Package 'Ulysses'

May 16, 2024

```
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Version 0.0.7
Description
      Automates setup of OHDSI study and provides functions to assist on improving organization
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      crayon,
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     magrittr,
     purrr,
     rlang,
     rstudioapi,
      scales,
      snakecase,
      usethis,
      whisker,
      withr,
      yaml,
      RJSONIO
Suggests knitr,
      rmarkdown,
      here,
      testthat (>= 3.0.0)
Config/testthat/edition 3
VignetteBuilder knitr
```

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Description

Add a line to the config file

Usage

```
addConfig(block, database = block, projectPath = here::here(), open = TRUE)
```

Arguments

block the name of the config block

database the name of the database for the block, default to block name

projectPath the path to the project

open toggle on whether the file should be opened

addDataSources Function to add study data sources

Description

Function to add study data sources

Usage

```
addDataSources(..., projectPath = here::here())
```

Arguments

a list of data sources to add projectPath the path to the project

Value

4 addStudyMember

addLinks

Function to add study links

Description

Function to add study links

Usage

```
addLinks(..., projectPath = here::here())
```

Arguments

```
... a list of links to add projectPath the path to the project
```

Value

invisible studyYml, prints specifying what changes happened

 ${\it addStudyMember}$

Function to add a study member

Description

Function to add a study member

Usage

```
addStudyMember(name, email = NULL, projectPath = here::here())
```

Arguments

name the name of the study member email the study member's email projectPath the path to the project

Value

addTags 5

addTags

Function to add study tags

Description

Function to add study tags

Usage

```
addTags(..., projectPath = here::here())
```

Arguments

```
a list of study tags to add projectPath the path to the project
```

Value

invisible studyYml, prints specifying what changes happened

buildStudyHub

Function to build study hub

Description

Function to build study hub

Usage

```
buildStudyHub(
  projectPath = here::here(),
  logoPath = NULL,
  footer = NULL,
  backgroundColor = "#336B91"
)
```

Arguments

projectPath path to ohdsi study

logoPath a path to a logo png to use in the quarto website, defaults to ohdsi logo from

Ulysses inst.

footer add a footer to the study Hub

backgroundColor

change background color, defaults to OHDSI blue #336B91

Value

builds a _site folder in documenation that holds the html website

6 cohortManifest

checkConfig

check if config file is in ohdsi study

Description

check if config file is in ohdsi study

Usage

checkConfig()

checkDatabaseCredential

Function to check the database credential

Description

Function to check the database credential

Usage

```
checkDatabaseCredential(cred, keyringName, verbose = TRUE)
```

Arguments

cred the credential to set (i.e dbms, user, connectionString)

keyringName the name of the keyringName for the credential check, this will be the keyring

namec

verbose toggle option to print console message

cohort Manifest

Function that lists all cohort definitions loaded into the study

Description

Function that lists all cohort definitions loaded into the study

Usage

```
cohortManifest(projectPath = here::here())
```

Arguments

projectPath the path to the project

Value

tibble of the cohorts in the project

defaultCredentials 7

defaultCredentials Function to list default credentials

Description

This function builds the standard credential set needed for most connections. If another credential is needed use c() to bind the character vector.

Usage

```
defaultCredentials()
```

getHadesWideLock

Function to grab the hades wide lock file

Description

Function to grab the hades wide lock file

Usage

```
getHadesWideLock(version, projectPath = here::here())
```

Arguments

version the version of the hades wide lock file to use

projectPath the path to the project

importAtlasCohorts Function to import Atlas cohorts into Ulysses

Description

Function to import Atlas cohorts into Ulysses

Usage

```
importAtlasCohorts(cohortIds, keyringName = "atlas", keyringPassword = "ohdsi")
```

Arguments

cohortIds the atlas ids of the cohorts you want to import

keyringName the name of the keyring to save credentials. Defaults to atlas

 ${\tt keyringPassword}$

the password for the keyring to save credentials. Defaults to ohdsi

Value

saves circe json of ids given to the cohorts/json folder of Ulysses

8 importImages

```
importAtlasConceptSets
```

Function to import Atlas concept sets into Ulysses

Description

Function to import Atlas concept sets into Ulysses

Usage

```
importAtlasConceptSets(
  conceptSetIds,
  keyringName = "atlas",
  keyringPassword = "ohdsi"
)
```

