# Package: galvanizer (via r-universe)

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Version 0.5.3
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https://github.com/jonlinca/galvanizer

BugReports https://github.com/jonlinca/galvanizer/issues

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```
create_results_analyses
```

Create, Update or Delete Results - Analyses

# Description

Create, Update or Delete Results - Analyses

# Usage

```
create_results_analyses(auth, collection_id, name, ...)
```

update\_results\_analyses(auth, analysis\_id, ...)

```
delete_results_analyses(auth, analysis_id)
```

# Arguments

| auth          | Highbond authentication credentials, created from setup_highbond |
|---------------|--|
| collection_id | The ID number of the collection                                  |
| name          | The name of the Results object to create                         |
|               | List(s) to add additional data                                   |
| analysis_id   | The ID number of the analyses                                    |

#### Details

Each endpoint has a list of required elements, as listed in the parameters.

For optional data, such as attributes, you may pass additional lists. The top level name of this optional list should match the name of the json level to be added, with key-value pairs within the list. Ultimately, this list object will be added as a child json level, under the 'data' top level json.

For example: attributes is a json is nested under data, and therefore should be created as the name of the object. Then additional information can be added to it as a key-value pair to the list.

#### Value

If creating or updating, a data frame with the new details. When deleting, JSON response indicating success or failure.

# Functions

- update\_results\_analyses: Update an analyses
- delete\_results\_analyses: Delete an analyses

create\_results\_collections

```
Create, Update or Delete Results - Collections
```

#### Description

Create, Update or Delete Results - Collections

#### Usage

```
create_results_collections(auth, name, ...)
```

update\_results\_collections(auth, collection\_id, ...)

```
delete_results_collections(auth, collection_id)
```

#### Arguments

| auth          | Highbond authentication credentials, created from setup_highbond |
|---------------|--|
| name          | The name of the Results object to create                         |
|               | List(s) to add additional data                                   |
| collection_id | The ID number of the collection                                  |

#### Details

Each endpoint has a list of required elements, as listed in the parameters.

For optional data, such as attributes, you may pass additional lists. The top level name of this optional list should match the name of the json level to be added, with key-value pairs within the list. Ultimately, this list object will be added as a child json level, under the 'data' top level json.

For example: attributes is a json is nested under data, and therefore should be created as the name of the object. Then additional information can be added to it as a key-value pair to the list.

#### Value

If creating or updating, a data frame with the new details. When deleting, JSON response indicating success or failure.

#### Functions

- update\_results\_collections: Update a collection
- delete\_results\_collections: Delete a collection

#### Examples

```
## Not run:
# Create and delete a Collection
auth <- setup_highbond(Sys.getenv('highbond_openapi'),</pre>
 Sys.getenv('highbond_org'),
 Sys.getenv('highbond_datacenter'))
name <- 'galvanizer Test Collection'</pre>
response <- create_results_collections(auth, name)</pre>
collection_id <- response$id[[1]]</pre>
response <- delete_results_collections(auth, collection_id)</pre>
# Create a Collection with attributes
myattr <- list(description = 'My first description')</pre>
response <- create_results_collections(auth, name, attributes = myattr)
collection_id <- response$id[[1]]</pre>
# Update a Collection with attributes
myattr <- list(name = 'galvanizer Super Test Collection', description = 'My second description')
response <- update_results_collections(auth, collection_id, attributes = myattr)
# Delete a Collection
response <- delete_results_collections(auth, collection_id)</pre>
## End(Not run)
```

create\_results\_columns

Create or Delete Results - Columns

#### Description

post\_results\_records will upload a data frame with the correct specification for the fields uploaded. You can use this function to add columns manually if preferred, especially if a non-standard column type.

#### Usage

```
create_results_columns(auth, table_id, columns)
```

#### Arguments

| auth     | Highbond authentication credentials, created from setup_highbond |
|----------|--|
| table_id | The ID number of the table                                       |
| columns  | A data frame with columns to be added                            |

#### Details

When creating columns, the argument will accept a data frame. This data frame must only have three columns - field\_name, display\_name, and data\_type. See API for allowable data\_type.

When deleting columns, the argument will accept a data frame. This data frame must only have one column - field\_name

#### Value

If creating or updating, a data frame with the new details. When deleting, JSON response indicating success or failure.

#### Examples

