPTIONAL, multi-threaded mode) TRUE = drop the scratch tables (may take

time depending on dbms), FALSE = leave them in place for later removal.

sql0nly Boolean to determine if CatalogueExport should be fully executed. TRUE = just

generate SQL files, don't actually run, FALSE = run CatalogueExport

outputFolder Path to store logs and SQL files

verboseMode Boolean to determine if the console will show all execution steps. Default =

TRUE

# Details

CatalogueExport exports a set of descriptive statistics summary from the CDM, to be uploaded in the Database Catalogue.

## Value

An object of type catalogueResults containing details for connecting to the database containing the results

## **Examples**

```
## Not run:
```

connectionDetails <- createConnectionDetails(dbms="sql server", server="some\_server")
results <- achilles(connectionDetails = connectionDetails,</pre>

4 createIndices

```
cdmDatabaseSchema = "cdm",
    resultsDatabaseSchema="results",
    scratchDatabaseSchema="scratch",
    sourceName="Some Source",
    cdmVersion = "5.3",
    numThreads = 10,
    outputFolder = "output")
## End(Not run)
```

createIndices

Create indicies

## **Description**

Create indicies

## Usage

```
createIndices(
  connectionDetails,
  resultsDatabaseSchema,
  outputFolder,
  sqlOnly = FALSE,
  verboseMode = TRUE,
  catalogueTables = c("catalogue_results", "catalogue_results_dist")
)
```

## **Arguments**

connectionDetails

An R object of type connectionDetails created using the function createConnectionDetails in the DatabaseConnector package.

resultsDatabaseSchema

Fully qualified name of database schema that we can write final results to. Default is cdmDatabaseSchema. On SQL Server, this should specify both the database and the schema, so for example, on SQL Server, 'cdm\_results.dbo'.

outputFolder Path to store logs and SQL files

sql0nly TRUE = just generate SQL files, don't actually run, FALSE = run Achilles

verboseMode Boolean to determine if the console will show all execution steps. Default =

TRUE

 ${\tt catalogueTables}$ 

Which CatalogueExport tables should be indexed? Default is both catalogue\_results and catalogue\_results\_dist.

## **Details**

Post-processing, create indices to help performance. Cannot be used with Redshift.

dropAllScratchTables 5

## **Description**

Drop all possible scratch tables

## Usage

```
dropAllScratchTables(
  connectionDetails,
  scratchDatabaseSchema,
  tempPrefix = "tmpach",
  numThreads = 1,
  tableTypes = "catalogueExport",
  outputFolder,
  verboseMode = TRUE
)
```

## **Arguments**

connectionDetails

An R object of type connectionDetails created using the function createConnectionDetails in the DatabaseConnector package.

scratchDatabaseSchema

string name of database schema that CatalogueExport scratch tables were writ-

ten to.

tempPrefix The prefix to use for the "temporary" (but actually permanent) CatalogueExport

analyses tables. Default is "tmpach"

numThreads The number of threads to use to run this function. Default is 1 thread.

tableTypes The types of scratch tables to drop: catalogueExport

outputFolder Path to store logs and SQL files

verboseMode Boolean to determine if the console will show all execution steps. Default =

**TRUE** 

# **Details**

Drop all possible CatalogueExport scratch tables

exportResultsToCSV The main CatalogueExport analyses (for v5.x)

# Description

exportResults exports the results to a csv file for upload to the Catalogue

6 getAnalysisDetails

### Usage

```
exportResultsToCSV(
  connectionDetails,
  resultsDatabaseSchema,
  analysisIds = c(),
  smallCellCount = 5,
  exportFolder = "./output"
)
```

## **Arguments**

connectionDetails

An R object of type connectionDetails created using the function createConnectionDetails in the DatabaseConnector package.

resultsDatabaseSchema

Fully qualified name of database schema that we can write final results to. Default is cdmDatabaseSchema. On SQL Server, this should specify both the database and the schema, so for example, on SQL Server, 'cdm\_results.dbo'.

analysisIds A vector containing the set of CatalogueExport analysisIds for which results will

be generated.

smallCellCount To avoid patient identifiability, cells with small counts (<= smallCellCount) are

deleted. Set to NULL if you don't want any deletions.

exportFolder Folder to export the results to.

getAnalysisDetails

Get all analysis details

# Description

Get all analysis details

# Usage

```
getAnalysisDetails()
```

## **Details**

Get a list of all analyses with their analysis IDs and strata.

## Value

A data.frame with the analysis details.

printAnalysesSql 7

printAnalysesSql

Print the sql of an analysis

# **Description**

Print the sql of an analysis

# Usage

```
printAnalysesSql(analysisId, connectionDetails)
```

## **Arguments**

analysisId  $\,$  An analysisId for which the sql will be printed. connectionDetails  $\,$ 

An R object of type connectionDetails created using the function createConnectionDetails in the DatabaseConnector package.

# **Details**

Print the parameterized SQL that is run for an analysisId.

# Value

None

# Index

```
catalogueExport, 2
createIndices, 4
dropAllScratchTables, 5
exportResultsToCSV, 5
getAnalysisDetails, 3, 6
printAnalysesSql, 7
```