Package 'ROhdsiWebApi'

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```
Type Package
Title Interacting With an OHDSI WebApi Instance
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Maintainer Gowtham Rao <rao@ohdsi.org>
Description ROhdsiWebApi is an R based interface to OHDSI WebAPI services, and per-
      forms GET/PULL/POST/DELETE calls via the WebApi.
      All objects starting from R or output to R - are analysis ready R-objects like list and data frame.
     The package handles the intermediary steps by converting R-objects to JSON and vice versa.
License Apache License 2.0
Depends R (>= 3.1.0),
Imports checkmate,
     dplyr,
     httr (>= 1.3.1),
     lubridate,
     openxlsx (>= 4.0.17),
     purrr,
     readr,
     RJSONIO,
     scales,
     SqlRender,
     stringr,
     tibble,
     tidyr,
     rlang
Suggests testthat,
     knitr,
     rmarkdown,
     httpuv,
     jsonlite,
     withr,
     httptest,
     stringi
URL https://ohdsi.github.io/ROhdsiWebApi/, https://github.com/OHDSI/ROhdsiWebApi
BugReports https://github.com/OHDSI/ROhdsiWebApi/issues
NeedsCompilation no
```

RoxygenNote 7.2.3 Encoding UTF-8 VignetteBuilder knitr Language en-US

${\sf R}$ topics documented:

getCohortResults	
getCohortSql	14
getConcepts	5
getConceptSetDefinition	6
getConceptSetDefinitionBySourceKey	57
getConceptSetDefinitionsMetaData	8
getDefinition	8
getDefinitionsMetadata	39
getEstimationDefinition	10
getEstimationDefinitionsMetaData	1
getGenerationInformation	1
getIncidenceRateDefinition	12
getIncidenceRateDefinitionsMetaData	13
getIncidenceRateGenerationInformation	
getIncidenceRateResults	14
getPathwayDefinition	
getPathwayDefinitionsMetaData	
getPathwayGenerationInformation	
getPathwayResults	
getPersonProfile	
getPredictionDefinition	
getPredictionDefinitionsMetaData	
getPriorityVocabularyKey	
getResults	
getSourceConcepts	
getWebApiVersion	
insertCohortDefinitionInPackage	
insertCohortDefinitionSetInPackage	
invokeCharacterizationGeneration	
invokeCohortGeneration	
invokeGeneration	
invokeGeneration	
invokePathwayGeneration	
isValidCharacterizationId	
isValidCohortId	
isValidConceptSetId	
is ValidEstimationId	
is ValidId	
	51 52
	53
•	
	53
•	54
1	55
1	66
1 1	56
1	57
1	58 50
1	59
	70
1	70
F	11
set Auth Header	17

4 authorizeWebApi

odateCohortDefinition
odateConceptSetDefinition
odateDefinition

authorizeWebApi

Authorize ROhdsiWebApi to access a protected instance of WebAPI Authorize the ROhdsiWebApi package to access WebApi on behalf of the user. This can be done with any of the auth methods described below. authorizeWebApi will use attempt to retrieve, cache, and update a token which will grant access to webAPI by all subsequent requests made by the package.

75

Description

Index

Authorize ROhdsiWebApi to access a protected instance of WebAPI Authorize the ROhdsiWebApi package to access WebApi on behalf of the user. This can be done with any of the auth methods described below. authorizeWebApi will use attempt to retrieve, cache, and update a token which will grant access to webAPI by all subsequent requests made by the package.

Usage

```
authorizeWebApi(
  baseUrl,
  authMethod,
  webApiUsername = NULL,
  webApiPassword = NULL
)
```

Arguments

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

authMethod The method used for authentication to WebAPI. Options are

• "db"Database authentication using Atlas/WebAPI built in auth

- "ad"Active Directory
- "windows"Windows NT authentication

The auth method must be enabled in the instance of WebAPI pointed to by baseUrl.

webApiUsername A character string containing the WebApi username passed on to authentication

methods

webApiPassword An character string containing a WebApi password passed on to authentication methods. By default the user will be prompted for their password when needed.

cancelCharacterizationGeneration

Cancel generation of Characterization id.

Description

Cancel generation of Characterization id.

Usage

```
cancel {\tt Characterization Generation (characterization Id, base {\tt Url, source Key)}}
```

Arguments

characterizationId

An integer id representing the id that uniquely identifies a Characterization def-

inition in a WebApi instance.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

sourceKey The source key for a CDM instance in WebAPI, as defined in the Configuration

page

Details

Cancel the generation of Characterization id in the WebApi.

Value

A tibble with job status information.

Examples

cancelCohortGeneration

Cancel generation of Cohort id.

Description

Cancel generation of Cohort id.

Usage

```
cancelCohortGeneration(cohortId, baseUrl, sourceKey)
```

6 cancelGeneration

Arguments

cohortId An integer id representing the id that uniquely identifies a Cohort definition in a

WebApi instance.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

sourceKey The source key for a CDM instance in WebAPI, as defined in the Configuration

page

Details

Cancel the generation of Cohort id in the WebApi.

Value

A tibble with job status information.

Examples

cancelGeneration

Invoke generation.

Description

Invoke generation.

Usage

```
cancelGeneration(id, baseUrl, sourceKey, category)
```

Arguments

id An integer id representing the id that uniquely identifies a definition for the

category in a WebApi instance.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

sourceKey The source key for a CDM instance in WebAPI, as defined in the Configuration

page

category These are the categories in WebApi. The valid string options are 'conceptSet',

'cohort', 'characterization', 'pathway, 'incidenceRate', 'estimation', 'predic-

tion'.

Details

Invoke generation (execution) information.

Value

Error message if invoke failed.

Examples

```
## Not run:
cancelGeneration(id = 13242, category = "cohort", baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

cancelIncidenceRateGeneration

Cancel generation of IncidenceRate id.

Description

Cancel generation of IncidenceRate id.

Usage

cancelIncidenceRateGeneration(incidenceRateId, baseUrl, sourceKey)

Arguments

incidenceRateId

An integer id representing the id that uniquely identifies a IncidenceRate defini-

tion in a WebApi instance.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

sourceKey The source key for a CDM instance in WebAPI, as defined in the Configuration

page

Details

Cancel the generation of IncidenceRate id in the WebApi.

Value

A tibble with job status information.

cancelPathwayGeneration

Cancel generation of Pathway id.

Description

Cancel generation of Pathway id.

Usage

```
cancelPathwayGeneration(pathwayId, baseUrl, sourceKey)
```

Arguments

pathwayId An integer id representing the id that uniquely identifies a Pathway definition in

a WebApi instance.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

sourceKey The source key for a CDM instance in WebAPI, as defined in the Configuration

page

Details

Cancel the generation of Pathway id in the WebApi.

Value

A tibble with job status information.

Examples

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.

 ${\tt convertConceptSetDefinitionToTable}$

Convert a concept set definition to a table

Description

Convert a concept set definition to a table

Usage

 ${\tt convertConceptSetDefinitionToTable(conceptSetDefinition)}$

Arguments

 ${\tt conceptSetDefinition}$

A concept set definition, for example as obtained through the getConceptSetDefinition function, or taken from a cohort definition.

Value

Takes a R (list) representation of the Concept Set expression and returns a table (dataframe) representing the concept set expression. This is useful to create publication friendly output of the concept set expression.

createConceptSetWorkbook

Save a set of concept sets expressions, included concepts, and mapped concepts into a workbook

Description

Save a set of concept sets expressions, included concepts, and mapped concepts into a workbook

Usage

```
createConceptSetWorkbook(
  conceptSetIds,
  fileName,
  baseUrl,
  included = FALSE,
  mapped = FALSE
)
```

Arguments

conceptSetIds A vector of concept set IDs.

fileName The name of the XLSX workbook file.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

included Should included concepts be included in the workbook?

Mapped Should mapped concepts be included in the workbook?

Value

A xlsx workbook that includes a list of all concept set IDs and names and a worksheet for the concepts in each set. Options to include an included concepts and mapped concepts worksheet for each concept set are available.

 ${\tt deleteCharacterizationDefinition}$

Delete Characterization id definition.

Description

Delete Characterization id definition.

