

Package ‘rapiclient’

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Type Package

Title Dynamic OpenAPI/Swagger Client

Version 0.1.3

URL <https://github.com/bergant/rapiclient>

BugReports <https://github.com/bergant/rapiclient/issues>

Description Access services specified in OpenAPI (formerly Swagger) format.
It is not a code generator. Client is generated dynamically as a list of R functions.

Depends R (>= 3.3)

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Imports jsonlite, httr, yaml

LazyData TRUE

RoxygenNote 6.1.1

Suggests testthat

NeedsCompilation no

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R topics documented:

rapiclient-package	2
get_api	2
get_operations	3
get_schemas	4
result_handlers	5
Index	6

rapiclient-package *rapiclient: Open API (Swagger) Client*

Description

Create R functions directly from OpenAPI (formerly Swagger) specification.

Creating a client

Use [get_api](#) to read the specification, [get_operations](#) to get client functions and [get_schemas](#) to create functions for additional schemas.

See usage example at <https://github.com/bergant/rapiclient#rapiclient>

Check out <https://github.com/OAI/OpenAPI-Specification> for additional information about Open API specification

Support

Please use <https://github.com/bergant/rapiclient/issues> for issues

Examples

```
## Not run:
# Read API description
api <- get_api(api_url)

# create operation and schema functions
operations <- get_operations(api)
schemas <- get_schemas(api)

# call service
operations$some_operation(x, y, schemas$some_structure(u, v, ...))

## End(Not run)
```

get_api *Get API*

Description

Create API object from Swagger specification

Usage

```
get_api(url, config = NULL)
```

Arguments

url Api url (can be json or yaml format)
 config httr::config() curl options.

Value

API object

See Also

See also [get_operations](#) and [get_schemas](#)

Examples

```
## Not run:
# create operation and schema functions
api <- get_api(api_url)
operations <- get_operations(api)
schemas <- get_schemas(api)

## End(Not run)
```

get_operations	<i>Get operations</i>
----------------	-----------------------

Description

Creates a list of functions from API operations definition. Names in a list are operationIDs from API.

Usage

```
get_operations(api, .headers = NULL, path = NULL,
  handle_response = identity)
```

Arguments

api API object (see [get_api](#))
 .headers Optional headers passed to httr functions. See [add_headers](#) documentation
 path (optional) filter by path from API specification
 handle_response (optional) A function with a single argument: httr response

Details

All functions return a [response](#) object from httr package or a value returned by handle_response function if specified. When path is defined, only operations with the specified API path root are created. Use .headers parameters to send additional headers when sending a request.

Value

A list of functions.

Handling response

If no response handler function is defined, operation functions return `response` object (`httr` package). See `httr` `content` documentation for extracting content from a request, and functions `http_error` and `http_status` how to handle http errors and error messages.

When using simple `result_handlers`, operations will return the content of response instead of `httr` response object (or handle error as exception or warning in case of error).

To handle response automatically with custom function, define a function with `httr` response object as argument and pass it as `handle_response` argument to `get_operations` function.

Examples

```
## Not run:
# create operation and schema functions
api <- get_api(api_url)
operations <- get_operations(api)
schemas <- get_schemas(api)

# get operations which return content or stop on error
operations <- get_operations(api, handle_response = content_or_stop)

# use .headers when operations must send additional heders when sending
operations <-
  get_operations(api, .headers = c("api-key" = Sys.getenv("SOME_API_KEY")))

## End(Not run)
```

get_schemas

Get schemas

Description

Returns a list of functions with arguments from API schemas. Elements are named by schema names, each function returns a named list.

Usage

```
get_schemas(api)
```

Arguments

api Api object

Value

A list of functions

result_handlers *Simple functions to handle http response*

Description

When creating operations from api one can define how the response from http should be handled. These functions can be used for simple result handling.

Usage

```
content_or_stop(x)
```

```
content_or_warning(x)
```

```
content_or_message(x)
```

Arguments

x A response object from htr package (see [response](#) object in **htr** package documentation)

Details

See [get_operations](#) for details.

Value

Content of http response

Functions

- `content_or_warning`: Returns content or issues a warning
- `content_or_message`: Returns content or prints a message

Examples

```
## Not run:  
operations <- get_operations(api, handle_response = content_or_stop)  
  
## End(Not run)
```

Index

`add_headers`, [3](#)

`content`, [4](#)

`content_or_message (result_handlers)`, [5](#)

`content_or_stop (result_handlers)`, [5](#)

`content_or_warning (result_handlers)`, [5](#)

`get_api`, [2](#), [2](#), [3](#)

`get_operations`, [2](#), [3](#), [3](#), [5](#)

`get_schemas`, [2](#), [3](#), [4](#)

`http_error`, [4](#)

`http_status`, [4](#)

`rapiclient (rapiclient-package)`, [2](#)

`rapiclient-package`, [2](#)

`response`, [3](#)–[5](#)

`result_handlers`, [4](#), [5](#)