

# Package ‘Strategus’

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**Type** Package

**Title** Coordinating and Executing Analytics Using HADES Modules

**Version** 0.0.3

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**Maintainer** Martijn Schuemie <schuemie@ohdsi.org>

**Description** An R package for coordinating and executing analytics using HADES modules.

**License** Apache License 2.0

**URL** <https://ohdsi.github.io/Strategus>, <https://github.com/OHDSI/Strategus>

**BugReports** <https://github.com/OHDSI/Strategus/issues>

**Depends** R (>= 4.0.0),  
CohortGenerator (>= 0.7.0),  
DatabaseConnector (>= 5.0.4)

**Imports** targets,  
renv (>= 0.15.5),  
ParallelLogger,  
dplyr,  
checkmate,  
keyring,  
rlang,  
utils,  
R.utils,  
digest,  
methods

**Suggests** testthat,  
fs,  
knitr,  
rmarkdown,  
Eunomia

**Remotes** ohdsi/CohortGenerator,  
ohdsi/Eunomia

**VignetteBuilder** knitr

**NeedsCompilation** no

**RoxygenNote** 7.2.1

**Roxygen** list(markdown = TRUE)

**Encoding** UTF-8

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addModuleSpecifications	
	<i>Add module specifications to analysis specifications</i>

---

**Description**

Add module specifications to analysis specifications

**Usage**

addModuleSpecifications(analysisSpecifications, moduleSpecifications)

**Arguments**

- analysisSpecifications  
An object of type AnalysisSpecifications as created by [createEmptyAnalysisSpecifications](#)
- moduleSpecifications  
An object of type ModuleSpecifications.

**Value**

Returns the analysisSpecifications object with the module specifications added.

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addSharedResources	<i>Add shared resources to analysis specifications</i>
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**Description**

Add shared resources to analysis specifications

**Usage**

addSharedResources(analysisSpecifications, sharedResources)

Arguments

- analysisSpecifications
- An object of type AnalysisSpecifications as created by [createEmptyAnalysisSpecifications](#)
- sharedResources
- An object of type SharedResources.

Value

Returns the analysisSpecifications object with the module specifications added.

---

createCdmExecutionSettings
<i>Create CDM execution settings</i>

---

Description

Create CDM execution settings

Usage

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

Arguments

- connectionDetailsReference
- A string that can be used to retrieve database connection details from a secure local store.
- workDatabaseSchema
- A database schema where intermediate data can be stored. The user (as identified in the connection details) will need to have write access to this database schema.
- cdmDatabaseSchema
- The database schema containing the data in CDM format. The user (as identified in the connection details) will need to have read access to this database schema.
- cohortTableNames
- An object identifying the various cohort table names that will be created in the workDatabaseSchema. This object can be created using the [CohortGenerator::getCohortTableNames](#) function.
- workFolder
- A folder in the local file system where intermediate results can be written.
- resultsFolder
- A folder in the local file system where the module output will be written.
- minCellCount
- The minimum number of subjects contributing to a count before it can be included in results.

**Value**

An object of type ExecutionSettings.

---

```
createEmptyAnalysisSpecifications
```

*Create an empty analysis specifications object.*

---

**Description**

Create an empty analysis specifications object.

**Usage**

```
createEmptyAnalysisSpecifications()
```

**Value**

An object of type AnalysisSpecifications.

---

```
createResultsExecutionSettings
```

*Create Results execution settings*

---

**Description**

Create Results execution settings

**Usage**

```
createResultsExecutionSettings(
    resultsConnectionDetailsReference,
    resultsDatabaseSchema,
    workFolder,
    resultsFolder,
    minCellCount = 5
)
```

**Arguments**

resultsConnectionDetailsReference

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

resultsDatabaseSchema

A schema where the results tables are stored

workFolder

A folder in the local file system where intermediate results can be written.

resultsFolder

A folder in the local file system where the module output will be written.

minCellCount

The minimum number of subjects contributing to a count before it can be included in results.

**Value**

An object of type ExecutionSettings.

---

`ensureAllModulesInstantiated`*Ensure all modules are instantiated*

---

**Description**

Ensure that all modules referenced in the analysis specifications are instantiated locally in the folder specified in the INSTANTIATED\_MODULES\_FOLDER environmental variable.

Missing modules will be fetched from remote repositories.

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

**Usage**

```
ensureAllModulesInstantiated(analysisSpecifications)
```

**Arguments**

`analysisSpecifications`

An object of type AnalysisSpecifications as created by [createEmptyAnalysisSpecifications](#)

**Value**

A tibble listing the instantiated modules.

---

`execute`*Execute analysis specifications.*

---

**Description**

Execute analysis specifications.

**Usage**

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

**Arguments**

analysisSpecifications	An object of type AnalysisSpecifications as created by <a href="#">createEmptyAnalysisSpecifications()</a> .
executionSettings	An object of type ExecutionSettings as created by <a href="#">createCdmExecutionSettings()</a> or <a href="#">createResultsExecutionSettings()</a> .
executionScriptFolder	Optional: the path to use for storing the execution script. when NULL, this function will use a temporary file location to create the script to execute.
restart	Restart run? Requires executionScriptFolder to be specified, and be the same as the executionScriptFolder used in the run to restart.

**Value**

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

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retrieveConnectionDetails

*Retrieve connection details from the secure location*

---

**Description**

Retrieve connection details from the secure location

**Usage**

```
retrieveConnectionDetails(connectionDetailsReference)
```

**Arguments**

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

Returns an object of type connectionDetails.

**See Also**

[storeConnectionDetails\(\)](#)

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`storeConnectionDetails`*Store connection details in a secure location*

---

**Description**

Store connection details in a secure location

**Usage**

```
storeConnectionDetails(connectionDetails, connectionDetailsReference)
```

**Arguments**

`connectionDetails`

An object of type `connectionDetails` as created by the [DatabaseConnector::createConnectionDetails](#) function.

`connectionDetailsReference`

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

**Value**

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

**See Also**

[retrieveConnectionDetails\(\)](#)

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