Package ‘Rexperigen’

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Title  R Interface to Experigen
Version  0.2.1
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Description  Provides convenience functions to communicate with
              an Experigen server: Experigen (<http://github.com/aquincum/experigen>)
              is an online framework for creating linguistic experiments,
              and it stores the results on a dedicated server. This package can be
              used to retrieve the results from the server, and it is especially
              helpful with registered experiments, as authentication with the server
              has to happen.
Depends  R (>= 3.2.3)
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API.request

Run a request to the API

Description

Run a request to the API

Usage

API.request(server = getOption("Rexperigen.server"), request = "version",
params = list(), auth = FALSE, method = "GET")

Arguments

server The server name (no need to be clean)
request The request verb to the server
params A list of name=value pairs that will be passed to the server
auth Do we send authentication? If this is FALSE, we don’t.
method The HTTP method to use (GET | POST | PUT | DELETE).

See Also

Other development: checkAuthentication, create.API.request.URL, prepare.server.URL,
server.version
checkAuthentication

Checks whether the authentication is supported by the server and handles the different POST request routes.

Description

Checks whether the authentication is supported by the server and handles the different POST request routes.

Usage

checkAuthentication(request, auth, version.needed = 1)

Arguments

- request: The needed request to be made (without .cgi).
- auth: Whether authentication is requested in R.
- version.needed: The minimum version of the request. If it is 1, and the server is version 1, the function will append .cgi to the request.

Value

A list:

1. request: the request to send
2. auth: whether to still send an authenticated request.

See Also

Other development: API.request, create.API.request.URL, prepare.server.URL, server.version

Examples

checkAuthentication("makecsv", TRUE)
checkAuthentication("registration", TRUE, 2)
checkLogin  

*Checks whether the user is logged in.*

**Description**

Checks whether the user is logged in. It also throws an exception if the server is of an old version and logging in is not supported.

**Usage**

checkLogin()

**Value**

The experimenter login user name

**Examples**

options(Rexperigen.server.version="2.0.0")
setExperigenCredentials("my", "credentials", check = FALSE)
checkLogin()

cleanURL  

*Returns the cleaned source URL.*

**Description**

Experigen has been using some URL cleaning since version 1. This function asks the server (if version >= 2) to return how it would clean the given URL. For older versions, you still have to replace /'s and stuff by .'s by yourself, sorry!

**Usage**

cleanURL(sourceURL)

**Arguments**

sourceURL  
The source URL to clean

**Value**

The cleaned URL
create.API.request.URL

Create an URL for a request to the Experigen API.

Description

Create an URL for a request to the Experigen API.

Usage

create.API.request.URL(server, request, params = list())

Arguments

server The server name (no need to be clean)
request The request verb to the server
params A list of name=value pairs that will be passed to the server

Value

A URL that can be queried.

See Also

Other development: API.request, checkAuthentication, prepare.server.URL, server.version

Examples

create.API.request.URL("db.phonologist.org", "users", list(sourceurl="x.y", experimentName="z"))
createExperimenter  
*Create a login for yourself using this function*

**Description**
Create a login for yourself using this function

**Usage**
createExperimenter(experimenter, password)

**Arguments**
- experimenter: The username.
- password: Your password.

**Value**
A string that the server returns ("done" if success)

downloadExperiment  *Makes a download request from the server.*

**Description**
This function downloads the results of an experiment.

**Usage**
downloadExperiment(sourceURL, experimentName, destination = "default.csv", auth = FALSE)

**Arguments**
- sourceURL: The source URL for the experiment
- experimentName: The experiment name as set in settings.js
- destination: The file to download. By default, all uploaded results are saved in default.csv, which is the default file to download.
- auth: Whether authentication is needed

**Value**
The downloaded data set as data frame
getDestinations

See Also

Other download: getDestinations, getUsers

Examples

## Not run:
downloadExperiment("https://s3.amazonaws.com.myexperiment.index.html", "testing1")

## End(Not run)

getDestinations Returns the list of destination files for an experiment.

Description

Returns the list of destination files for an experiment.

Usage

getDestinations(sourceURL, experimentName, auth = FALSE)

Arguments

sourceURL The source URL for the experiment
experimentName The experiment name as set in settings.js
auth Whether authentication is needed

Value

The list of destinations

See Also

Other download: downloadExperiment, getUsers

Examples

## Not run:

## End(Not run)
getRegisteredExperiments

Get a list of registered experiments.

Description

Returns a list of the registered experiments for the logged in experimenter.

Usage

getRegisteredExperiments()

Value

The parsed list of experiments

See Also

Other registration: registerExperiment, removeRegistration

Examples

## Not run:
getRegisteredExperiments()

## End(Not run)

getUsers

Requests the table of users from the server.

