

# Package: montagu (via r-universe)

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**Title** Interface with 'montagu'

**Version** 0.6.1

**Description** Client for interacting with the montagu API, and authentication with the montagu OrderlyWeb instance. This package is part of montagu.

**License** MIT + file LICENSE

**Encoding** UTF-8

**URL** <https://github.com/vimc/montagu-r>

**BugReports** <https://github.com/vimc/montagu-r/issues>

**Imports** R6, getPass, httr, jsonlite, openssl, progress (>= 1.2.0),  
stor

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**VignetteBuilder** knitr

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---

montagu\_burden\_estimate\_sets

*Retrieves list of estimate sets for a group, touchstone and scenario.*

---

**Description**

Burden estimate sets define a set of results for a modelling group. They are specific to a touchstone and scenario. Usually, they will be the populated version of the burden estimate set template, which a modelling group can download, and defines the columns and rows for all the countries, ages and years that are expected from that group, for that scenario. The modelling group then overwrites the missing values with results from their model, and submits the results to Montagu.

**Usage**

```
montagu_burden_estimate_sets(modelling_group_id, touchstone_id,
                             scenario_id, location = NULL)
```

**Arguments**

modelling_group_id	Modelling group identifier
touchstone_id	Touchstone identifier
scenario_id	Scenario identifier
location	The montagu server to connect to.

**Value**

A data frame of information about all relevant estimate sets.

---

```
montagu_burden_estimate_set_clear
```

*Deletes all uploaded rows from an incomplete burden estimate set*

---

**Description**

Burden estimate sets define a set of results for a modelling group. They are specific to a touchstone and scenario. Usually, they will be the populated version of the burden estimate set template, which a modelling group can download, and defines the columns and rows for all the countries, ages and years that are expected from that group, for that scenario. The modelling group then overwrites the missing values with results from their model, and submits the results to Montagu.

**Usage**

```
montagu_burden_estimate_set_clear(modelling_group_id, touchstone_id,
                                   scenario_id, burden_estimate_set_id, location = NULL)
```

**Arguments**

modelling_group_id	Modelling group identifier
touchstone_id	Touchstone identifier
scenario_id	Scenario identifier
burden_estimate_set_id	Burden estimate set created by montagu_burden_estimate_set_create
location	The montagu server to connect to.

**Value**

The id of the burden estimate set

---

montagu\_burden\_estimate\_set\_close  
*Closes a burden estimate set, marking it as complete.*

---

**Description**

Burden estimate sets define a set of results for a modelling group. They are specific to a touchstone and scenario. Usually, they will be the populated version of the burden estimate set template, which a modelling group can download, and defines the columns and rows for all the countries, ages and years that are expected from that group, for that scenario. The modelling group then overwrites the missing values with results from their model, and submits the results to Montagu.

**Usage**

```
montagu_burden_estimate_set_close(modelling_group_id, touchstone_id,
    scenario_id, burden_estimate_set_id, location = NULL)
```

**Arguments**

modelling_group_id	Modelling group identifier
touchstone_id	Touchstone identifier
scenario_id	Scenario identifier
burden_estimate_set_id	Burden estimate set created by montagu_burden_estimate_set_create
location	The montagu server to connect to.

**Value**

The id of the burden estimate set

---

montagu_burden_estimate_set_create
<i>Create a new burden estimate set</i>

---

**Description**

Burden estimate sets define a set of results for a modelling group. They are specific to a touchstone and scenario. Usually, they will be the populated version of the burden estimate set template, which a modelling group can download, and defines the columns and rows for all the countries, ages and years that are expected from that group, for that scenario. The modelling group then overwrites the missing values with results from their model, and submits the results to Montagu.

**Usage**

```
montagu_burden_estimate_set_create(modelling_group_id, touchstone_id,
    scenario_id, type, details = NULL, location = NULL)
```

**Arguments**

modelling_group_id	Modelling group identifier
touchstone_id	Touchstone identifier
scenario_id	Scenario identifier
type	Can be ‘central-single-run‘ or ‘central-averaged‘
details	Optional details string
location	The montagu server to connect to.

