

# Package: hakaiApi (via r-universe)

October 19, 2024

**Title** Authenticated HTTP Request Client for the 'Hakai' API

**Version** 1.0.2

**Description** Initializes a class that obtains API credentials and provides a method to use those credentials to make GET requests to the 'Hakai' API server. Usage instructions are documented at <https://hakaiinstitute.github.io/hakai-api/>.

**License** MIT + file LICENSE

**URL** <https://github.com/HakaiInstitute/hakai-api-client-r>

**BugReports** <https://github.com/HakaiInstitute/hakai-api-client-r/issues>

**Depends** R (>= 3.3.0)

**Imports** dplyr, httr2, R6, readr, tibble

**Suggests** knitr, markdown, rmarkdown

**VignetteBuilder** knitr

**Encoding** UTF-8

**Language** en-CA

**RoxygenNote** 7.3.2

**Repository** <https://hakaiinstitute.r-universe.dev>

**RemoteUrl** <https://github.com/hakaiinstitute/hakai-api-client-r>

**RemoteRef** HEAD

**RemoteSha** de1ca32bd7d688aa40e73fdaccf128b1a22064b0

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Client

*The Hakai API Client Class*

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## Description

Class to use to make authenticated API requests for Hakai data

## Public fields

`api_root` The `api_root` you are logged in to

## Methods

### Public methods:

- `Client$new()`
- `Client$get()`
- `Client$post()`
- `Client$put()`
- `Client$patch()`
- `Client$remove_credentials()`
- `Client$clone()`

**Method** `new()`: Log into Google to gain credential access to the API

*Usage:*

```
Client$new(  
  api_root = "https://hecate.hakai.org/api",  
  login_page = "https://hecate.hakai.org/api-client-login"  
)
```

*Arguments:*

`api_root` Optional API base url to fetch data. Defaults to "https://hecate.hakai.org/api"  
`login_page` Optional API login page url to display to user. Defaults to "https://hecate.hakai.org/api-client-login"

*Returns:* A client instance

*Examples:*

```
client <- Client$new()
```

**Method** `get()`: Send a GET request to the API

*Usage:*

```
Client$get(endpoint_url)
```

*Arguments:*

`endpoint_url` The full API url to fetch data from

*Returns:* A dataframe of the requested data

*Examples:*

```
client$get("https://hecate.hakai.org/api/aco/views/projects")
```

**Method** `post()`: Send a POST request to the API

*Usage:*

```
Client$post(endpoint_url, rec_data)
```

*Arguments:*

`endpoint_url` The full API url to fetch data from

`rec_data` dataframe, list, or other R data structure to send as part of the post request payload

*Returns:* post request response status code and description

**Method** `put()`: Send a PUT request to the API

*Usage:*

```
Client$put(endpoint_url, rec_data)
```

*Arguments:*

`endpoint_url` The full API url to fetch data from

`rec_data` dataframe, list, or other R data structure to send as part of the post request payload

*Returns:* PUT request response status code and description

**Method** `patch()`: Send a PATCH request to the API

*Usage:*

```
Client$patch(endpoint_url, rec_data)
```

*Arguments:*

`endpoint_url` The full API url to fetch data from

`rec_data` dataframe, list, or other R data structure to send as part of the post request payload

*Returns:* PATCH request response status code and description

**Method** `remove_credentials()`: Remove your cached login credentials to logout of the client

*Usage:*

```
Client$remove_credentials()
```

*Examples:*

```
client$remove_credentials()
```

**Method** `clone()`: The objects of this class are cloneable with this method.

*Usage:*

```
Client$clone(deep = FALSE)
```

*Arguments:*

`deep` Whether to make a deep clone.

**Examples**

```

# Initialize a new client
client <- Client$new()
# Follow authorization prompts to log in

# Retrieve some data. See <https://hakaiinstitute.github.io/hakai-api/> for options.
url <- paste0(client$api_root, "/aco/views/projects?project_year=2020&fields=project_name")
projects_2020 <- client$get(url)

print(projects_2020)
# # A tibble: 20 x 1
#   project_name
#   <chr>
# 1 Fountain FN
# 2 Haig Glacier
# 3 Fraser River - Chimney Creek West William Canyon
# 4 Cruickshank WS
# ...

## -----
## Method `Client$new`
## -----

client <- Client$new()

## -----
## Method `Client$get`
## -----

client$get("https://hecate.hakai.org/api/aco/views/projects")

## -----
## Method `Client$remove_credentials`
## -----

client$remove_credentials()

```

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