Usage

```
\tt delete Characterization Definition (characterization Id, base Url)
```

deleteCohortDefinition 11

Arguments

characterizationId

An integer id representing the id that uniquely identifies a Characterization def-

inition in a WebApi instance.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Delete the Characterization definition from WebAPI for a given Characterization id

Value

None, unless error.

Examples

deleteCohortDefinition

Delete Cohort id definition.

Description

Delete Cohort id definition.

Usage

```
deleteCohortDefinition(cohortId, baseUrl)
```

Arguments

cohortId An integer id representing the id that uniquely identifies a Cohort definition in a

WebApi instance.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Delete the Cohort definition from WebAPI for a given Cohort id

Value

None, unless error.

```
## Not run:
deleteCohortDefinition(cohortId = 13242, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

12 deleteDefinition

deleteConceptSetDefinition

Delete ConceptSet id definition.

Description

Delete ConceptSet id definition.

Usage

```
deleteConceptSetDefinition(conceptSetId, baseUrl)
```

Arguments

conceptSetId An integer id representing the id that uniquely identifies a ConceptSet definition

in a WebApi instance.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Delete the ConceptSet definition from WebAPI for a given ConceptSet id

Value

None, unless error.

Examples

```
## Not run:
deleteConceptSetDefinition(conceptSetId = 13242, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

deleteDefinition

Delete a definition id of a chosen category.

Description

Delete a definition id of a chosen category.

Usage

```
deleteDefinition(id, baseUrl, category)
```

Arguments

An integer id representing the id that uniquely identifies a definition for the

category in a WebApi instance.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

category These are the categories in WebApi. The valid string options are 'conceptSet',

'cohort', 'characterization', 'pathway, 'incidenceRate', 'estimation', 'predic-

tion'.

deleteEstimationDefinition 13

Details

Delete the definition for an id of chosen category in WebApi.

Value

None, unless error.

Examples

```
## Not run:
deleteDefinition(id = 13242, baseUrl = "http://server.org:80/WebAPI", category = "cohort")
## End(Not run)
```

deleteEstimationDefinition

Delete Estimation id definition.

Description

Delete Estimation id definition.

Usage

```
deleteEstimationDefinition(estimationId, baseUrl)
```

Arguments

estimationId An integer id representing the id that uniquely identifies a Estimation definition

in a WebApi instance.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Delete the Estimation definition from WebAPI for a given Estimation id

Value

None, unless error.

```
## Not run:
deleteEstimationDefinition(estimationId = 13242, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

deleteIncidenceRateDefinition

Delete IncidenceRate id definition.

Description

Delete IncidenceRate id definition.

Usage

```
deleteIncidenceRateDefinition(incidenceRateId, baseUrl)
```

Arguments

incidenceRateId

An integer id representing the id that uniquely identifies a IncidenceRate defini-

tion in a WebApi instance.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Delete the IncidenceRate definition from WebAPI for a given IncidenceRate id

Value

None, unless error.

Examples

```
## Not run:
deleteIncidenceRateDefinition(incidenceRateId = 13242, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

 ${\tt deletePathwayDefinition}$

Delete Pathway id definition.

Description

Delete Pathway id definition.

Usage

```
deletePathwayDefinition(pathwayId, baseUrl)
```

Arguments

pathwayId An integer id representing the id that uniquely identifies a Pathway definition in

a WebApi instance.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

deletePredictionDefinition 15

Details

Delete the Pathway definition from WebAPI for a given Pathway id

Value

None, unless error.

Examples

```
## Not run:
deletePathwayDefinition(pathwayId = 13242, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

deletePredictionDefinition

Delete Prediction id definition.

Description

Delete Prediction id definition.

Usage

```
deletePredictionDefinition(predictionId, baseUrl)
```

Arguments

predictionId An integer id representing the id that uniquely identifies a Prediction definition

in a WebApi instance.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Delete the Prediction definition from WebAPI for a given Prediction id

Value

None, unless error.

```
## Not run:
deletePredictionDefinition(predictionId = 13242, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

detectCharacterizationsByName

Detect the presence of string matched Characterization definitions.

Description

Detect the presence of string matched Characterization definitions.

Usage

```
detectCharacterizationsByName(pattern, negate = FALSE, baseUrl)
```

Arguments

pattern A pattern to look for. See str_detect for details.

negate If TRUE, return non-matching elements. See str_detect for details.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Detect string matched Characterization definition names from the WebApi, and retrieve metadata definitions.

Value

FALSE if no matches. If matched - output from getCharacterizationDefinitionsMetaData

Examples

detectCohortsByName

Detect the presence of string matched Cohort definitions.

Description

Detect the presence of string matched Cohort definitions.

Usage

```
detectCohortsByName(pattern, negate = FALSE, baseUrl)
```

Arguments

pattern A pattern to look for. See str_detect for details.

negate If TRUE, return non-matching elements. See str_detect for details.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Detect string matched Cohort definition names from the WebApi, and retrieve metadata definitions.

Value

FALSE if no matches. If matched - output from getCohortDefinitionsMetaData

Examples

 ${\tt detectConceptSetsByName}$

Detect the presence of string matched ConceptSet definitions.

Description

Detect the presence of string matched ConceptSet definitions.

Usage

```
detectConceptSetsByName(pattern, negate = FALSE, baseUrl)
```

Arguments

pattern A pattern to look for. See str_detect for details.

negate If TRUE, return non-matching elements. See str_detect for details.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Detect string matched ConceptSet definition names from the WebApi, and retrieve metadata definitions.

Value

FALSE if no matches. If matched - output from getConceptSetDefinitionsMetaData

 ${\tt detectEstimationsByName}$

Detect the presence of string matched Estimation definitions.

Description

Detect the presence of string matched Estimation definitions.

Usage

```
detectEstimationsByName(pattern, negate = FALSE, baseUrl)
```

Arguments

pattern A pattern to look for. See str_detect for details.

negate If TRUE, return non-matching elements. See str_detect for details.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Detect string matched Estimation definition names from the WebApi, and retrieve metadata definitions.

Value

FALSE if no matches. If matched - output from getEstimationDefinitionsMetaData

Examples

detectIncidenceRatesByName

Detect the presence of string matched IncidenceRate definitions.

Description

Detect the presence of string matched IncidenceRate definitions.

Usage

```
detectIncidenceRatesByName(pattern, negate = FALSE, baseUrl)
```

Arguments

pattern A pattern to look for. See str_detect for details.

negate If TRUE, return non-matching elements. See str_detect for details.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Detect string matched IncidenceRate definition names from the WebApi, and retrieve metadata definitions.

Value

FALSE if no matches. If matched - output from getIncidenceRateDefinitionsMetaData

Examples

detectPathwaysByName

Detect the presence of string matched Pathway definitions.

Description

Detect the presence of string matched Pathway definitions.

Usage

```
detectPathwaysByName(pattern, negate = FALSE, baseUrl)
```

Arguments

pattern A pattern to look for. See str_detect for details.

negate If TRUE, return non-matching elements. See str_detect for details.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Detect string matched Pathway definition names from the WebApi, and retrieve metadata definitions.

Value

FALSE if no matches. If matched - output from getPathwayDefinitionsMetaData

Examples

detectPredictionsByName

Detect the presence of string matched Prediction definitions.

Description

Detect the presence of string matched Prediction definitions.

Usage

```
detectPredictionsByName(pattern, negate = FALSE, baseUrl)
```

Arguments

pattern A pattern to look for. See str_detect for details.

negate If TRUE, return non-matching elements. See str_detect for details.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Detect string matched Prediction definition names from the WebApi, and retrieve metadata definitions.

Value

FALSE if no matches. If matched - output from getPredictionDefinitionsMetaData

existsCharacterizationName

21

 ${\tt existsCharacterizationName}$

Check if Characterization definition name exists.

Description

Check if Characterization definition name exists.

Usage

```
existsCharacterizationName(characterizationName, baseUrl)
```

Arguments

characterizationName

A string name for the Characterization to be checked.

baseUrl

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Check if a string name already exists in the WebApi as a Characterization definition name.

Value

If found, the function will return a tibble with details of the specification. If not found, FALSE will be returned.

Examples

existsCohortName

Check if Cohort definition name exists.

Description

Check if Cohort definition name exists.