**Value**

The id of the burden estimate set

---

montagu_burden_estimate_set_data
<i>Retrieves the data for a specific burden estimate set.</i>

---

**Description**

Burden estimate sets define a set of results for a modelling group. They are specific to a touchstone and scenario. Usually, they will be the populated version of the burden estimate set template, which a modelling group can download, and defines the columns and rows for all the countries, ages and years that are expected from that group, for that scenario. The modelling group then overwrites the missing values with results from their model, and submits the results to Montagu.

**Usage**

```
montagu_burden_estimate_set_data(modelling_group_id, touchstone_id,
    scenario_id, burden_estimate_set_id, location = NULL)
```

**Arguments**

```
modelling_group_id      Modelling group identifier
touchstone_id           Touchstone identifier
scenario_id              Scenario identifier
burden_estimate_set_id  the integer id of a burden estimate set
location                The montagu server to connect to.
```

**Value**

A list of information about a specific estimate set.

---

```
montagu_burden_estimate_set_info
```

*Retrieves information about a specific burden estimate set.*

---

**Description**

Burden estimate sets define a set of results for a modelling group. They are specific to a touchstone and scenario. Usually, they will be the populated version of the burden estimate set template, which a modelling group can download, and defines the columns and rows for all the countries, ages and years that are expected from that group, for that scenario. The modelling group then overwrites the missing values with results from their model, and submits the results to Montagu.

**Usage**

```
montagu_burden_estimate_set_info(modelling_group_id, touchstone_id,
    scenario_id, burden_estimate_set_id, location = NULL)
```

**Arguments**

```
modelling_group_id      Modelling group identifier
touchstone_id           Touchstone identifier
scenario_id              Scenario identifier
burden_estimate_set_id  The integer id of a burden estimate set
location                The montagu server to connect to.
```

**Value**

A list of information about a specific estimate set.

---

```
montagu_burden_estimate_set_outcome_data
```

*Retrieve data for a particular outcome of a burden estimate set, aggregated across country and disaggregated by either age or year.*

---

**Description**

Burden estimate sets define a set of results for a modelling group. They are specific to a touchstone and scenario. Usually, they will be the populated version of the burden estimate set template, which a modelling group can download, and defines the columns and rows for all the countries, ages and years that are expected from that group, for that scenario. The modelling group then overwrites the missing values with results from their model, and submits the results to Montagu.

**Usage**

```
montagu_burden_estimate_set_outcome_data(modelling_group_id, touchstone_id,
  scenario_id, burden_estimate_set_id, outcome_code, group_by = "age",
  location = NULL)
```

**Arguments**

modelling_group_id	Modelling group identifier
touchstone_id	Touchstone identifier
scenario_id	Scenario identifier
burden_estimate_set_id	The integer id of a burden estimate set
outcome_code	The name of an outcome, such as 'cases' or 'deaths'.
group_by	Set to 'age' (the default) or 'year', to set the
location	The montagu server to connect to.

**Value**

A data frame with columns age or year (depending on group\_by),

---

montagu_burden_estimate_set_problems
<i>Retrieves information about a specific burden estimate set.</i>

---

**Description**

Burden estimate sets define a set of results for a modelling group. They are specific to a touchstone and scenario. Usually, they will be the populated version of the burden estimate set template, which a modelling group can download, and defines the columns and rows for all the countries, ages and years that are expected from that group, for that scenario. The modelling group then overwrites the missing values with results from their model, and submits the results to Montagu.

**Usage**

```
montagu_burden_estimate_set_problems(modelling_group_id, touchstone_id,
    scenario_id, burden_estimate_set_id, location = NULL)
```

**Arguments**

- modelling\_group\_id      Modelling group identifier
- touchstone\_id      Touchstone identifier
- scenario\_id      Scenario identifier
- burden\_estimate\_set\_id      The integer id of a burden estimate set
- location      The montagu server to connect to.

**Value**

A list of any problems with this burden estimate set

---

montagu_burden_estimate_set_upload
<i>Deletes all uploaded rows from an incomplete burden estimate set</i>

---

**Description**

Burden estimate sets define a set of results for a modelling group. They are specific to a touchstone and scenario. Usually, they will be the populated version of the burden estimate set template, which a modelling group can download, and defines the columns and rows for all the countries, ages and years that are expected from that group, for that scenario. The modelling group then overwrites the missing values with results from their model, and submits the results to Montagu.



