

Package ‘rapiclient’

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Type Package

Title Dynamic OpenAPI/Swagger Client

Version 0.1.4

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 (>= 3.3.0)

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Imports jsonlite, httr, yaml

Encoding UTF-8

RoxygenNote 7.3.1

Suggests testthat

NeedsCompilation no

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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

Author(s)

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See Also

Useful links:

- <https://github.com/bergant/rapiclient>
- Report bugs at <https://github.com/bergant/rapiclient/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	<i>Get API</i>
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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>
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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 httr package (see [response](#) object in **httr** 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)
```

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