Usage

```
existsCohortName(cohortName, baseUrl)
```

Arguments

cohortName A string name for the Cohort to be checked.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Check if a string name already exists in the WebApi as a Cohort definition name.

Value

If found, the function will return a tibble with details of the specification. If not found, FALSE will be returned.

Examples

existsConceptSetName Check if ConceptSet definition name exists.

Description

Check if ConceptSet definition name exists.

Usage

```
existsConceptSetName(conceptSetName, baseUrl)
```

Arguments

```
conceptSetName A string name for the ConceptSet to be checked.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".
```

Details

Check if a string name already exists in the WebApi as a ConceptSet definition name.

Value

If found, the function will return a tibble with details of the specification. If not found, FALSE will be returned.

existsEstimationName 23

existsEstimationName Check if Estimation definition name exists.

Description

Check if Estimation definition name exists.

Usage

```
existsEstimationName(estimationName, baseUrl)
```

Arguments

estimationName A string name for the Estimation to be checked.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Check if a string name already exists in the WebApi as a Estimation definition name.

Value

If found, the function will return a tibble with details of the specification. If not found, FALSE will be returned.

Examples

existsIncidenceRateName

Check if IncidenceRate definition name exists.

Description

Check if IncidenceRate definition name exists.

Usage

```
existsIncidenceRateName(incidenceRateName, baseUrl)
```

Arguments

incidenceRateName

A string name for the IncidenceRate to be checked.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

24 existsPathwayName

Details

Check if a string name already exists in the WebApi as a IncidenceRate definition name.

Value

If found, the function will return a tibble with details of the specification. If not found, FALSE will be returned.

Examples

existsPathwayName

Check if Pathway definition name exists.

Description

Check if Pathway definition name exists.

Usage

```
existsPathwayName(pathwayName, baseUrl)
```

Arguments

pathwayName A string name for the Pathway to be checked.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Check if a string name already exists in the WebApi as a Pathway definition name.

Value

If found, the function will return a tibble with details of the specification. If not found, FALSE will be returned.

existsPredictionName 25

existsPredictionName Check if Prediction definition name exists.

Description

Check if Prediction definition name exists.

Usage

```
existsPredictionName(predictionName, baseUrl)
```

Arguments

predictionName A string name for the Prediction to be checked.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Check if a string name already exists in the WebApi as a Prediction definition name.

Value

If found, the function will return a tibble with details of the specification. If not found, FALSE will be returned.

Examples

 ${\tt exportCohortDefinitionSet}$

Export cohort definition set from WebAPI

Description

Export cohort definition set from WebAPI

Usage

```
exportCohortDefinitionSet(baseUrl, cohortIds, generateStats = FALSE)
```

Arguments

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

cohortIds A set of cohortIds to fetch from WebApi.

generateStats Should cohort inclusion rule statistics be generated?

Details

Constructs a CohortDefinition set containing the following fields:

atlasId The cohort ID in ATLAS.

cohortId a copy of the value in atlasId.

cohortName The name of the cohort.

sql The cohort generation sql.

json The cohort definition JSON.

logicDescription The cohort description.

 ${\tt getCdmSources}$

Get the data sources in the WebAPI instance

Description

Get the data sources in the WebAPI instance

Usage

```
getCdmSources(baseUrl)
```

Arguments

baseUrl

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Obtains the data sources configured in the WebAPI instance.

Value

A data frame.

 ${\tt getCharacterizationDefinition}$

Get Characterization id definition.

Description

Get Characterization id definition.

Usage

 $\verb|getCharacterizationDefinition(characterizationId, baseUrl)|\\$

Arguments

characterizationId

An integer id representing the id that uniquely identifies a Characterization definition in a WebApi instance.

baseUrl

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Obtain the Characterization definition from WebAPI for a given Characterization id

Value

An R object representing the Characterization definition

Examples

 ${\tt getCharacterizationDefinitionsMetaData}$

Get the meta data for Characterization definitions.

Description

Get the meta data for Characterization definitions.

Usage

```
{\tt getCharacterizationDefinitionsMetaData(baseUrl)}
```

Arguments

baseUrl

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Get the meta data of WebApi specifications such as id, name, created/modified details, hash object, etc. from WebApi for Characterization. This function is useful to retrieve the current Characterization specifications.

Value

A tibble of specification metadata for Characterization. Note: modifiedDate and createdDate are returned as text/character.

Examples

```
## Not run:
getCharacterizationDefinitionsMetaData(baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

 ${\tt getCharacterizationGenerationInformation}$

Get generation information for Characterization id.

Description

Get generation information for Characterization id.

Usage

getCharacterizationGenerationInformation(characterizationId, baseUrl)

Arguments

 ${\tt characterizationId}$

An integer id representing the id that uniquely identifies a Characterization definition in a WebApi instance.

baseUrl

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Get generation (execution) information about Characterization for a characterizationId.

Value

An R object representing the Characterization definition

 ${\tt getCharacterizationResults}$

Get results for a Characterization Id.

Description

Get results for a Characterization Id.

Usage

```
getCharacterizationResults(characterizationId, baseUrl)
```

Arguments

characterizationId

An integer id representing the id that uniquely identifies a characterization anal-

ysis definition in a WebApi instance.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Get the results for Characterization id.

Value

An R object with results.

Examples

```
## Not run:
getCharacterizationResults(characterizationId = 342, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

 ${\tt getCohortDefinition}$

Get Cohort id definition.

Description

Get Cohort id definition.

Usage

```
getCohortDefinition(cohortId, baseUrl)
```

Arguments

cohortId An integer id representing the id that uniquely identifies a Cohort definition in a

WebApi instance.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Obtain the Cohort definition from WebAPI for a given Cohort id

Value

An R object representing the Cohort definition

Examples

Description

(Deprecated) Get a cohort definition expression

Usage

```
getCohortDefinitionExpression(cohortId, baseUrl)
```

Arguments

cohortId An integer id representing the id that uniquely identifies a cohort definition in a

WebApi instance.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

(Deprecated) Obtain the JSON expression from WebAPI for a given cohort id

Value

A JSON list object representing the cohort definition This function has been deprecated. As an alternative please use the following steps as in the example below: 1) cohortDefinition <- getCohortDefinition(baseUrl = baseUrl, cohortId = 15873) 2) validJsonExpression <- RJSONIO::toJSON(cohortDefinition\$expression\$3) save validJsonExpression object as .txt"

```
## Not run:
# This will obtain a cohort definition's JSON expression:
getCohortDefinitionExpression(cohortId = 282, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

getCohortDefinitionName

(Deprecated) Get a cohort definition's name from WebAPI

Description

(Deprecated) Get a cohort definition's name from WebAPI

Usage

getCohortDefinitionName(baseUrl, cohortId, formatName = FALSE)

Arguments

 $base \verb|URL| for the WebApi instance, for example: \verb|"http://server.org:80/WebAPI"|.$

cohortId An integer id representing the id that uniquely identifies a cohort definition in a

WebApi instance.

formatName Should the name be formatted to remove prefixes and underscores?

Details

(Deprecated) Obtains the name of a cohort. This function has been deprecated. As an alternative please use getCohortDefinition

Value

The name of the cohort.

getCohortDefinitionsMetaData

Get the meta data for Cohort definitions.

Description

Get the meta data for Cohort definitions.

Usage

getCohortDefinitionsMetaData(baseUrl)

Arguments

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Get the meta data of WebApi specifications such as id, name, created/modified details, hash object, etc. from WebApi for Cohort. This function is useful to retrieve the current Cohort specifications.

Value

A tibble of specification metadata for Cohort. Note: modifiedDate and createdDate are returned as text/character.

Examples

```
## Not run:
getCohortDefinitionsMetaData(baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

getCohortDefinitionSql

Get a cohort definition's SQL from WebAPI

Description

Get a cohort definition's SQL from WebAPI

Usage

```
getCohortDefinitionSql(cohortId, baseUrl, generateStats = TRUE)
```

Arguments

cohortId An integer id representing the id that uniquely identifies a cohort definition in a

WebApi instance.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

generateStats Should the SQL include the code for generating inclusion rule statistics? Note

that if TRUE, several additional tables are expected to exists as described in the

details. By default this is TRUE.