**Usage**

```
montagu_burden_estimate_set_upload(modelling_group_id, touchstone_id,
    scenario_id, burden_estimate_set_id, data, lines = 10000L,
    keep_open = FALSE, location = NULL)
```

**Arguments**

modelling_group_id	Modelling group identifier
touchstone_id	Touchstone identifier
scenario_id	Scenario identifier
burden_estimate_set_id	Burden estimate set created by montagu_burden_estimate_set_create
data	Data frame containing burden estimates.
lines	Number of lines to chunk the files into
keep_open	Keep the burden estimate set open after upload?
location	The montagu server to connect to.

**Value**

The id of the burden estimate set

---

montagu\_central\_burden\_estimate\_template

*Get central burden estimate template for an expectation*

---

**Description**

The burden estimate set is the list of burden estimates for a particular scenario for a touchstone. Montagu provides csv templates including rows for all the countries, years and ages, and columns for all the burden outcomes expected. These templates can then be filled in by the modelling groups, and uploaded to Montagu as their results submission.

**Usage**

```
montagu_central_burden_estimate_template(modelling_group_id, touchstone_id,
    expectation_id, location = NULL)
```

**Arguments**

modelling_group_id	id of the modelling group. If omitted, or null, then all scenarios associated with the touchstone are returned.
touchstone_id	id of the touchstone (including version)
expectation_id	id of the expectation (integer)
location	The montagu server to connect to.

**Value**

A data frame with columns disease, year, age, country, and country\_name with given values, then cohort\_size, deaths, cases and dalys, all NA.

---

montagu\_coverage\_data *Retrieve coverage data for a scenario, touchstone and modelling group.*

---

**Description**

The coverage data describes for each country, over time and age, the efforts to vaccinate people against each disease. Routine activities involve the regular vaccination that is in place, whereas campaigns are specifically targeted towards a certain disease or people group for a certain time period.

**Usage**

```
montagu_coverage_data(modelling_group = NULL, touchstone_id, scenario_id,
  format = "long", all_countries = FALSE, location = NULL)
```

**Arguments**

modelling_group	id of modelling group; if omitted or NULL, then return coverage info for all modelling groups.
touchstone_id	id of touchstone (including version)
scenario_id	id of scenario within touchstone
format	"wide" or "long" csv format. Long format contains a row per year per country; wide format contains a row per country, with year-specific columns for target population and coverage.
all_countries	Include all countries, instead of just those for which burden estimates are required.
location	The montagu server to connect to.

**Value**

A data frame of the coverage data.

---

montagu_coverage_info	<i>Retrieve metadata for coverage sets for a particular group, touchstone and scenario.</i>
-----------------------	---

---

**Description**

The coverage data describes for each country, over time and age, the efforts to vaccinate people against each disease. Routine activities involve the regular vaccination that is in place, whereas campaigns are specifically targeted towards a certain disease or people group for a certain time period.

**Usage**

```
montagu_coverage_info(modelling_group, touchstone_id, scenario_id,  
  location = NULL)
```

**Arguments**

modelling_group	id of modelling group
touchstone_id	id of touchstone (including version)
scenario_id	id of scenario within touchstone
location	The montagu server to connect to.

**Value**

A data frame of metadata about all associated coverage sets

---

montagu_current_estimate_set_info	<i>Get information on current estimate set for a scenario.</i>
-----------------------------------	--

---

**Description**

Groups upload estimate sets to Montagu. The most recent set of results uploaded by a group for a given scenario can be queried for its status, or retrieved.

**Usage**

```
montagu_current_estimate_set_info(modelling_group_id, touchstone_id,  
  scenario_id, location = NULL)
```

**Arguments**

modelling_group_id	id of the modelling group. If omitted, or null, then all scenarios associated with the touchstone are returned.
touchstone_id	id of the touchstone (including version)
scenario_id	id of the scenario
location	The montagu server to connect to.

**Value**

A list of fields about the current estimate set

---

montagu\_current\_estimate\_set\_problems

*Retrieve list of any problems in current estimate set for a scenario.*

---

**Description**

Groups upload estimate sets to Montagu. The most recent set of results uploaded by a group for a given scenario can be queried for its status, or retrieved.

**Usage**

```
montagu_current_estimate_set_problems(modelling_group_id, touchstone_id,  
    scenario_id, location = NULL)
```

**Arguments**

modelling_group_id	id of the modelling group. If omitted, or null, then all scenarios associated with the touchstone are returned.
touchstone_id	id of the touchstone (including version)
scenario_id	id of the scenario
location	The montagu server to connect to.