```
## Not run:
auth <- setup_highbond(Sys.getenv('highbond_openapi'),
Sys.getenv('highbond_org'),
Sys.getenv('highbond_datacenter'))
field_name <- c("a", "b", "c", "d", "e", "f", "g")
display_name <- c("field_one", "field_two", "field_three",
    "field_four", "field_five", "field_six", "field_seven")
data_type <- c("character", "numeric", 'logical',
    'date', 'datetime', 'file', 'digital_signature')
columns <- data.frame(field_name, display_name, data_type)
table_id <- 12345
response <- create_results_columns(auth, table_id, columns)</pre>
```

## End(Not run)

create\_results\_tables Create, Update or Delete Results - Tables

#### Description

Create, Update or Delete Results - Tables

#### Usage

```
create_results_tables(auth, analysis_id, name, ...)
update_results_tables(auth, table_id, ...)
delete_results_tables(auth, table_id)
```

#### Arguments

| auth        | Highbond authentication credentials, created from setup_highbond |
|-------------|--|
| analysis_id | The ID number of the analyses                                    |
| name        | The name of the Results object to create                         |
|             | List(s) to add additional data                                   |
| table_id    | The ID number of the table                                       |

#### Details

Each endpoint has a list of required elements, as listed in the parameters.

For optional data, such as attributes, you may pass additional lists. The top level name of this optional list should match the name of the json level to be added, with key-value pairs within the list. Ultimately, this list object will be added as a child json level, under the 'data' top level json.

For example: attributes is a json is nested under data, and therefore should be created as the name of the object. Then additional information can be added to it as a key-value pair to the list.

#### Value

If creating or updating, a data frame with the new details. When deleting, JSON response indicating success or failure.

#### Functions

- update\_results\_tables: Update an analyses
- delete\_results\_tables: Delete an analyses

get\_projects

#### Description

Downloads the primary details of one or all projects

#### Usage

```
get_projects(
   auth,
   project_id = NULL,
   fields = NULL,
   pagesize = 50,
   waittime = 0.2
)
```

# Arguments

| auth       | Highbond authentication credentials, created from setup_highbond                                       |
|------------|--|
| project_id | Project ID number. NULL will default to all items.   |
| fields     | OPTIONAL. A character vector each field requested within the project. NULL will default to all fields. |
| pagesize   | Defaults to 50. Maximum is 100.  |
| waittime   | Time in seconds to wait between requests.  |

# Details

Fields allowed: name, state, status, created\_at, updated\_at, description, background, budget, position, certification, control\_performance, risk\_assurance, management\_response, max\_sample\_size, number\_of\_testing\_rounds, opinion, opinion\_description, purpose, scope, start\_date, target\_date, tag\_list, project\_type, entities

#### Value

A tibble of projects

# Examples

```
## Not run:
projects <- get_projects(auth)
projects <- get_projects(auth, fields = c('name', 'state', 'status'))
## End(Not run)
```

get\_project\_actions Retrieve Highbond Project - Actions

# Description

"An action is a specific follow-up measure that is associated with an identified issue. You can add actions and assign action owners. You can also set up reminders for yourself to retest issues or track hours spent on retesting by self-assigning actions."

# Usage

```
get_project_actions(
   auth,
   issue_id = NULL,
   action_id = NULL,
   fields = NULL,
   pagesize = 50,
   waittime = 0.2
)
```

# Arguments

| auth      | Highbond authentication credentials, created from <pre>setup_highbond</pre>                            |
|-----------|--|
| issue_id  | Required if other parameter is blank. May obtain multiple rows.  |
| action_id | Required if other parameter is blank. Will get only one.   |
| fields    | OPTIONAL. A character vector each field requested within the project. NULL will default to all fields. |
| pagesize  | Defaults to 50. Maximum is 100.  |
| waittime  | Time in seconds to wait between requests.  |

#### Details

possible fields: title, created\_at, updated\_at, owner\_name, owner\_email, send\_recurring\_reminder, include\_issue\_details, include\_remediation\_details, description, due\_date, priority, closed, completed\_date, status, submitted\_on, custom\_attributes, issue, assigned\_by, cc\_users

# Value

A tibble of actions

get\_project\_collaborators

Retrieve Highbond Projects - Collaborators

# Description

Get the collaborators, aka user roles in Project or Framework.

# Usage