Details

Obtains the template SQL of a cohort. When using generateStats = TRUE, the following tables are required to exist when executing the SQL: cohort_inclusion, cohort_inclusion_result, cohort_inclusion_stats, and cohort_summary_stats. Also note that the cohort_inclusion table should be populated with the names of the rules prior to executing the cohort definition SQL.

Value

The templated SQL to generate the cohort

 ${\tt getCohortGenerationInformation}$

Get generation information for Cohort id.

Description

Get generation information for Cohort id.

Usage

```
getCohortGenerationInformation(cohortId, baseUrl)
```

Arguments

cohortId An integer id representing the id that uniquely identifies a Cohort definition in a

WebApi instance.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Get generation (execution) information about Cohort for a cohortId.

Value

An R object representing the Cohort definition

Examples

```
## Not run:
getCohortGenerationInformation(cohortId = 13242, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

 ${\tt getCohortInclusionRulesAndCounts}$

Get cohort inclusion rules and person counts

Description

Get cohort inclusion rules and person counts

Usage

```
getCohortInclusionRulesAndCounts(baseUrl, cohortId, sourceKey)
```

Arguments

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI". cohortId An integer id representing the id that uniquely identifies a cohort definition in a

WebApi instance.

sourceKey The source key for a CDM instance in WebAPI, as defined in the Configuration

page

34 getCohortSql

Details

Obtains the inclusion rules from a cohort definition and summarizes the person counts per rule

getCohortResults

Get results for a Cohort Id.

Description

Get results for a Cohort Id.

Usage

```
getCohortResults(cohortId, baseUrl)
```

Arguments

cohortId An integer id representing the id that uniquely identifies a cohort definition in a

WebApi instance.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Get the results for Cohort id.

Value

An R object with results.

Examples

```
## Not run:
getCohortResults(cohortId = 342, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

getCohortSql

Get SQL query for Cohort definition.

Description

Get SQL query for Cohort definition.

Usage

```
getCohortSql(cohortDefinition, baseUrl, generateStats = TRUE)
```

getConcepts 35

Arguments

cohortDefinition

An R list object (not JSON) representing the Cohort definition. It is the output

 \boldsymbol{R} expression object of list object from CohortDefinition

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

generateStats Should the SQL include the code for generating inclusion rule statistics? Note

that if TRUE, several additional tables are expected to exists as described in the

details. By default this is TRUE.

Details

Given a valid Cohort definition R-object (not JSON) this function will return the parameterized SQL in OHDSI SQL dialect. This SQL may be used along with OHDSI R-package 'SQLRender' to render/translate to target SQL dialect and parameters rendered.

Value

An R object containing the SQL for Cohort definition.

Examples

getConcepts

Get concepts

Description

Get concepts

Usage

```
getConcepts(
  conceptIds,
  baseUrl,
  vocabularySourceKey = NULL,
  snakeCaseToCamelCase = TRUE
)
```

Arguments

conceptIds A vector of concept IDs.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI". vocabularySourceKey

 $\label{thm:control} The source key of the Vocabulary. By default, the priority Vocabulary is used. \\ snakeCaseToCamelCase$

Should the column names of the result be converted to camelCase?

Value

A tibble containing information on the concepts.

Examples

```
## Not run:
    conceptSet <- getConceptSet(conceptSetId = 282, baseUrl = "http://server.org:80/WebAPI")
    conceptIds <- resolveConceptSet(conceptSet = conceptSet, baseUrl = "http://server.org:80/WebAPI")
    concepts <- getConcepts(conceptIds = conceptIds, baseUrl = "http://server.org:80/WebAPI")

## End(Not run)

getConceptSetDefinition

Get ConceptSet id definition.</pre>
```

Description

Get ConceptSet id definition.

Usage

```
getConceptSetDefinition(conceptSetId, baseUrl)
```

Arguments

conceptSetId An integer id representing the id that uniquely identifies a ConceptSet definition

in a WebApi instance.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Obtain the ConceptSet definition from WebAPI for a given ConceptSet id

Value

An R object representing the ConceptSet definition

```
## Not run:
getConceptSetDefinition(conceptSetId = 13242, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

```
getConceptSetDefinitionBySourceKey
Fetch concept set definition from WebAPI by SourceKey
```

Description

Fetch concept set definition from WebAPI by SourceKey

Usage

```
getConceptSetDefinitionBySourceKey(
  conceptSetId,
  baseUrl,
  vocabularySourceKey = NULL
)
```

Arguments

```
conceptSetId the id of the concept set to retrieve.
```

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI". vocabularySourceKey

The source key of the Vocabulary. By default, the priority Vocabulary is used.

Details

Fetches a concept set definition from WebAPI by SourceKey. If SourceKey is not specified, the priority vocabulary will be used.

Value

An R object representing the ConceptSet definition

38 getDefinition

```
getConceptSetDefinitionsMetaData
```

Get the meta data for ConceptSet definitions.

Description

Get the meta data for ConceptSet definitions.

Usage

```
getConceptSetDefinitionsMetaData(baseUrl)
```

Arguments

baseUrl

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Get the meta data of WebApi specifications such as id, name, created/modified details, hash object, etc. from WebApi for ConceptSet. This function is useful to retrieve the current ConceptSet specifications.

Value

A tibble of specification metadata for ConceptSet. Note: modifiedDate and createdDate are returned as text/character.

Examples

```
## Not run:
getConceptSetDefinitionsMetaData(baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

getDefinition

Get the definition for an id of chosen category in WebApi.

Description

Get the definition for an id of chosen category in WebApi.

```
getDefinition(id, baseUrl, category)
```

getDefinitionsMetadata 39

Arguments

id An integer id representing the id that uniquely identifies a definition for the

category in a WebApi instance.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

category These are the categories in WebApi. The valid string options are 'conceptSet',

'cohort', 'characterization', 'pathway, 'incidenceRate', 'estimation', 'predic-

tion'.

Details

Get the definition for an id of chosen category in WebApi. The return object will be a R representation of the definition, that may be reconverted to JSON.

Value

An R object representing the definition

Examples

```
## Not run:
getDefinition(id = 13242, category = "cohort", baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

getDefinitionsMetadata

Retrieve the meta data for WebApi definitions of a certain category

Description

Retrieve the meta data for WebApi definitions of a certain category

Usage

```
getDefinitionsMetadata(baseUrl, category)
```

Arguments

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

category These are the categories in WebApi. The valid string options are 'conceptSet',

'cohort', 'characterization', 'pathway, 'incidenceRate', 'estimation', 'predic-

tion'.

Details

Obtains the meta data of WebApi specifications such as id, name, created/modified details, hash object, etc for a certain category. The following function categories are supported. Concept-set, Cohort-definition, Cohort-characterization, Pathway-analysis, Incidence rate (ir), estimation and prediction. This function is useful to retrieve the current specifications.

Value

A tibble of specification metadata.

Examples

```
## Not run:
getDefinitionsMetadata(baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

 ${\tt getEstimationDefinition}$

Get Estimation id definition.

Description

Get Estimation id definition.

Usage

```
getEstimationDefinition(estimationId, baseUrl)
```

Arguments

estimationId An integer id representing the id that uniquely identifies a Estimation definition

in a WebApi instance.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Obtain the Estimation definition from WebAPI for a given Estimation id

Value

An R object representing the Estimation definition

```
## Not run:
getEstimationDefinition(estimationId = 13242, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

 ${\tt getEstimationDefinitionsMetaData}$

Get the meta data for Estimation definitions.

Description

Get the meta data for Estimation definitions.

Usage

```
getEstimationDefinitionsMetaData(baseUrl)
```

Arguments

baseUrl

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Get the meta data of WebApi specifications such as id, name, created/modified details, hash object, etc. from WebApi for Estimation. This function is useful to retrieve the current Estimation specifications.

Value

A tibble of specification metadata for Estimation. Note: modifiedDate and createdDate are returned as text/character.

Examples

```
## Not run:
getEstimationDefinitionsMetaData(baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

getGenerationInformation

Get generation information.