**Value**

A list of problem text.

---

`montagu_demographics_list`*List the demographic data available for a given touchstone.*

---

**Description**

Montagu provides standardised demographic data for the groups to use in their models. The source of the data is UNWPP, although various procedures are applied for convenience, including work on some smaller countries, people above the age of 80 in certain time periods, and extrapolating both cohorts backwards in time to their origins before 1950. Internal documents in the reporting portal describe the methods and motivations for these extensions.

**Usage**

```
montagu_demographics_list(touchstone_id, location = NULL)
```

**Arguments**

<code>touchstone_id</code>	Touchstone identifier
<code>location</code>	The location of the montagu api server.

**Value**

A data frame, giving the code and description for each demographic statistic, whether the data are stratified by gender, and a code indicating the source of the demographic data, which will change if there are future updates to any of the demographic data fields.

---

`montagu_demographic_data`*Download demographic data for a given touchstone.*

---

**Description**

Montagu provides standardised demographic data for the groups to use in their models. The source of the data is UNWPP, although various procedures are applied for convenience, including work on some smaller countries, people above the age of 80 in certain time periods, and extrapolating both cohorts backwards in time to their origins before 1950. Internal documents in the reporting portal describe the methods and motivations for these extensions.

**Usage**

```
montagu_demographic_data(type_code, touchstone_id, gender_code = NULL,  
  wide = FALSE, source_code = NULL, location = NULL)
```

**Arguments**

type_code	The demographic type code (something like cbr for Fertility: Crude birth rate (CBR). Get the possible values from montagu_demographics_list
touchstone_id	Touchstone identifier
gender_code	One of "male", "female" or "both" (if omitted montagu will return "both"). Not applicable to all statistics.
wide	Logical, if TRUE returns data in wide format rather than long.
source_code	Optional source code, may be useful if one type_code can come from two sources within a touchstone.
location	The location of the montagu api server.

**Value**

A data frame, giving the code and description for each demographic statistic, whether the data are stratified by gender, and a code indicating the source of the demographic data, which will change if there are future updates to any of the demographic data fields.

---

montagu_disease	<i>Retrieve disease with given id.</i>
-----------------	--

---

**Description**

Diseases have an internal id and a name in Montagu, which are generally, but not always the same. Occasionally, it is necessary to provide the disease id to Montagu functions.

**Usage**

```
montagu_disease(disease_id, location = NULL)
```

**Arguments**

disease_id	The disease id.
location	the montagu server to connect to.

**Value**

a list of an id and a disease name

---

montagu_diseases	<i>Retrieve list of all disease ids and names.</i>
------------------	--

---

**Description**

Diseases have an internal id and a name in Montagu, which are generally, but not always the same. Occasionally, it is necessary to provide the disease id to Montagu functions.

**Usage**

```
montagu_diseases(location = NULL)
```

**Arguments**

location	the montagu server to connect to.
----------	-----------------------------------

**Value**

data frame containing ids and names of diseases

---

montagu_expectation	<i>Get information about an expectation</i>
---------------------	---

---

**Description**

The expectations, for a modelling group for a particular touchstone, indicate the range of chronological years, ages and countries for which burden estimates are expected, and what burden outcomes are required.

**Usage**

```
montagu_expectation(modelling_group_id, touchstone_id, expectation_id,
  location = NULL)
```

**Arguments**

modelling_group_id	id of the modelling group. If omitted, or null, then all scenarios associated with the touchstone are returned.
touchstone_id	id of the touchstone (including version)
expectation_id	id of the expectation (integer)
location	The montagu server to connect to.

**Value**

list of information about the expectation, including a description and ranges of age and time required.

---

montagu\_expectations    *Get expectations for a modelling group and touchstone*

---

### Description

The expectations, for a modelling group for a particular touchstone, indicate the range of chronological years, ages and countries for which burden estimates are expected. These are also per-disease, so groups that model multiple diseases will see multiple rows of expectations.

### Usage

```
montagu_expectations(modelling_group_id, touchstone_id, location = NULL)
```

### Arguments

modelling_group_id	id of the modelling group. If omitted, or null, then all scenarios associated with the touchstone are returned.
touchstone_id	id of the touchstone (including version)
location	The montagu server to connect to.