Arguments

conceptSetIds the atlas ids of the concept sets you want to import

keyringName the name of the keyring to save credentials. Defaults to atlas

keyringPassword

the password for the keyring to save credentials. Defaults to ohdsi

Value

saves circe json of ids given to the cohorts/conceptSets/json folder of Ulysses

importImages

Function to import a folder of images for a study hub

Description

Function to import a folder of images for a study hub

Usage

```
importImages(imageFolder, projectPath = here::here())
```

Arguments

```
imageFolder the file path for an image folder projectPath path to ohdsi study
```

Value

invisible return of the image file folder

initConfig 9

Description

Function to create a config.yml file

Usage

```
initConfig(
  block = "BlockName",
  database = "DatabaseName",
  withKeyring = FALSE,
  projectPath = here::here(),
  open = TRUE
)
```

Arguments

block the name of the config block, defaults to BlockName

database the name of the database for the block, default to DatabaseName

withKeyring should the config file use keyring, default FALSE

projectPath the path to the project

open toggle on whether the file should be opened

```
initConfigUsingKeyring
```

Function to initialize config.yml using keyring

Description

Function to initialize config.yml using keyring

Usage

```
initConfigUsingKeyring(dbIds, projectPath = here::here(), open = TRUE)
```

Arguments

dbIds the dbIds to add to the config file

projectPath the path to the project

initConfigUsingTable Function to import credentials in stored csv to study config.yml

Description

Function to import credentials in stored csv to study config.yml

Usage

```
initConfigUsingTable(
  credFile = fs::path_home("shhh.csv"),
  projectPath = here::here(),
  open = TRUE
)
```

Arguments

credFile a credential.csv file stored in a secure location

projectPath the path to the project

open toggle on whether the file should be opened

initCredentialsKeyring

Function to set multi credentials

Description

Function to set multi credentials

Usage

```
initCredentialsKeyring(db_id, keyringPassword = "ulysses", forceCheck = TRUE)
```

Arguments

db_id the database id to distinguish the set of credentials

keyringPassword

the password for the keyring. Defaults to ulysses.

forceCheck a toggle that will print blurred credentials to check credential

initCredentialsTable 11

initCredentialsTable Function to start a credential table

Description

Function to start a credential table

Usage

```
initCredentialsTable(
  db_id,
  db_full_name = db_id,
  dbms,
  user,
  password,
  connection_string,
  cdm_database_schema,
  work_database_schema,
  temp_emulation_schema = work_database_schema)
```

Arguments

db_id an id or shortName for a database. Please use snakecase ${\sf db_full_name}$ the full name of the database. If not specified defaults to db_id the dbms for your database. Can be either redshift, postgres, snowflake, sql dbms server or oracle the user name to connect to the database user password the password to connect to the databse connection_string a jdbc connection string to use with DatabaseConnector cdm_database_schema the cdm database schema of the datbase you want to use work_database_schema a scratch schema the user has read and write access to in order to build cohort temp_emulation_schema a schema required for oracle and snowflake to make temp tables.

Value

writes a csv to your home directory called shhh.csv storing your database credentials

12 makeAnalysisTask

isOhdsiStudy

Function to check if the directory is an ohdsi project

Description

Function to check if the directory is an ohdsi project

Usage

```
isOhdsiStudy(basePath)
```

Arguments

basePath

the path of the directory

 ${\tt make Analysis Plan}$

Function to create a SAP

Description

Function to create a SAP

Usage

```
makeAnalysisPlan(projectPath = here::here(), open = TRUE)
```

Arguments

projectPath the path to the project

open toggle on whether the file should be opened

makeAnalysisTask

Function to create a pipeline task as a Rmd file

Description

Function to create a pipeline task as a Rmd file

Usage

```
makeAnalysisTask(
  taskName,
  configBlock = NULL,
  date = lubridate::today(),
  projectPath = here::here(),
  open = TRUE
```

makeCaprScript 13

Arguments

taskName The name of the analysis script

configBlock the name of the config block to use for the script date the date the script was built, default to today's date

projectPath the path to the project

open toggle on whether the file should be opened

makeCaprScript

Function to create a pipeline task as an R file

Description

Function to create a pipeline task as an R file

Usage

```
makeCaprScript(
   scriptName,
   configBlock = NULL,
   date = lubridate::today(),
   projectPath = here::here(),
   open = TRUE
)
```

Arguments

scriptName The name of the capr file that is being created configBlock the name of the config block to use for the script date the date the script was built, default to today's date

projectPath the path to the project

open toggle on whether the file should be opened

makeCohortDetails

Function to create the cohort details for the study

Description

The cohort details file is a document that provides a human-readable version of the circe cohort definitions used in the study. This function targets the cohortsToCreate folder and makes a quarto of the cohort details.