Description

Get generation information.

```
getGenerationInformation(id, category, baseUrl)
```

Arguments

id An integer id representing the id that uniquely identifies a definition for the

category in a WebApi instance.

category The category of expression in WebApi. Only the following strings are accepted:

'cohort', 'characterization', 'pathway', 'incidenceRate'.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Get generation (execution) information.

Value

An R object with the generation information.

Examples

getIncidenceRateDefinition

Get IncidenceRate id definition.

Description

Get IncidenceRate id definition.

Usage

```
{\tt getIncidenceRateDefinition(incidenceRateId,\ baseUrl)}
```

Arguments

incidenceRateId

An integer id representing the id that uniquely identifies a IncidenceRate defini-

tion in a WebApi instance.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Obtain the IncidenceRate definition from WebAPI for a given IncidenceRate id

Value

An R object representing the IncidenceRate definition

Examples

```
## Not run:
getIncidenceRateDefinition(incidenceRateId = 13242, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

getIncidenceRateDefinitionsMetaData

Get the meta data for IncidenceRate definitions.

Description

Get the meta data for IncidenceRate definitions.

Usage

getIncidenceRateDefinitionsMetaData(baseUrl)

Arguments

baseUrl

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Get the meta data of WebApi specifications such as id, name, created/modified details, hash object, etc. from WebApi for IncidenceRate. This function is useful to retrieve the current IncidenceRate specifications.

Value

A tibble of specification metadata for IncidenceRate. Note: modifiedDate and createdDate are returned as text/character.

```
## Not run:
getIncidenceRateDefinitionsMetaData(baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

 ${\tt getIncidenceRateGenerationInformation}$

Get generation information for IncidenceRate id.

Description

Get generation information for IncidenceRate id.

Usage

```
getIncidenceRateGenerationInformation(incidenceRateId, baseUrl)
```

Arguments

incidenceRateId

An integer id representing the id that uniquely identifies a IncidenceRate definition in a WebApi instance.

baseUrl

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Get generation (execution) information about IncidenceRate for a incidenceRateId.

Value

An R object representing the IncidenceRate definition

Examples

```
getIncidenceRateResults
```

Get results for a IncidenceRate Id.

Description

Get results for a IncidenceRate Id.

```
getIncidenceRateResults(incidenceRateId, baseUrl)
```

getPathwayDefinition 45

Arguments

incidenceRateId

An integer id representing the id that uniquely identifies a incidence rate analysis

definition in a WebApi instance.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Get the results for IncidenceRate id.

Value

An R object with results.

Examples

```
## Not run:
getIncidenceRateResults(incidenceRateId = 342, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

getPathwayDefinition Get Pathway id definition.

Description

Get Pathway id definition.

Usage

```
getPathwayDefinition(pathwayId, baseUrl)
```

Arguments

pathwayId An integer id representing the id that uniquely identifies a Pathway definition in

a WebApi instance.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Obtain the Pathway definition from WebAPI for a given Pathway id

Value

An R object representing the Pathway definition

```
## Not run:
getPathwayDefinition(pathwayId = 13242, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

getPathwayDefinitionsMetaData

Get the meta data for Pathway definitions.

Description

Get the meta data for Pathway definitions.

Usage

```
getPathwayDefinitionsMetaData(baseUrl)
```

Arguments

baseUrl

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Get the meta data of WebApi specifications such as id, name, created/modified details, hash object, etc. from WebApi for Pathway. This function is useful to retrieve the current Pathway specifications.

Value

A tibble of specification metadata for Pathway. Note: modifiedDate and createdDate are returned as text/character.

Examples

```
## Not run:
getPathwayDefinitionsMetaData(baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

 ${\tt getPathwayGenerationInformation}$

Get generation information for Pathway id.

Description

Get generation information for Pathway id.

Usage

```
getPathwayGenerationInformation(pathwayId, baseUrl)
```

Arguments

pathwayId An integer id representing the id that uniquely identifies a Pathway definition in

a WebApi instance.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

getPathwayResults 47

Details

Get generation (execution) information about Pathway for a pathwayId.

Value

An R object representing the Pathway definition

Examples

```
## Not run:
getPathwayGenerationInformation(pathwayId = 13242, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

getPathwayResults

Get results for a Pathway Id.

Description

Get results for a Pathway Id.

Usage

```
getPathwayResults(pathwayId, baseUrl)
```

Arguments

pathwayId An integer id representing the id that uniquely identifies a pathway analysis

definition in a WebApi instance.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Get the results for Pathway id.

Value

An R object with results.

```
## Not run:
getPathwayResults(pathwayId = 342, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

48 getPersonProfile

getPersonProfile	Get person profile data

Description

Get person profile data

Usage

```
getPersonProfile(baseUrl, sourceKey, personId, indexCohortId = NULL)
```

Arguments

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

sourceKey The source key for a CDM instance in WebAPI, as defined in the Configuration

page

personId The personId of the person whose profile is being reviewed

indexCohortId <OPTIONAL> Do you want to use a particular cohortId as the index cohort? If

left NULL, the WebApi will identify the earliest cohort for the person by cohort start date and use it as the index cohort. WebApi uses the cohort start date of the index cohort to calculate the person's index age (ageAtIndex). WebApi will also return the relative position, in days, for each event compared to the index cohorts start date. These relative positions are useful to study the relationship of

various events with respect to the index cohort start date.

Details

Get a R object with person profile data. This function may be used for visualizing a patients profile in tables or visualization.

Value

A list of tibble data frame objects corresponding to cohorts, observationPeriod, records and person.

getPredictionDefinition 49

```
{\tt getPredictionDefinition}
```

Get Prediction id definition.

Description

Get Prediction id definition.

Usage

```
getPredictionDefinition(predictionId, baseUrl)
```

Arguments

predictionId An integer id representing the id that uniquely identifies a Prediction definition

in a WebApi instance.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Obtain the Prediction definition from WebAPI for a given Prediction id

Value

An R object representing the Prediction definition

Examples

```
## Not run:
getPredictionDefinition(predictionId = 13242, baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

getPredictionDefinitionsMetaData

Get the meta data for Prediction definitions.

Description

Get the meta data for Prediction definitions.

Usage

```
getPredictionDefinitionsMetaData(baseUrl)
```

Arguments

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Get the meta data of WebApi specifications such as id, name, created/modified details, hash object, etc. from WebApi for Prediction. This function is useful to retrieve the current Prediction specifications.

Value

A tibble of specification metadata for Prediction. Note: modifiedDate and createdDate are returned as text/character.

Examples

```
## Not run:
getPredictionDefinitionsMetaData(baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

getPriorityVocabularyKey

Get Priority Vocabulary Source Key

Description

Get Priority Vocabulary Source Key

Usage

```
getPriorityVocabularyKey(baseUrl)
```

Arguments

baseUrl

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Obtains the source key of the default OMOP Vocabulary in WebApi.

Value

A string.

getResults 51

getResults	Get generation results	
------------	------------------------	--

Description

Get generation results

Usage

```
getResults(id, baseUrl, category)
```

Arguments

id An integer id representing the id that uniquely identifies a definition for the

category in a WebApi instance.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

category These are the categories in WebApi. The valid string options are 'conceptSet',

'cohort', 'characterization', 'pathway, 'incidenceRate', 'estimation', 'predic-

tion'.

Details

Get the results objects from WebApi for a definition of a certain category in WebApi.

Value

Returns the result objects for a given id and category from the WebApi.

Examples

```
## Not run:
getResults(id = 282, category = "cohort", baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

 ${\tt getSourceConcepts}$

Get source concepts that map to standard concepts

Description

Get source concepts that map to standard concepts

```
getSourceConcepts(
  conceptIds,
  baseUrl,
  vocabularySourceKey = NULL,
  snakeCaseToCamelCase = TRUE
)
```

52 getWebApiVersion

Arguments

conceptIds A list of concept IDs referring to standard concepts.

 $base \verb|URL| for the WebApi instance, for example: \verb|"http://server.org:80/WebAPI"|.$

vocabularySourceKey

The source key of the Vocabulary. By default, the priority Vocabulary is used.

snakeCaseToCamelCase

Should the column names of the result be converted to camelCase?

Value

A tibble containing information on the source concepts.