Description

Requests the table of users from the server.

Usage

getUsers(sourceURL, experimentName, auth = FALSE)

Arguments

sourceURL    The source URL for the experiment
experimentName  The experiment name as set in settings.js
auth    Whether authentication is needed
logoutExperigen

Value
The table of users

See Also
Other download: downloadExperiment, getDestinations

Examples
```r
## Not run:
## End(Not run)
```

logoutExperigen

Simply removes the stored credentials, so following requests will be unauthenticated.

Description
Simply removes the stored credentials, so following requests will be unauthenticated.

Usage
```r
logoutExperigen()
```

NO_SERVER_ERROR

Error string returned when no server is found

Description
Error string returned when no server is found

Usage
```r
NO_SERVER_ERROR
```

Format
An object of class character of length 1.
Register an Experiment to the Experimenter

**Description**

Registers the given experiment to the experimenter. Returns the server’s response. Do provide the credentials before calling this function.

**Usage**

```
registerExperiment(sourceURL, experimentName)
```

**Arguments**

- `sourceURL` The source URL for the experiment
- `experimentName` The experiment name as set in `settings.js`

**Examples**

```javascript
registerExperiment("https://example.com", "Experiment Name")
```
removeRegistration

Value

The server response.

See Also

Other registration: `getRegisteredExperiments, removeRegistration`

Examples

```r
## Not run:
removeRegistration("https...s3.amazonaws.com.myexperiment.index.html", "running")
## End(Not run)
```

---

**removeRegistration**  
Removes the registration of the experiment

Description

Removes the registration of the experiment to the logged in experimenter. Does not remove any data though! All of the data will be available to anyone.

Usage

```
removeRegistration(sourceURL, experimentName)
```

Arguments

- `sourceURL`  
The source URL for the experiment
- `experimentName`  
The experiment name as set in `settings.js`

Value

The server response.

See Also

Other registration: `getRegisteredExperiments, registerExperiment`

Examples

```r
## Not run:
removeRegistration("https...s3.amazonaws.com.myexperiment.index.html", "running")
## End(Not run)
```
Rexperigen

### Description
An R interface for downloading results from an Experigen server. Works with the "classic" server that is currently running on db.experigen.org as well, but its main advantage is that it helps a lot with the new functions of the newer version of the Experigen server. Most importantly, it helps with registration of experimenters, registration of experiments and accessing their data.

### Setup functions
- `setExperigenServer`, `setExperigenCredentials`

### Registration functions
- `registerExperiment`, `removeRegistration`, `getRegisteredExperiments`

### Download functions
The main function is `downloadExperiment`. Further information about the experiment can be inquired with `getUsers` and `getDestinations`

---

**server.version**

### Description
Returns the version of an Experigen server

### Usage
```
server.version(server = getOption("Rexperigen.server"))
```

### Arguments
- `server` The server name

### Value
A string with the Experigen server version

### See Also
Other development: `API.request`, `checkAuthentication`, `create.API.request.URL`, `prepare.server.URL`
setExperigenCredentials

**Examples**

```r
server.version("db.phonologist.org")
```

---

**setExperigenCredentials**

*Sets up the experimenter credentials for the further requests. It can also check whether the authentication is successful.*

**Description**

Sets up the experimenter credentials for the further requests. It can also check whether the authentication is successful.

**Usage**

```r
setExperigenCredentials(experimenter, password, check = TRUE, quiet = FALSE)
```

**Arguments**

- **experimenter**: The experimenter username
- **password**: The password for the experimenter
- **check**: Whether to check if the experimenter is registered.
- **quiet**: If TRUE, the function will not print out the result of the existence check

**Value**

Whether the existence check is successful. If check = FALSE, it will return TRUE by default

**See Also**

Other setup: `setExperigenServer`

**Examples**

```r
## Not run:
setExperigenCredentials("joesmith", "1234")

## End(Not run)
setExperigenCredentials("janemiller", "passdrow", check = FALSE)
```
setExperigenServer

Sets the Experigen server address for further operations. By default, it checks the existence of the server and sets the Rexperigen.server.version option based on the response of the server. If check = FALSE, set the version by yourself!

Usage

setExperigenServer(server, check = TRUE)

Arguments

server The server’s URL
check Whether to check the server’s existence

See Also

Other setup: setExperigenCredentials

Examples

setExperigenServer("db.phonologist.org")
setExperigenServer("localhost:3000", FALSE)

versionMain

Returns the main version number of the server.

Description

Returns the main version number of the server.

Usage

versionMain()
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