### Value

A data frame of information about the expectation

---

montagu\_expectation\_applicable\_scenarios  
*Get applicable scenarios for an expectation*

---

### Description

Different scenarios may have different expectations. For example, for Hepatitis B, different countries are required for different scenarios, since the different HepB vaccination initiatives have been carried out in different sets of countries. For other diseases, the same expectation might be equally valid in different scenarios. Here, we can query which scenarios a particular expectation applies to.

### Usage

```
montagu_expectation_applicable_scenarios(modelling_group_id, touchstone_id,
  expectation_id, location = NULL)
```



**Arguments**

`modelling_group_id` id of the modelling group. If omitted, or null, then all scenarios associated with the touchstone are returned.

`touchstone_id` id of the touchstone (including version)

`expectation_id` id of the expectation (integer)

`location` The montagu server to connect to.

**Value**

A vector of scenario names

---

`montagu_expectation_countries`  
*Get country list for an expectation*

---

**Description**

The expectations, for a modelling group for a particular touchstone, indicate the range of chronological years, ages and countries for which burden estimates are expected, and what burden outcomes are required.

**Usage**

```
montagu_expectation_countries(modelling_group_id, touchstone_id,
  expectation_id, location = NULL)
```

**Arguments**

`modelling_group_id` id of the modelling group. If omitted, or null, then all scenarios associated with the touchstone are returned.

`touchstone_id` id of the touchstone (including version)

`expectation_id` Integer id of the expectation

`location` The montagu server to connect to.

**Value**

A data frame of country id and name, for all expected countries.

---

montagu\_expectation\_outcomes

*Get expected outcomes*


---

### Description

The expectations, for a modelling group for a particular touchstone, indicate the range of chronological years, ages and countries for which burden estimates are expected, and what burden outcomes are required.

### Usage

```
montagu_expectation_outcomes(modelling_group_id, touchstone_id,
                             expectation_id, location = NULL)
```

### Arguments

`modelling_group_id` id of the modelling group. If omitted, or null, then all scenarios associated with the touchstone are returned.

`touchstone_id` id of the touchstone (including version)

`expectation_id` id of the expectation (integer)

`location` The montagu server to connect to.

### Value

A vector of outcome names

---

montagu\_model

*Retrieve model with given id.*


---

### Description

Models and modelling groups have text ids in Montagu. Here we can look up the relationships between groups and models, with description and citation information.

### Usage

```
montagu_model(model_id, location = NULL)
```

### Arguments

`model_id` The model id.

`location` The montagu server to connect to.

**Value**

List containing information about one model

---

montagu\_modelling\_group

*Retrieve modelling\_group with given modelling\_group\_id.*

---

**Description**

Modelling group ids generally consist of an identifier for the institution where the group is based, a hyphen, and the principal investigator for that group. Groups will be informed of their internal id when joining the consortium, but for convenience, we provide functions to look up the modelling group id, and associated models.

**Usage**

```
montagu_modelling_group(modelling_group_id, location = NULL)
```

**Arguments**

modelling\_group\_id

The id of the modelling group

location

The montagu server to connect to.

**Value**

A list of id and description for the given group id.

---

montagu\_modelling\_groups

*Retrieve list of all modelling group ids and names.*

---

**Description**

Modelling group ids generally consist of an identifier for the institution where the group is based, a hyphen, and the principal investigator for that group. Groups will be informed of their internal id when joining the consortium, but for convenience, we provide functions to look up the modelling group id, and associated models.

**Usage**

```
montagu_modelling_groups(location = NULL)
```

**Arguments**

location

The montagu server to connect to.

**Value**

A dataframe of id and description for each group

---

montagu\_modelling\_group\_members

*Retrieve list of members for a given modelling\_group\_id.*

---

**Description**

Retrieve list of members for a given modelling\_group\_id.

**Usage**

```
montagu_modelling_group_members(modelling_group_id, location = NULL)
```

**Arguments**

modelling\_group\_id

The id of the modelling group

location

The montagu server to connect to.

---

montagu\_models

*Retrieve list of all model ids, names, citations and groups.*

---

**Description**

Models and modelling groups have text ids in Montagu. Here we can look up the relationships between groups and models, with description and citation information.