Usage

```
makeCohortDetails(projectPath = here::here(), open = TRUE)
```

14 makeHowToRun

Arguments

projectPath the path to the project

open toggle on whether the file should be opened

Value

writes a CohortDetails.qmd file to the documentation folder

makeContributionGuidelines

R Markdown file to make the contribution guidelines

Description

R Markdown file to make the contribution guidelines

Usage

```
makeContributionGuidelines(projectPath = here::here(), open = TRUE)
```

Arguments

projectPath the path to the project

open toggle on whether the file should be opened

makeHowToRun

Function to create a HowToRun file

Description

Function to create a HowToRun file

Usage

```
makeHowToRun(projectPath = here::here(), open = TRUE)
```

Arguments

projectPath the path to the project

makeInternals 15

makeInternals

Function to create a pipeline task as an R file

Description

Function to create a pipeline task as an R file

Usage

```
makeInternals(
  internalsName,
  date = lubridate::today(),
  projectPath = here::here(),
  open = TRUE
)
```

Arguments

internal sName The name of the internals file that is being created date the date the script was built, default to today's date

projectPath the path to the project

open toggle on whether the file should be opened

makeKeyringSetup

Function to create a config.yml file

Description

Function to create a config.yml file

Usage

```
makeKeyringSetup(
  database = NULL,
  configBlock = NULL,
  secret = NULL,
  projectPath = here::here(),
  open = TRUE
)
```

Arguments

database the name of the database for the project, can be NULL configBlock the name of the configBlock to use, can be NULL

secret a keyword to use as the keyring password to access credentials, if NULL pass-

word is ulysses

projectPath the path to the project

16 makeNews

makeMigrationScript

Function to create a migration script

Description

Function to create a migration script

Usage

```
makeMigrationScript(
   scriptName,
   date = lubridate::today(),
   projectPath = here::here(),
   open = TRUE
)
```

Arguments

scriptName The name of the analysis script

date the date the script was built, default to today's date

projectPath the path to the project

open toggle on whether the file should be opened

makeNews

Function to create a NEWS file

Description

Function to create a NEWS file

Usage

```
makeNews(projectPath = here::here(), open = TRUE)
```

Arguments

projectPath the path to the project

makeReadMe 17

makeReadMe

Function to create a README file

Description

Function to create a README file

Usage

```
makeReadMe(projectPath = here::here(), open = TRUE)
```

Arguments

projectPath the path to the project

open toggle on whether the file should be opened

makeResultsReport

Quarto file to make a results report

Description

Quarto file to make a results report

Usage

```
makeResultsReport(projectPath = here::here(), open = TRUE)
```

Arguments

projectPath the path to the project

open toggle on whether the file should be opened

 ${\tt makeStrategusTask}$

Function to create a pipeline task as a Rmd file

Description

Function to create a pipeline task as a Rmd file

Usage

```
makeStrategusTask(
  taskName,
  configBlock = NULL,
  date = lubridate::today(),
  projectPath = here::here(),
  open = TRUE
)
```

18 newOhdsiStudy

Arguments

taskName The name of the analysis script

configBlock the name of the config block to use for the script
date the date the script was built, default to today's date

projectPath the path to the project

open toggle on whether the file should be opened

makeWebApiScript

Function to create a pipeline task as an R file

Description

Function to create a pipeline task as an R file

Usage

```
makeWebApiScript(
  keyringName = NULL,
  keyringPassword = NULL,
  projectPath = here::here(),
  open = TRUE
)
```

Arguments

keyringName The name of the keyring for the study, if null defaults to dir basename

keyringPassword

The password for the keyring, if null defauls to ohdsi

projectPath the path to the project

open toggle on whether the file should be opened

newOhdsiStudy

Function that initializes a new ohdsi study project environment

Description

Function that initializes a new ohdsi study project environment

openCredentials 19

Usage

```
newOhdsiStudy(
  path,
  projectName = basename(path),
  studyInfo = setStudyInfo(id = basename(path)),
  authors = setStudyAuthors(),
  timeline = setStudyTimeline(),
  about = setStudyDescription(),
  links = setStudyLinks(),
  tags = setStudyTags(),
  verbose = TRUE,
  openProject = TRUE
)
```