Examples

getWebApiVersion

Get the WebAPI version number

Description

Get the WebAPI version number

Usage

```
getWebApiVersion(baseUrl)
```

Arguments

baseUrl

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Obtains the WebAPI version number. This function is used to check that WebAPI baseUrl can be accessed and is a good first check to make sure you can access a WebAPI endpoint.

Value

The WebApi versions as a string.

```
## Not run:
getWebApiVersion("http://server.org:80/WebAPI")
## End(Not run)
```

insertCohortDefinitionInPackage

Load a cohort definition and insert it into this package

Description

Load a cohort definition and insert it into this package

Usage

```
insertCohortDefinitionInPackage(
  cohortId,
  name = NULL,
  jsonFolder = "inst/cohorts",
  sqlFolder = "inst/sql/sql_server",
  baseUrl,
  generateStats = FALSE
)
```

Arguments

cohortId An integer id representing the id that uniquely identifies a cohort definition in a

WebApi instance.

name The name that will be used for the JSON and SQL files. If not provided, the

name in cohort will be used, but this may not lead to valid file names.

jsonFolder Path to the folder where the JSON representation will be saved. sqlFolder Path to the folder where the SQL representation will be saved.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

generateStats Should the SQL include the code for generating inclusion rule statistics? Note

that if TRUE, several additional tables are expected to exists as described in the

details.

Details

Load a cohort definition from a WebApi instance and insert it into this package. This will fetch the JSON object and store it in a folder (defaults to 'the inst/cohorts' folder), and fetch the template SQL and store it in another folder (defaults to the 'inst/sql/sql_server' folder). Both folders will be created if they don't exist. When using generateStats = TRUE, the following tables are required to exist when executing the SQL: cohort_inclusion, cohort_inclusion_result, cohort_inclusion_stats, and cohort_summary_stats. Also note that the cohort_inclusion table should be populated with the names of the rules prior to executing the cohort definition SQL. Note: generate inclusion statistics are created for all by default.

```
baseUrl = "http://server.org:80/WebAPI")
```

End(Not run)

insertCohortDefinitionSetInPackage

Insert a set of cohort definitions into package

Description

Insert a set of cohort definitions into package

Usage

```
insertCohortDefinitionSetInPackage(
  fileName = "inst/settings/CohortsToCreate.csv",
  baseUrl,
  jsonFolder = "inst/cohorts",
  sqlFolder = "inst/sql/sql_server",
  rFileName = "R/CreateCohorts.R",
  insertTableSql = TRUE,
  insertCohortCreationR = TRUE,
  generateStats = FALSE,
  packageName
)
```

Arguments

fileName Name of a CSV file specifying the cohorts to insert. See details for the expected

file format.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

jsonFolder Path to the folder where the JSON representations will be saved. sqlFolder Path to the folder where the SQL representations will be saved.

rFileName Name of R file to generate when insertCohortCreationR = TRUE.

insertTableSql Should the SQL for creating the cohort table be inserted into the package as

well? This file will be called CreateCohortTable.sql.

insertCohortCreationR

Insert R code that will create the cohort table and instantiate the cohorts? This

will create a file called R/CreateCohorts.R containing a function called .createCohorts.

generateStats Should cohort inclusion rule statistics be created?

packageName The name of the package (only needed when inserting the R code as well).

Details

The CSV file should have at least the following fields:

atlasId The cohort ID in ATLAS.

cohortId The cohort ID that will be used when instantiating the cohort (can be different from atlasId).

name The name to be used for the cohort. This name will be used to generate file names, so please use letters and numbers only (no spaces).

invokeCharacterizationGeneration

Invoke generation of Characterization id.

Description

Invoke generation of Characterization id.

Usage

invoke Characterization Generation (characterization Id, base Url, source Key)

Arguments

characterizationId

An integer id representing the id that uniquely identifies a Characterization def-

inition in a WebApi instance.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

sourceKey The source key for a CDM instance in WebAPI, as defined in the Configuration

page

Details

Invoke the generation of Characterization id in the WebApi.

Value

A tibble with job status information.

56 invokeGeneration

invokeCohortGeneration

Invoke generation of Cohort id.

Description

Invoke generation of Cohort id.

Usage

```
invokeCohortGeneration(cohortId, baseUrl, sourceKey)
```

Arguments

cohortId An integer id representing the id that uniquely identifies a Cohort definition in a

WebApi instance.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

sourceKey The source key for a CDM instance in WebAPI, as defined in the Configuration

page

Details

Invoke the generation of Cohort id in the WebApi.

Value

A tibble with job status information.

Examples

invokeGeneration

Invoke generation.

Description

Invoke generation.

```
invokeGeneration(id, baseUrl, sourceKey, category)
```

Arguments

An integer id representing the id that uniquely identifies a definition for the

category in a WebApi instance.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

sourceKey The source key for a CDM instance in WebAPI, as defined in the Configuration

page

category These are the categories in WebApi. The valid string options are 'conceptSet',

'cohort', 'characterization', 'pathway, 'incidenceRate', 'estimation', 'predic-

tion'.

Details

Invoke generation (execution) information.

Value

A dataframe with generation information such as status, jobName, and time.

Examples

```
## Not run:
invokeGeneration(id = 13242, category = "cohort", baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

invokeIncidenceRateGeneration

Invoke generation of IncidenceRate id.

Description

Invoke generation of IncidenceRate id.

Usage

invokeIncidenceRateGeneration(incidenceRateId, baseUrl, sourceKey)

Arguments

incidenceRateId

An integer id representing the id that uniquely identifies a IncidenceRate defini-

tion in a WebApi instance.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

sourceKey The source key for a CDM instance in WebAPI, as defined in the Configuration

page

Details

Invoke the generation of IncidenceRate id in the WebApi.

Value

A tibble with job status information.

Examples

invokePathwayGeneration

Invoke generation of Pathway id.

Description

Invoke generation of Pathway id.

Usage

```
invokePathwayGeneration(pathwayId, baseUrl, sourceKey)
```

Arguments

pathwayId An integer id representing the id that uniquely identifies a Pathway definition in

a WebApi instance.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

sourceKey The source key for a CDM instance in WebAPI, as defined in the Configuration

page

Details

Invoke the generation of Pathway id in the WebApi.

Value

A tibble with job status information.

is ValidCharacterizationId 59

isValidCharacterizationId

is Characterization id a valid definition in the WebApi.

Description

is Characterization id a valid definition in the WebApi.

Usage

```
isValidCharacterizationId(characterizationIds, baseUrl)
```

Arguments

characterizationIds

A list of integer id(s) of the Characterization to be tested for validity.

baseUrl

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Checks if a set of id for a Characterization is valid. The following checks are performed. 1) checks if all the ids exists in the WebApi i.e. valid.

Value

A logical vector indicating if an ID is valid.

Examples

isValidCohortId

is Cohort id a valid definition in the WebApi.

Description

is Cohort id a valid definition in the WebApi.

Usage

```
isValidCohortId(cohortIds, baseUrl)
```

Arguments

cohortIds A list of integer id(s) of the Cohort to be tested for validity.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

60 is ValidConceptSetId

Details

Checks if a set of id for a Cohort is valid. The following checks are performed. 1) checks if all the ids exists in the WebApi i.e. valid.

Value

A logical vector indicating if an ID is valid.

Examples

```
## Not run:
isValidCohortId(cohortIds = c(13242, 3423, 34), baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

isValidConceptSetId

is ConceptSet id a valid definition in the WebApi.

Description

is ConceptSet id a valid definition in the WebApi.

Usage

```
isValidConceptSetId(conceptSetIds, baseUrl)
```

Arguments

conceptSetIds A list of integer id(s) of the ConceptSet to be tested for validity.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Checks if a set of id for a ConceptSet is valid. The following checks are performed. 1) checks if all the ids exists in the WebApi i.e. valid.

Value

A logical vector indicating if an ID is valid.

```
## Not run:
isValidConceptSetId(conceptSetIds = c(13242, 3423, 34), baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

is ValidEstimationId 61

isValidEstimationId is Estimation id a valid definition in the WebApi.

Description

is Estimation id a valid definition in the WebApi.

Usage

```
isValidEstimationId(estimationIds, baseUrl)
```

Arguments

estimationIds A list of integer id(s) of the Estimation to be tested for validity.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Checks if a set of id for a Estimation is valid. The following checks are performed. 1) checks if all the ids exists in the WebApi i.e. valid.

Value

A logical vector indicating if an ID is valid.

Examples

```
## Not run:
isValidEstimationId(estimationIds = c(13242, 3423, 34), baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

isValidId

Check if an id is valid.