**Usage**

```
montagu_models(location = NULL)
```

**Arguments**

location

The montagu server to connect to.

**Value**

Data frame containing information about models.

---

montagu_model_list	<i>Retrieve list of models for a given modelling_group_id.</i>
--------------------	--

---

### Description

Modelling group ids generally consist of an identifier for the institution where the group is based, a hyphen, and the principal investigator for that group. Groups will be informed of their internal id when joining the consortium, but for convenience, we provide functions to look up the modelling group id, and associated models.

### Usage

```
montagu_model_list(modelling_group_id, location = NULL)
```

### Arguments

modelling_group_id	The id of the modelling group
location	The montagu server to connect to.

---

montagu_model_run_parameter_sets	<i>Retrieve a list of model run parameter sets for a group and touchstone</i>
----------------------------------	---

---

### Description

A model run parameter set is a list of parameters that is required for a set of stochastic model runs. In a stochastic ensemble, modelling groups are requested to perform a number of model runs. Each model run executes with a unique set of parameters, and for a given run, all scenarios are run with the same parameters, so that we can calculate impact between them. The spread of parameters across the different runs should capture the range of sensible behaviour of the model. The model run parameter set then contains as many rows as there are model runs. Each row must contain a run\_id, and the value for each parameter that is varied.

### Usage

```
montagu_model_run_parameter_sets(modelling_group_id, touchstone_id,  
  location = NULL)
```

### Arguments

modelling_group_id	The id of the modelling group
touchstone_id	The id of the touchstone
location	The montagu server to connect to.

**Details**

Adding, and querying existing model\_run\_parameter\_sets is supported, and when creating a stochastic burden estimate set, the id of the associated model\_run\_parameter\_set is required as a parameter.

**Value**

a data frame of info about the model run parameter sets.

---

montagu_model_run_parameter_set_data	<i>Retrieve info about one model run parameter sets for a group and touchstone</i>
--------------------------------------	--

---

**Description**

A model run parameter set is a list of parameters that is required for a set of stochastic model runs. In a stochastic ensemble, modelling groups are requested to perform a number of model runs. Each model run executes with a unique set of parameters, and for a given run, all scenarios are run with the same parameters, so that we can calculate impact between them. The spread of parameters across the different runs should capture the range of sensible behaviour of the model. The model run parameter set then contains as many rows as there are model runs. Each row must contain a run\_id, and the value for each parameter that is varied.

**Usage**

```
montagu_model_run_parameter_set_data(modelling_group_id, touchstone_id,
  model_run_parameter_set_id, location = NULL)
```

**Arguments**

- modelling\_group\_id      The id of the modelling group
- touchstone\_id      The id of the touchstone
- model\_run\_parameter\_set\_id      The id of the model\_run\_parameter\_set.
- location      The montagu server to connect to.

**Details**

Adding, and querying existing model\_run\_parameter\_sets is supported, and when creating a stochastic burden estimate set, the id of the associated model\_run\_parameter\_set is required as a parameter.

**Value**

a csv of parameter values for each run\_id.

---

`montagu_model_run_parameter_set_info`*Retrieve info about one model run parameter sets for a group and touchstone*

---

## Description

A model run parameter set is a list of parameters that is required for a set of stochastic model runs. In a stochastic ensemble, modelling groups are requested to perform a number of model runs. Each model run executes with a unique set of parameters, and for a given run, all scenarios are run with the same parameters, so that we can calculate impact between them. The spread of parameters across the different runs should capture the range of sensible behaviour of the model. The model run parameter set then contains as many rows as there are model runs. Each row must contain a `run_id`, and the value for each parameter that is varied.

## Usage

```
montagu_model_run_parameter_set_info(modelling_group_id, touchstone_id,  
    model_run_parameter_set_id, location = NULL)
```

## Arguments

<code>modelling_group_id</code>	The id of the modelling group
<code>touchstone_id</code>	The id of the touchstone
<code>model_run_parameter_set_id</code>	The id of the <code>model_run_parameter_set</code> .
<code>location</code>	The montagu server to connect to.

## Details

Adding, and querying existing `model_run_parameter_sets` is supported, and when creating a stochastic burden estimate set, the id of the associated `model_run_parameter_set` is required as a parameter.

## Value

a list of info about one model run parameter set.