Arguments

path

projectName the name of the project studyInfo a list object identifying the title, type and study version, defaults to setStudyInfo,

see documentation

the path where the project sits

authors a list object identifying the lead and developer authors names and emails, de-

faults to setStudyAuthors, see documentation.

timeline a list object identifying the study status, start and end date, defaults to setStudyTimeline,

see documentation

about a list object identifying the study description, therapeutic area and databases,

defaults to setStudyDescription, see documentation

links a list object identifying the linked resources of the study, defaults to setStudyLinks,

see documentation

a list object identifying tags to the study, defauls to setStudyTags, see docutags

mentation

verbose whether the function should provide steps, default TRUE

openProject should the project be opened if created

openCredentials Function to open the credentials table to edit or peak

Description

Function to open the credentials table to edit or peak

Usage

```
openCredentials(credFile = fs::path_home("shhh.csv"))
```

Arguments

credFile the path to shhh.csv

Value

tibble of credentials

previewStudyHub

Function to preview study hub

Description

Function to preview study hub

Usage

```
previewStudyHub(projectPath = here::here())
```

Arguments

```
projectPath path to ohdsi study
```

Value

previews study hub in browser

```
publishStudyToRepository
```

Publish Study to Repo

Description

Publish Study to Repo

Usage

```
publishStudyToRepository(repoUrl, message = "Initial commit for OHDSI study")
```

Arguments

repoUrl an https url for the repo remote. Example: https://github.com/Org/repo.git

message the commit message for your OHDSI study

retrieveStudySettings 21

retrieveStudySettings Function to convert yml into a specified list format

Description

Function to convert yml into a specified list format

Usage

```
retrieveStudySettings(projectPath)
```

Arguments

```
projectPath the path to the project
```

Value

the study yml as an R object (list)

run Task In Background

Function to run study task in background

Description

Function to run study task in background

Usage

```
runTaskInBackground(taskFile, configBlock, projectPath = here::here())
```

Arguments

taskFile a task file to run in the background configBlock the configBlock to use in the study

projectPath the path to the project

Value

invisble return, launches background job

22 setCredential

setAtlasCredentials Function to set atlas credentials for keyring

Description

Function to set atlas credentials for keyring

Usage

```
setAtlasCredentials(keyringName = "atlas", keyringPassword = "ohdsi")
```

Arguments

keyringName the name of the keyring to save credentials. Defaults to atlas

keyringPassword

the password for the keyring to save credentials. Defaults to ohdsi

Value

a series of dialog box inputs for the webapi credentials including the baseUrl, authMethod, user and password

setCredential

Function to set single credential

Description

Function to set single credential

Usage

```
setCredential(cred, db, keyringName, keyringPassword, forceCheck = TRUE)
```

Arguments

cred the credential to set (i.e dbms, user, connectionString)

db the database prefix for the credential

keyringName the name of the keyringName for the credential set, this will be the keyring

namec

keyringPassword

the password for the keyring.

forceCheck a toggle that will print blurred credentials to check credential

setMultipleCredentials 23

```
setMultipleCredentials
```

Function to set multi credentials

Description

Function to set multi credentials

Usage

```
setMultipleCredentials(
  creds,
  db,
  keyringName,
  keyringPassword,
  forceCheck = TRUE
)
```

Arguments

creds a vector of credentials to set (i.e dbms, user, connectionString). See defaultCre-

dentials on building set

db the database prefix for the credential

keyringName the name of the keyringName where the credential will be set

keyringPassword

the password for the keyring.

forceCheck a toggle that will print blurred credentials to check credential

setStrategusInstantiatedFolder

Function to set strategus instantiated folder

Description

Function to set strategus instantiated folder

Usage

```
setStrategusInstantiatedFolder(folderName, root = NULL)
```

Arguments

folderName the name of the instantiated folder

root the root path to the folder, defaults to the home path

24 setStudyDescription

setStudyAuthors

Function to set study authors

Description

Function to set study authors

Usage

```
setStudyAuthors(
  developer = Sys.getenv("USERNAME"),
  developerEmail = glue::glue("{developer}@ohdsi.org"),
  lead = "Ulysses",
  leadEmail = "Ulysses@ohdsi.org"
)
```

Arguments

developer specify the study developer, default to system variable

developerEmail the email of the developer
lead specify the lead of the study
leadEmail specify the lead of the study email

Value

a list containing study authors

setStudyDescription

Function to set study description

Description

Function to set study description

Usage

```
setStudyDescription(
  desc = "Provide a 1 to 2 sentence description of your study. Be concise.",
  ta = "Specify the therapeutic area of the study",
  dataSources = list("Truven MarketScan", "Optum Market Clarity")
)
```