```
get_project_collaborators(
   auth,
   project_id = NULL,
   encoded_uid = NULL,
   fields = NULL,
   pagesize = 50,
   waittime = 0.2
)
```

# Arguments

| auth        | Highbond authentication credentials, created from setup_highbond   |
|-------------|--|
| project_id  | Required if other parameter is blank.  |
| encoded_uid | Required if the other parameter is blank. Base64 encoded parent resource id (project or framework) and user uid, encoded from format parent_resource_id:user_uid |
| fields      | OPTIONAL. A character vector each field requested within the project. NULL will default to all fields.   |
| pagesize    | Defaults to 50. Maximum is 100.  |
| waittime    | Time in seconds to wait between requests.  |

## Details

Fields allowed: project, framework, user, project\_role, effective\_role, organization\_role, created\_at, updated\_at, group

# Value

A tibble of collaborators

# Description

"A control is a program, policy, routine, or activity that is intended to mitigate a risk. Controls are organized by objectives, and can be associated with one or more risks. The combination of identified risks and corresponding controls defines the Risk Control Matrix. Controls are also known as procedures."

# Usage

```
get_project_controls(
   auth,
   objective_id = NULL,
   control_id = NULL,
   fields = NULL,
   pagesize = 50,
   waittime = 0.2
)
```

#### Arguments

| auth         | Highbond authentication credentials, created from setup_highbond                                       |
|--------------|--|
| objective_id | Required if other parameter is blank. May obtain multiple rows.  |
| control_id   | Required if other parameter is blank. Will get only one.   |
| fields       | OPTIONAL. A character vector each field requested within the project. NULL will default to all fields. |
| pagesize     | Defaults to 50. Maximum is 100.  |
| waittime     | Time in seconds to wait between requests.  |

# Details

possible fields: title, description, control\_id, owner, frequency, control\_type, prevent\_detect, method, status, position, created\_at, updated\_at, custom\_attributes, objective, walkthrough, control\_test\_plan, control\_tests, mitigations, owner\_user, entities

#### Value

A tibble of controls

get\_project\_control\_tests

Retrieve Highbond Project - Control Tests

# Description

"Control tests evaluate the operating effectiveness of a control."

# Usage

```
get_project_control_tests(
   auth,
   control_test_id,
   fields = NULL,
   pagesize = 50,
   waittime = 0.2
)
```

# Arguments

| auth            | Highbond authentication credentials, created from setup_highbond                                       |  |  |  |  |
|-----------------|--|--|--|--|--|
| control_test_id |  |  |  |  |  |
|                 | Will get only one.   |  |  |  |  |
| fields          | OPTIONAL. A character vector each field requested within the project. NULL will default to all fields. |  |  |  |  |
| pagesize        | Defaults to 50. Maximum is 100.  |  |  |  |  |
| waittime        | Time in seconds to wait between requests.  |  |  |  |  |

# Details

Only applicable to test plans with Internal Control types

# Value

A tibble of control tests

get\_project\_control\_test\_plans

Retrieve Highbond Project - Test Plans

# Description

"A test plan is a document that details how controls are assessed. Test plans identify the testing method or type of evidence obtained, specify the total sample size (split amongst testing rounds), and illustrate test steps or attributes."

#### Usage

```
get_project_control_test_plans(
   auth,
   control_test_plan_id,
   fields = NULL,
   pagesize = 50,
   waittime = 0.2
)
```

## Arguments

| auth                                       | Highbond authentication credentials, created from setup_highbond                                       |  |  |  |  |
|--|--|--|--|--|--|
| control_test_plan_id<br>Will get only one. |  |  |  |  |  |
| fields                                     | OPTIONAL. A character vector each field requested within the project. NULL will default to all fields. |  |  |  |  |
| pagesize                                   | Defaults to 50. Maximum is 100.  |  |  |  |  |
| waittime                                   | Time in seconds to wait between requests.  |  |  |  |  |

### Details

Only applicable to test plans with Internal Control types

possible fields: testing\_round\_number, not\_applicable, sample\_size, testing\_results, testing\_conclusion, created\_at, updated\_at, control, assigned\_user

# Value

A tibble of control test plans

get\_project\_entities Retrieve Highbond Projects - Entities

# Description

Get all the entities

# Usage