---

montagu\_model\_run\_parameter\_set\_upload

*Upload a model\_run\_parameter\_set to Montagu.*


---

## Description

A model run parameter set is a list of parameters that is required for a set of stochastic model runs. In a stochastic ensemble, modelling groups are requested to perform a number of model runs. Each model run executes with a unique set of parameters, and for a given run, all scenarios are run with the same parameters, so that we can calculate impact between them. The spread of parameters across the different runs should capture the range of sensible behaviour of the model. The model run parameter set then contains as many rows as there are model runs. Each row must contain a run\_id, and the value for each parameter that is varied.

## Usage

```
montagu_model_run_parameter_set_upload(modelling_group_id, touchstone_id,
    disease_id, data, location = NULL)
```

## Arguments

modelling_group_id	The id of the modelling group
touchstone_id	The id of the touchstone
disease_id	The id of the disease associated with this model
data	a data frame with a column 'run_id', and other columns for each parameter that will be varied for each run.
location	The montagu server to connect to.

## Details

Adding, and querying existing model\_run\_parameter\_sets is supported, and when creating a stochastic burden estimate set, the id of the associated model\_run\_parameter\_set is required as a parameter.

## Value

the id of the newly created model\_run\_parameter\_set



---

```
montagu_orderlyweb_remote
    orderly remote driver
```

---

### Description

An orderlyweb remote driver for montagu

### Usage

```
montagu_orderlyweb_remote(name, host, port, ...)
```

### Arguments

name	Name for the remote, shared with the <a href="#">montagu_server</a> name.
host	Hostname, shared with the <a href="#">montagu_server</a> host.
port	Port, shared with the <a href="#">montagu_server</a> port.
...	Additional arguments passed through to <a href="#">montagu_server</a>

---

```
montagu_scenarios    Retrieve information about a scenario
```

---

### Description

A scenario describes the vaccination conditions for a particular run of a model. Typical examples include a scenario where there is no vaccination, a scenario where there is routine (background) vaccination, or a scenario in which there are targetted campaigns to vaccinate particularly ages. Depending on disease, modelling groups may be asked to model various scenarios, for a particular touchstone.

### Usage

```
montagu_scenarios(modelling_group_id = NULL, touchstone_id,
    location = NULL)
```

### Arguments

modelling_group_id	id of the modelling group. If omitted, or null, then all scenarios associated with the touchstone are returned.
touchstone_id	id of the touchstone (including version)
location	The montagu server to connect to.

### Value

Data frame of scenario\_id, description and disease.

---

montagu\_scenario\_problems

*Retrieve a list of any problems with a scenario.*

---

### Description

A scenario describes the vaccination conditions for a particular run of a model. Typical examples include a scenario where there is no vaccination, a scenario where there is routine (background) vaccination, or a scenario in which there are targetted campaigns to vaccinate particularly ages. Depending on disease, modelling groups may be asked to model various scenarios, for a particular touchstone.

### Usage

```
montagu_scenario_problems(modelling_group_id, touchstone_id, scenario_id,
    location = NULL)
```

### Arguments

modelling_group_id	id of the modelling group. If omitted, or null, then all scenarios associated with the touchstone are returned.
touchstone_id	id of the touchstone (including version)
scenario_id	id of the scenario
location	The montagu server to connect to.

### Value

A list of problem text.

---

montagu\_scenario\_status

*Retrieve current status of a groups' scenario.*

---

### Description

A scenario describes the vaccination conditions for a particular run of a model. Typical examples include a scenario where there is no vaccination, a scenario where there is routine (background) vaccination, or a scenario in which there are targetted campaigns to vaccinate particularly ages. Depending on disease, modelling groups may be asked to model various scenarios, for a particular touchstone.

### Usage

```
montagu_scenario_status(modelling_group_id, touchstone_id, scenario_id,
    location = NULL)
```

**Arguments**

modelling_group_id	id of the modelling group. If omitted, or null, then all scenarios associated with the touchstone are returned.
touchstone_id	id of the touchstone (including version)
scenario_id	id of the scenario
location	The montagu server to connect to.

