# ${\bf Package\ 'Reward Execution Package'}$

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Type Package

Title REWARD Execution Package
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<b>Depends</b> DatabaseConnector ( $\xi = 5.0.0$ ), R ( $\xi = 4.0.0$ )
Imports jsonlite,     ParallelLogger,     SqlRender,     yaml,     SelfControlledCohort ( $i=1.6.0$ ),     keyring,     tools,     checkmate,     vroom,     dplyr
Suggests testthat, withr, Eunomia, R.utils
Remotes OHDSI/SelfControlledCohort, OHDSI/Eunomia
<b>Description</b> Study execution package for generating REWARD results.  Uses SelfControlledCohort package to generate effect estimates.  Handles uploading of results to reward system.
License Apache
Encoding UTF-8
LazyData true
RoxygenNote 7.1.2
R topics documented:  computeAtlasCohorts
computeSccResults

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 ${\tt computeAtlasCohorts}$ 

 $Compute\ Atlas\ cohorts$ 

# Description

Computes sql cohorts against the CDM

# Usage

```
computeAtlasCohorts(connection, config, exposureCohorts = FALSE)
```

#### Arguments

connection DatabaseConnector connection to cdm

config cdmConfiguration object

exposureCohorts

Exposure or outcome based cohorts?

 ${\tt computeSccResults}$ 

Get Zipped Scc Results

# Description

Get zip files for scc Partial reward execution with a subset of targets or outcomes. If both are null this will generate SCC results for all exposure and outcome pairs. This is only really useful if you're adding an cohort after the full result set has been generated.

# Usage

```
computeSccResults(
  connection,
  config,
  analysisIds = NULL,
  outcomeCohortIds = NULL,
  targetCohortIds = NULL
)
```

#### Arguments

 ${\tt createCdmConfiguration}$ 

Create CDM configuration file

#### Description

Opens a file for editing that contains the default settings for a cdm

#### Usage

```
createCdmConfiguration(
  cdmConfigPath,
  keyring = NULL,
  overwrite = FALSE,
  testConnection = TRUE
)
```

#### Arguments

 ${\tt cdmConfigPath} \quad {\tt path} \ {\tt to} \ {\tt cdm} \ {\tt configuration} \ {\tt file}$ 

keyring keyring::keyring. For systems that support multiple keyrings, specify the

name of the keyring to use here. If NULL, then the default keyring is

used.

overwrite Overwite existing file (if it exists)

testConnection Attempt to connect to database and write to schemas needed for writing?

createCohorts

Create exposure cohorts

#### Description

Create all the exposure cohorts on a CDM Note, will not recompute if they already exist

#### Usage

```
createCohorts(connection, config, deleteExisting = FALSE)
```

createOutcomeCohorts

# Arguments

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connection DatabaseConnector connection to cdm

config cdm config

deleteExisting delete any existing computed cohorts

createCustomDrugEras  $Create\ custom\ drug\ eras$ 

#### Description

create the custom drug eras, these are for drugs with nonstandard eras (e.g. where doeses aren't picked up by repeat perscriptions). Could be something like a vaccine where exposed time is non trivial. deprecated It is now best to use atlas cohort definitions, will be removed in future version

#### Usage

createCustomDrugEras(connection, config)

#### Arguments

connection DatabaseConnector connection

config CdmConfig object

createOutcomeCohorts

# Description

Create outcome cohorts in the CDM - this function can take a very very long time Does not compute if results already exist in cohort tables

#### Usage

createOutcomeCohorts(connection, config, deleteExisting = FALSE)

#### Arguments

connection DatabaseConnector connection to cdm

config
 cdm configuration
deleteExisting remove existing data

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execute

 $Execute\ package$ 

#### Description

Upload cohorts and references Execute SCC methods Store results (and optionally transfer them to main REWARD server location)

#### Usage

```
execute(cdmConfigPath, referenceZipFile, deleteExistingCohorts = FALSE)
```

#### Arguments

```
getUncomputedAtlasCohorts
```

get Uncomputed Atlas Cohorts

#### Description

Get cohorts that haven't been computed and return their references from file on disk SQL and JSON references are not stored in the CDM database's scratch schema

# Usage

```
getUncomputedAtlasCohorts(connection, config, exposureCohorts = FALSE)
```

#### Arguments

```
\begin{array}{ll} \text{connection} & \text{connection} \\ \\ \text{config} & \text{cdmConfig} \\ \\ \text{exposureCohorts} \\ & \text{get exposures or not} \end{array}
```

importReferenceTables Import reference tables

# Description

Note that this always overwrites the existing reference tables stored in the database

#### Usage

```
importReferenceTables(connection, cdmConfig, zipFilePath)
```

#### Arguments

connection DatabaseConnector connection

 ${\tt cdmConfig} \qquad \qquad {\tt cdmConfig} \ object$ 

zipFilePath zip file path

 ${\tt loadCdmConfiguration} \quad \textit{load cdm config object}$ 

# Description

 $Loads\ config\ and\ prompt\ user\ for\ db\ password\ Password\ can\ be\ set\ in\ environment\ variable\ password\ Environment\ Variable\ of\ yaml\ file$ 

# Usage

loadCdmConfiguration(cdmConfigPath, keyring = NULL)

# Arguments

cdmConfigPath path to cdm configuration file

keyring: keyring: keyring. For systems that support multiple keyrings, specify the

name of the keyring to use here. If NULL, then the default keyring is

used.

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runScc

 $Peform\ SCC\ from\ self\ controlled\ cohort\ package\ with\ rewardbs$  settings

# Description

Peform SCC from self controlled cohort package with rewardbs settings

# Usage

```
runScc(
  config,
  postProcessFunction,
  postProcessArgs,
  analysisSettings,
  exposureIds = NULL,
  outcomeIds = NULL,
  cores = parallel::detectCores() - 1
)
```

unzipAndVerify

Unzip and verify results zip with meta-data json

# Description

Used to unzip and check all files in a zip folder with meta data file containing md5 hashes at time of creation Used by both results generation and reference files

# Usage

```
unzipAndVerify(exportZipFilePath, unzipPath, overwrite)
```

# Arguments

```
exportZipFilePath
zip file to inflate

unzipPath
path to create

overwrite overwrite any existing files
```

# Description

Opens a file for editing that contains the default settings for a cdm

# Usage

validateCdmConfigFile(cdmConfigPath, testConnection = TRUE, keyring = NULL)

# Arguments

cdmConfigPath path to cdm configuration file

testConnection Attempt to connect to database and write to schemas needed for writing?

keyring keyring::keyring. For systems that support multiple keyrings, specify the

name of the keyring to use here. If NULL, then the default keyring is

used.