Description

Check if an id is valid.

Usage

```
isValidId(ids, baseUrl, category)
```

Arguments

ids A list of integer id(s) of the category to be tested for validity.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI". category These are the categories in WebApi. The valid string options are 'conceptSet',

'cohort', 'characterization', 'pathway, 'incidenceRate', 'estimation', 'predic-

tion'.

62 is ValidIncidenceRateId

Details

Checks if a set of id for a category is valid, i.e. checks if all the ids exists in the WebApi i.e. valid.

Value

A logical vector indicating if an ID is valid.

Examples

```
## Not run:
isValidId(ids = c(13242, 3423, 34), baseUrl = "http://server.org:80/WebAPI", category = "cohort")
## End(Not run)
```

isValidIncidenceRateId

is IncidenceRate id a valid definition in the WebApi.

Description

is IncidenceRate id a valid definition in the WebApi.

Usage

```
isValidIncidenceRateId(incidenceRateIds, baseUrl)
```

Arguments

incidenceRateIds

A list of integer id(s) of the IncidenceRate to be tested for validity.

baseUrl

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Checks if a set of id for a IncidenceRate is valid. The following checks are performed. 1) checks if all the ids exists in the WebApi i.e. valid.

Value

A logical vector indicating if an ID is valid.

is ValidPathwayId 63

isValidPathwayId

is Pathway id a valid definition in the WebApi.

Description

is Pathway id a valid definition in the WebApi.

Usage

```
isValidPathwayId(pathwayIds, baseUrl)
```

Arguments

pathwayIds A list of integer id(s) of the Pathway to be tested for validity.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Checks if a set of id for a Pathway is valid. The following checks are performed. 1) checks if all the ids exists in the WebApi i.e. valid.

Value

A logical vector indicating if an ID is valid.

Examples

```
## Not run:
isValidPathwayId(pathwayIds = c(13242, 3423, 34), baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

isValidPredictionId

is Prediction id a valid definition in the WebApi.

Description

is Prediction id a valid definition in the WebApi.

Usage

```
isValidPredictionId(predictionIds, baseUrl)
```

Arguments

predictionIds A list of integer id(s) of the Prediction to be tested for validity.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

64 is ValidSourceKey

Details

Checks if a set of id for a Prediction is valid. The following checks are performed. 1) checks if all the ids exists in the WebApi i.e. valid.

Value

A logical vector indicating if an ID is valid.

Examples

```
## Not run:
isValidPredictionId(predictionIds = c(13242, 3423, 34), baseUrl = "http://server.org:80/WebAPI")
## End(Not run)
```

isValidSourceKey

Check if source key is valid.

Description

Check if source key is valid.

Usage

```
isValidSourceKey(sourceKeys, baseUrl)
```

Arguments

sourceKeys The source key(s) for a CDM instance in WebAPI, as defined in the Configura-

tion page.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Checks if a set of sourceKey(s) are valid, i.e. checks if all the sourceKey(s) exists in the WebApi i.e. valid.

Value

A logical vector indicating if an ID is valid.

postCharacterizationDefinition

Post Characterization definition.

Description

Post Characterization definition.

Usage

```
postCharacterizationDefinition(name, characterizationDefinition, baseUrl)
```

Arguments

name

A valid name for the definition. WebApi will use this name (if valid) as the name of the definition. WebApi checks for validity, such as uniqueness, absence of unacceptable character etc. An error might be thrown.

characterizationDefinition

An R list object containing the expression for the specification. This will be converted to JSON expression by function and posted into the WebApi. Note: only limited checks are performed in R to check the validity of this expression.

baseUrl

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Post Characterization definition to WebAPI

Value

This function will return a dataframe object with one row describing the posted WebApi expression and its details. If unsuccessful a STOP message will be shown.

postCohortDefinition Post Cohort definition.

Description

Post Cohort definition.

Usage

```
postCohortDefinition(name, cohortDefinition, baseUrl)
```

Arguments

name

A valid name for the definition. WebApi will use this name (if valid) as the name of the definition. WebApi checks for validity, such as uniqueness, absence of unacceptable character etc. An error might be thrown.

cohortDefinition

An R list object containing the expression for the specification. This will be converted to JSON expression by function and posted into the WebApi. Note: only limited checks are performed in R to check the validity of this expression.

baseUrl

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Post Cohort definition to WebAPI

Value

This function will return a dataframe object with one row describing the posted WebApi expression and its details. If unsuccessful a STOP message will be shown.

Examples

 $\verb"postConceptSetDefinition"$

Post ConceptSet definition.

Description

Post ConceptSet definition.

```
postConceptSetDefinition(name, conceptSetDefinition, baseUrl)
```

postDefinition 67

Arguments

name

A valid name for the definition. WebApi will use this name (if valid) as the name of the definition. WebApi checks for validity, such as uniqueness, absence of unacceptable character etc. An error might be thrown.

conceptSetDefinition

An R list object containing the expression for the specification. This will be converted to JSON expression by function and posted into the WebApi. Note: only limited checks are performed in R to check the validity of this expression.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Post ConceptSet definition to WebAPI

Value

This function will return a dataframe object with one row describing the posted WebApi expression and its details. If unsuccessful a STOP message will be shown.

Examples

postDefinition

Post a definition into WebApi

Description

Post a definition into WebApi

Usage

```
postDefinition(baseUrl, name, category, definition)
```

Arguments

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

name A valid name for the definition. WebApi will use this name (if valid) as the

name of the definition. WebApi checks for validity, such as uniqueness, absence

of unacceptable character etc. An error might be thrown.

category These are the categories in WebApi. The valid string options are 'conceptSet',

'cohort', 'characterization', 'pathway, 'incidenceRate', 'estimation', 'predic-

tion'

definition An R list object containing the expression for the specification. This will be

converted to JSON expression by function and posted into the WebApi. Note: only limited checks are performed in R to check the validity of this expression.

Details

Post a definition into WebAPI. Currently only cohort and concept-set are supported.

Value

This function will return a dataframe object with one row describing the posted WebApi expression and its details. If unsuccessful a STOP message will be shown.

Examples

postEstimationDefinition

Post Estimation definition.

Description

Post Estimation definition.

Usage

```
postEstimationDefinition(name, estimationDefinition, baseUrl)
```

Arguments

name

A valid name for the definition. WebApi will use this name (if valid) as the name of the definition. WebApi checks for validity, such as uniqueness, absence of unacceptable character etc. An error might be thrown.

estimationDefinition

An R list object containing the expression for the specification. This will be converted to JSON expression by function and posted into the WebApi. Note: only limited checks are performed in R to check the validity of this expression.

baseUrl

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Post Estimation definition to WebAPI

Value

This function will return a dataframe object with one row describing the posted WebApi expression and its details. If unsuccessful a STOP message will be shown.

Examples

Description

Post IncidenceRate definition.

Usage

```
postIncidenceRateDefinition(name, incidenceRateDefinition, baseUrl)
```

Arguments

name

A valid name for the definition. WebApi will use this name (if valid) as the name of the definition. WebApi checks for validity, such as uniqueness, absence of unacceptable character etc. An error might be thrown.

 $incidence Rate {\tt Definition}$

An R list object containing the expression for the specification. This will be converted to JSON expression by function and posted into the WebApi. Note: only limited checks are performed in R to check the validity of this expression.

baseUrl

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Post IncidenceRate definition to WebAPI

Value

This function will return a dataframe object with one row describing the posted WebApi expression and its details. If unsuccessful a STOP message will be shown.

postPathwayDefinition Post Pathway definition.

Description

Post Pathway definition.

Usage

```
postPathwayDefinition(name, pathwayDefinition, baseUrl)
```

Arguments

name A va

A valid name for the definition. WebApi will use this name (if valid) as the name of the definition. WebApi checks for validity, such as uniqueness, absence of unacceptable character etc. An error might be thrown.

pathwayDefinition

An R list object containing the expression for the specification. This will be converted to JSON expression by function and posted into the WebApi. Note: only limited checks are performed in R to check the validity of this expression.

baseUrl

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Post Pathway definition to WebAPI

Value

This function will return a dataframe object with one row describing the posted WebApi expression and its details. If unsuccessful a STOP message will be shown.

Examples

 $\verb"postPredictionDefinition"$

Post Prediction definition.

Description

Post Prediction definition.