**Value**

"invalid", "complete", "valid", or "empty"

---

montagu_server	<i>Create a handle to a montagu server</i>
----------------	--

---

**Description**

Create a handle to a montagu server

**Usage**

```
montagu_server(name, host, port = 443, username = NULL,
  password = NULL, verbose = FALSE, global = TRUE,
  overwrite = FALSE)
```

**Arguments**

name	The name to call this server. This appears in a few places as a "friendly" name. If <code>global = TRUE</code> then this will be available from the package using this name.
host	The hostname of the server
port	The port the server is running on (default is 443 which is the standard https port)
username	The username. If not given, then on authorisation, the user will be prompted. Falls back on the R global options <code>montagu.&lt;name&gt;.username</code> and <code>montagu.username</code> in turn.
password	The password. If not given, then on authorisation, the user will be prompted. Falls back on the R global options <code>montagu.&lt;name&gt;.password</code> and <code>montagu.password</code> in turn.
verbose	Logical, indicating if verbose http communication should be used. This is for debugging only.
global	Logical, indicating if the server should be stored in the global set. If true then you can pass <code>location = name</code> to most other functions in the package.
overwrite	Logical, and meaningful only if <code>global = TRUE</code> , indicating if a global configuration should be replaced if it exists.

**Value**

Invisibly, a montagu\_server object.

---

montagu\_server\_global\_default\_set

*Set a global default montagu server*

---

**Description**

Set a global default montagu server

**Usage**

montagu\_server\_global\_default\_set(location)

**Arguments**

location            A server location

---

montagu\_server\_global\_list

*List known montagu servers*

---

**Description**

List known montagu servers

**Usage**

montagu\_server\_global\_list()

---

montagu\_stochastic\_burden\_estimate\_template

*Get stochastic burden estimate template for an expectation*


---

## Description

Montagu provides the stochastic burden estimate set, which along with the columns of the central-estimate set, also includes a run\_id column.

## Usage

```
montagu_stochastic_burden_estimate_template(modelling_group_id,
      touchstone_id, expectation_id, location = NULL)
```

## Arguments

modelling_group_id	id of the modelling group. If omitted, or null, then all scenarios associated with the touchstone are returned.
touchstone_id	id of the touchstone (including version)
expectation_id	id of the expectation (integer)
location	The montagu server to connect to.

## Value

A data frame with columns disease (given), run\_id (NA), year, age, country, and country\_name (all given), and finally cohort\_size, deaths, cases and dalys, (NA).

---

montagu\_touchstones      *Retrieve touchstones a modelling group is responsible for.*


---

## Description

Touchstones are created by the VIMC management. The touchstone id associates a particular call for burden estimates, with the input data (coverage and demography) required to produce those estimates, and with the results that the modelling groups provide. A touchstone has a base name, and a version.

## Usage

```
montagu_touchstones(modelling_group_id = NULL, location = NULL)
```

**Arguments**

modelling\_group\_id  
id of the modelling group. If omitted or null, then all touchstones are returned.

location  
The montagu server to connect to.

**Value**

Data frame of touchstone name, description and comment.

---

montagu\_touchstones\_for\_scenario  
*Get touchstones that include this scenario*

---

**Description**

Given a particular touchstone and scenario, we can lookup all the other touchstones that also contain this scenario.

**Usage**

```
montagu_touchstones_for_scenario(modelling_group_id, touchstone_id,
  scenario_id, location = NULL)
```

**Arguments**

modelling\_group\_id  
id of the modelling group. If omitted, or null, then all scenarios associated with the touchstone are returned.

touchstone\_id  
id of the touchstone (including version)

scenario\_id  
id of the scenario

location  
The montagu server to connect to.

**Value**

vector of touchstone ids

---

`montagu_touchstone_versions`*Retrieve list of all versions of a given touchstone.*

---

**Description**

Touchstones are versioned; errata in the input or coverage data may be addressed with a new version of the existing touchstone. When interacting with Montagu, a touchstone\_id will consist of a basename, and a version.

**Usage**

```
montagu_touchstone_versions(modelling_group_id = NULL,  
                             touchstone_name = NULL, require_open = FALSE, location = NULL)
```

**Arguments**

<code>modelling_group_id</code>	id of the modelling group. If omitted or null, then all touchstones are returned.
<code>touchstone_name</code>	Optional base name of the touchstone to filter. (ie, no version suffix)
<code>require_open</code>	If true, include only open touchstones
<code>location</code>	The montagu server to connect to.

**Value**

Data frame of touchstone id, name, version, description and status

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