Arguments

desc a brief description of the study

ta a character string of the therapeutic area

dataSources a list of data sources

Value

a list containing study description info

setStudyInfo 25

 ${\tt setStudyInfo}$

Function to set study info

Description

Function to set study info

Usage

```
setStudyInfo(
  id,
  title = id,
  type = c("Characterization"),
  version = "0.0.0.999"
)
```

Arguments

id specify the study idtitle specify the study titletype specify the type of studyversion specify the study version

Value

a list containing study info

setStudyKeyring

Function to set study keyring

Description

Function to set study keyring

Usage

```
setStudyKeyring(keyringName, keyringPassword)
```

Arguments

```
keyringName the name of the keyring, this should be the reponame for the study keyringPassword a password to access the study keyring
```

26 setStudyTags

setStudyLinks

Function to set study links

Description

Function to set study links

Usage

```
setStudyLinks(...)
```

Arguments

... a series of resource links for the study

Value

a list containing links to resources

 ${\tt setStudyTags}$

Function to set study tags

Description

Function to set study tags

Usage

```
setStudyTags(...)
```

Arguments

... a series of tags for the study

Value

a list containing study tags

setStudyTimeline 27

 ${\tt setStudyTimeline}$

Function to set study timeline

Description

Function to set study timeline

Usage

```
setStudyTimeline(
  status = "Started",
  startDate = as.character(lubridate::today()),
  endDate = as.character(lubridate::today() + (365 * 2))
)
```

Arguments

status the study status, default is started

startDate the start of the study, defaults to todays date

endDate the date specifying the end (or expected end) of the study

Value

a list containing study timeline

updateDeveloperInfo

Function to update developer Infor

Description

Function to update developer Infor

Usage

```
updateDeveloperInfo(newName, newEmail, projectPath = here::here())
```

Arguments

newName change the developer name newEmail change the developer email

Value

update Lead Info

Function to update lead Infor

Description

Function to update lead Infor

Usage

```
updateLeadInfo(newName, newEmail, projectPath = here::here())
```

Arguments

newName change the lead name newEmail change the lead email

Value

invisible studyYml, prints specifying what changes happened

 ${\tt updateStudyDescription}$

Function to update study description

Description

Function to update study description

Usage

```
updateStudyDescription(newStudyDescription, projectPath = here::here())
```

Arguments

```
projectPath the path to the project newStudyVersion the new study description
```

Value

updateStudyEndDate 29

update Study End Date

Function to update study end date

Description

Function to update study end date

Usage

```
updateStudyEndDate(newEndDate, projectPath = here::here())
```

Arguments

```
newEndDate the new end date of the study, suggest format YYYY-MM-DD projectPath the path to the project
```

Value

invisible studyYml, prints specifying what changes happened

update Study Status

Function to update study status

Description

Function to update study status

Usage

```
updateStudyStatus(
  newStudyStatus = c("Started", "In-Progress", "Stopped", "Completed"),
  projectPath = here::here()
)
```

Arguments

```
newStudyStatus the new status of the study, accepts Started, In-Progress, Stopped, Completed projectPath the path to the project
```

Value

30 updateStudyVersion

update Study Title

Function to update study title

Description

Function to update study title

Usage

```
updateStudyTitle(newStudyTitle, projectPath = here::here())
```

Arguments

```
newStudyTitle the new study title projectPath the path to the project
```

Value

invisible studyYml, prints specifying what changes happened

 ${\tt updateStudyVersion}$

Function to update study version

Description

Function to update study version

Usage

```
updateStudyVersion(newStudyVersion, projectPath = here::here())
```

Arguments

```
{\tt newStudyVersion}
```

the new study version

projectPath the path to the project

Value

updateTherapeuticArea

updateTherapeuticArea Function to update study therapeutic area

Description

Function to update study therapeutic area

Usage

```
updateTherapeuticArea(newTA, projectPath = here::here())
```

Arguments

newTA the new study therapeutic area

projectPath the path to the project

Value

invisible studyYml, prints specifying what changes happened

zipResults

Funciton to compress results into a zip file

Description

Funciton to compress results into a zip file

Usage

```
zipResults(databaseName, projectPath = here::here())
```

Arguments

 ${\tt databaseName} \qquad {\tt the \ name \ of \ the \ database \ folder \ to \ compress}$

projectPath the path to the project

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