```
postPredictionDefinition(name, predictionDefinition, baseUrl)
```

resolveConceptSet 71

Arguments

name

A valid name for the definition. WebApi will use this name (if valid) as the name of the definition. WebApi checks for validity, such as uniqueness, absence of unacceptable character etc. An error might be thrown.

predictionDefinition

An R list object containing the expression for the specification. This will be converted to JSON expression by function and posted into the WebApi. Note: only limited checks are performed in R to check the validity of this expression.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Post Prediction definition to WebAPI

Value

This function will return a dataframe object with one row describing the posted WebApi expression and its details. If unsuccessful a STOP message will be shown.

Examples

resolveConceptSet

Resolve a concept set to the included standard concept IDs

Description

Resolve a concept set to the included standard concept IDs

Usage

```
resolveConceptSet(conceptSetDefinition, baseUrl, vocabularySourceKey = NULL)
```

Arguments

 ${\tt conceptSetDefinition}$

A concept set definition, for example as obtained through the getConceptSetDefinition function, or taken from a cohort definition.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI". vocabularySourceKey

The source key of the Vocabulary. By default, the priority Vocabulary is used.

Details

Resolve a concept set to the included standard concept IDs

Value

A vector of standard concept ids.

Examples

setAuthHeader

Manually set the authorization http header for a WebAPI baseUrl In some cases the user may want to manually set the authorization header. An authHeader is associated with a particular baseUrl and added to to the header of all http requests sent to that url by ROhdsi-WebApi.

Description

Manually set the authorization http header for a WebAPI baseUrl In some cases the user may want to manually set the authorization header. An authHeader is associated with a particular baseUrl and added to to the header of all http requests sent to that url by ROhdsiWebApi.

Usage

```
setAuthHeader(baseUrl, authHeader)
```

Arguments

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

authHeader A character string containing a Bearer token that will be added to the header of

all http requests sent to baseUrl. (e.g. "Bearer lxd9n2nsdsd2329km23mexjop02m23m23mmmsioxiist

 ${\tt updateCohortDefinition}$

Update a Cohort definition.

Description

Update a Cohort definition.

```
updateCohortDefinition(cohortDefinition, baseUrl)
```

Arguments

cohortDefinition

An R list object containing the expression for the specification. Must include id, name and expression. This will be converted to JSON expression by function and posted into the WebApi. The definition will be checked against the WebApi instance for errors

baseUrl

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Update a Cohort definition.

Examples

updateConceptSetDefinition

Update a ConceptSet definition.

Description

Update a ConceptSet definition.

Usage

```
updateConceptSetDefinition(conceptSetDefinition, baseUrl)
```

Arguments

conceptSetDefinition

An R list object containing the expression for the specification. Must include id, name and expression. This will be converted to JSON expression by function and posted into the WebApi. The definition will be checked against the WebApi instance for errors

baseUrl

The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

Details

Update a ConceptSet definition.

74 updateDefinition

Examples

updateDefinition

Update definition

Description

Update definition

Usage

```
updateDefinition(definition, baseUrl, category)
```

Arguments

definition An R list object containing the expression for the specification. This will be

converted to JSON expression by function and posted into the WebApi.

baseUrl The base URL for the WebApi instance, for example: "http://server.org:80/WebAPI".

category These are the categories in WebApi. The valid string options are 'conceptSet',

'cohort', 'characterization', 'pathway, 'incidenceRate', 'estimation', 'predic-

tion'.

Details

Update a definition in WebAPI. Currently only cohorts are supported. Takes the definition as a parameter and converts it to json. This is the full definition (i.e. including name and id fields)

```
## Not run:
definition <- getDefinition(
  id = 13242,
  baseUrl = "http://server.org:80/WebAPI",
  category = "cohort"
)
definition$name <- "My new name for this"
updateDefinition(definition, baseUrl, category = "cohort")
## End(Not run)</pre>
```

Index

authorizeWebApi,4	<pre>getCohortDefinitionExpression, 30</pre>
	<pre>getCohortDefinitionName, 31</pre>
${\tt cancelCharacterizationGeneration}, {\tt 5}$	getCohortDefinitionsMetaData, 17, 31
cancelCohortGeneration, 5	<pre>getCohortDefinitionSql, 32</pre>
cancel $Generation, 6$	<pre>getCohortGenerationInformation, 33</pre>
cancelIncidenceRateGeneration, 7	<pre>getCohortInclusionRulesAndCounts, 33</pre>
cancelPathwayGeneration, 8	<pre>getCohortResults, 34</pre>
<pre>checkInputFileEncoding, 8</pre>	getCohortSql, 34
<pre>convertConceptSetDefinitionToTable, 9</pre>	getConcepts, 35
createConceptSetWorkbook, 10	<pre>getConceptSetDefinition, 9, 36, 71 getConceptSetDefinitionBySourceKey, 37</pre>
deleteCharacterizationDefinition, 10	<pre>getConceptSetDefinitionsMetaData, 17,</pre>
deleteCohortDefinition, 11	38
<pre>deleteConceptSetDefinition, 12</pre>	getDefinition, 38
deleteDefinition, 12	getDefinitionsMetadata, 39
deleteEstimationDefinition, 13	getEstimationDefinition, 40
deleteIncidenceRateDefinition, 14	<pre>getEstimationDefinitionsMetaData, 18,</pre>
deletePathwayDefinition, 14	41
deletePredictionDefinition, 15	getGenerationInformation, 41
detectCharacterizationsByName, 16	<pre>getIncidenceRateDefinition, 42</pre>
detectCohortsByName, 16	<pre>getIncidenceRateDefinitionsMetaData,</pre>
detectConceptSetsByName, 17	19, 43
detectEstimationsByName, 18	getIncidenceRateGenerationInformation
detectIncidenceRatesByName, 18	44
detectPathwaysByName, 19	<pre>getIncidenceRateResults, 44</pre>
detectPredictionsByName, 20	getPathwayDefinition,45
	getPathwayDefinitionsMetaData, 19,46
existsCharacterizationName, 21	${\tt getPathwayGenerationInformation}, 46$
existsCohortName, 21	getPathwayResults, 47
existsConceptSetName, 22	getPersonProfile,48
existsEstimationName, 23	getPredictionDefinition, 49
existsIncidenceRateName, 23	${\tt getPredictionDefinitionsMetaData}, 20,$
existsPathwayName, 24	49
existsPredictionName, 25	getPriorityVocabularyKey, 50
exportCohortDefinitionSet, 25	getResults, 51
	getSourceConcepts, 51
getCdmSources, 26	getWebApiVersion,52
getCharacterizationDefinition, 26	
getCharacterizationDefinitionsMetaData,	insertCohortDefinitionInPackage, 53
16, 27	insertCohortDefinitionSetInPackage, 54
getCharacterizationGenerationInformation,	invokeCharacterizationGeneration, 55
28	invokeCohortGeneration, 56
getCharacterizationResults, 29	invokeGeneration, 56
getCohortDefinition 20	invokeIncidenceRateGeneration 57

76 INDEX

```
invokePathwayGeneration, 58
isValidCharacterizationId, 59
isValidCohortId, 59
isValidConceptSetId, 60
isValidEstimationId, 61
isValidId, 61
isValidIncidenceRateId, 62
isValidPathwayId, 63
isValidPredictionId, 63
isValidSourceKey, 64
postCharacterizationDefinition, 65
postCohortDefinition, 66
postConceptSetDefinition, 66
postDefinition, 67
postEstimationDefinition, 68
\verb"postIncidenceRateDefinition", 69
postPathwayDefinition, 70
{\tt postPredictionDefinition,}\,70
resolveConceptSet, 71
setAuthHeader, 72
str_detect, 16–20
updateCohortDefinition, 72
{\tt updateConceptSetDefinition}, {\tt 73}
updateDefinition, 74
```