Package 'Strategus'

June 10, 2022

```
Type Package
Title Coordinating and Executing Analytics Using HADES Modules
Version 0.0.1
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Maintainer Martijn Schuemie <schuemie@ohdsi.org>
Description An R package for coordinating and executing analytics using HADES modules.
License Apache License 2.0
URL https://ohdsi.github.io/Strategus, https://github.com/OHDSI/Strategus
BugReports https://github.com/OHDSI/Strategus/issues
Depends R (>= 4.0.0),
     CohortGenerator,
     DatabaseConnector
Imports targets,
     renv,
     ParallelLogger,
     dplyr,
     checkmate,
     keyring,
     rlang,
     utils,
     R.utils,
     digest,
     SqlRender,
     readr
Suggests testthat,
     fs,
     knitr,
     rmarkdown
Remotes ohdsi/CohortGenerator
VignetteBuilder knitr
NeedsCompilation no
RoxygenNote 7.2.0
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```

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 ${\it add} {\it Module Specifications}$

Add module specifications to analysis specifications

Description

Add module specifications to analysis specifications

Usage

 ${\tt addModuleSpecifications}, \ {\tt moduleSpecifications}, \ {\tt moduleSpecifications})$

Arguments

analysisSpecifications

 $An \ object \ of \ type \ Analysis Specifications \ as \ created \ by \ create Empty Analysis Specifications \ module Specifications$

An object of type ModuleSpecifications.

Value

Returns the analysisSpecifications object with the module specifications added.

addSharedResources

Add shared resources to analysis specifications

Description

Add shared resources to analysis specifications

Usage

 ${\tt addSharedResources} (analysis Specifications, shared Resources) \\$

Arguments

```
analysisSpecifications
```

 $An object of type \verb| Analysis Specifications| as created by \verb| create Empty Analysis Specific interval to the control of type and the control of type and type and$

sharedResources

An object of type SharedResources.

Value

Returns the analysisSpecifications object with the module specifications added.

 ${\tt createEmptyAnalysisSpecificiations}$

Create an emtpy analysis specifications object.

Description

Create an emtpy analysis specifications object.

Usage

```
createEmptyAnalysisSpecificiations()
```

Value

An object of type AnalysisSpecifications.

createExecutionSettings

Create execution settings

Description

Create execution settings

Usage

```
createExecutionSettings(
  connectionDetailsReference,
  workDatabaseSchema,
  cdmDatabaseSchema,
  cohortTableNames = CohortGenerator::getCohortTableNames(cohortTable = "cohort"),
  workFolder,
  resultsFolder,
  minCellCount = 5
)
```

Arguments

connectionDetailsReference

A string that can be used to retrieve database connection details from a secure local store.

workDatabaseSchema

A database schema where intermediate data can be stored. The user (as identified in the connection details) will need to have write access to this database schema.

cdmDatabaseSchema

The database schema containing the data in CDM format. The user (as identified in the connection details) will need to have read access to this database schema.

cohortTableNames

An object identifying the various cohort table names that will be created in the

workDatabaseSchema. This object can be created using the CohortGenerator::getCohortTableNa

function.

workFolder A folder in the local file system where intermediate results can be written. resultsFolder A folder in the local file system where the module output will be written.

minCellCount The minimum number of subjects contributing to a count before it can be in-

cluded in results.

Value

An object of type ExecutionSettings.

ensureAllModulesInstantiated

Ensure all modules are instantiated

Description

Ensure that all modules referenced in the analysis specifications are instantiated locally in the folder specified in the INSTANTIATED_MODULES_FOLDER environmental variable.

Missing modules will be fetched from remote repositories.

This function will also check whether there are different versions of the same module specified, which is not allowed, and whether all modules required by the specified modules are also instantiated.

Usage

ensureAllModulesInstantiated(analysisSpecifications)

Arguments

 $analysis {\tt Specifications}$

An object of type AnalysisSpecifications as created by createEmptyAnalysisSpecificiations

Value

A tibble listing the instantiated modules.

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execute

Execute analysis specifications.

Description

Execute analysis specifications.

Usage

```
execute(
   analysisSpecifications,
   executionSettings,
   executionScriptFolder = NULL
)
```

Arguments

analysisSpecifications

 $An \ object \ of \ type \ Analysis Specifications \ as \ created \ by \ create Empty Analysis Specificiations \ execution Settings$

 $An \ object \ of \ type \ {\tt ExecutionSettings} \ as \ created \ by \ {\tt createExecutionSettings}().$ executionScriptFolder

Optional: the path to use for storing the execution script. when NULL, this function will use a temporary file location to create the script to execute.

Value

Does not return anything. Is called for the side-effect of executing the specified analyses.

retrieveConnectionDetails

Retrieve connection details from the secure location

Description

Retrieve connection details from the secure location

Usage

retrieveConnectionDetails(connectionDetailsReference)

Arguments

 ${\tt connectionDetailsReference}$

A string that can be used to retrieve the settings from the secure store.

Value

Returns an object of type connectionDetails.

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See Also

storeConnectionDetails()

storeConnectionDetails

Store connection details in a secure location

Description

Store connection details in a secure location

Usage

storeConnectionDetails(connectionDetails, connectionDetailsReference)

Arguments

connectionDetails

An object of type connectionDetails as created by the DatabaseConnector::createConnectionDetails as created by the DatabaseConnector::createConnector::crea

connectionDetailsReference

A string that can be used to retrieve the settings from the secure store.

Value

Does not return anything. Is called for the side effect of having the connection details stored.

See Also

retrieveConnectionDetails()

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