```
get_project_entities(
   auth,
   entity_id = NULL,
   fields = NULL,
   pagesize = 50,
   waittime = 0.2
)
```

# Arguments

| auth      | Highbond authentication credentials, created from setup_highbond                                       |
|-----------|--|
| entity_id | NULL will default to all entities.   |
| fields    | OPTIONAL. A character vector each field requested within the project. NULL will default to all fields. |
| pagesize  | Defaults to 50. Maximum is 100.  |
| waittime  | Time in seconds to wait between requests.  |

# Details

Fields allowed: title, description, created\_at, updated\_at, parent, children\_count, entity\_category

# Value

A tibble of entities

get\_project\_entity\_categories Retrieve Highbond Projects - Entity Categories

# Description

Get all the entity categories

# Usage

```
get_project_entity_categories(
   auth,
   entity_category_id = NULL,
   fields = NULL,
   pagesize = 50,
   waittime = 0.2
)
```

#### Arguments

| auth               | Highbond authentication credentials, created from setup_highbond                                       |  |
|--------------------|--|--|
| entity_category_id |  |  |
|                    | NULL will default to all entity categories   |  |
| fields             | OPTIONAL. A character vector each field requested within the project. NULL will default to all fields. |  |
| pagesize           | Defaults to 50. Maximum is 100.  |  |
| waittime           | Time in seconds to wait between requests.  |  |

# Details

Fields allowed: title, description, position, entities\_count, created\_at, updated\_at, entities

#### Value

A tibble of entities

get\_project\_issues Retrieve Highbond Project - Issues

# Description

"An issue is a problem, control gap, or exception that has been identified within a project. Adding an issue involves recording basic information about the issue and assigning the issue to an owner. Issues may also be known as deficiencies, findings, or another customized term."

# Usage

```
get_project_issues(
   auth,
   project_id = NULL,
   issue_id = NULL,
   fields = NULL,
   pagesize = 50,
   waittime = 0.2
)
```

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#### Arguments

| auth                  | Highbond authentication credentials, created from setup_highbond                                       |
|-----------------------|--|
| <pre>project_id</pre> | Required if other parameter is blank. May obtain multiple rows.  |
| issue_id              | Required if other parameter is blank. Will get only one.   |
| fields                | OPTIONAL. A character vector each field requested within the project. NULL will default to all fields. |
| pagesize              | Defaults to 50. Maximum is 100.  |
| waittime              | Time in seconds to wait between requests.  |

#### Details

possible fields: title, description, creator\_name, created\_at, updated\_at, position, owner, recommendation, deficiency\_type, severity, published, identified\_at, reference, reference\_prefix, risk, scope, escalation, cause, effect, cost\_impact, executive\_summary, executive\_owner, project\_owner, closed, remediation\_status, remediation\_plan, remediation\_date, actual\_remediation\_date, retest\_deadline\_date, actual\_retest\_date, retesting\_results\_overview, custom\_attributes, project, entities

# Value

A tibble of issues

```
get_project_mitigations
```

Retrieve Highbond Project - Mitigations

# Description

The mapping between controls and risks

# Usage

```
get_project_mitigations(
   auth,
   mitigation_id,
   fields = NULL,
   pagesize = 50,
   waittime = 0.2
)
```

#### Arguments

| auth          | Highbond authentication credentials, created from setup_highbond                                       |
|---------------|--|
| mitigation_id | Will get only one.   |
| fields        | OPTIONAL. A character vector each field requested within the project. NULL will default to all fields. |
| pagesize      | Defaults to 50. Maximum is 100.  |
| waittime      | Time in seconds to wait between requests.  |

# Value

A tibble of mitigations

get\_project\_narratives

Retrieve Highbond Project - Narratives

# Description

"A narrative is a description of a business process or area under review. Narratives are also known as policies, process narratives, process descriptions, or control guides."

# Usage

```
get_project_narratives(
   auth,
   objective_id = NULL,
   narrative_id = NULL,
   fields = NULL,
   pagesize = 50,
   waittime = 0.2
)
```

# Arguments

| auth         | Highbond authentication credentials, created from setup_highbond                                       |
|--------------|--|
| objective_id | Required if other parameter is blank. May obtain multiple rows.  |
| narrative_id | Required if other parameter is blank. Will get only one row.   |
| fields       | OPTIONAL. A character vector each field requested within the project. NULL will default to all fields. |
| pagesize     | Defaults to 50. Maximum is 100.  |
| waittime     | Time in seconds to wait between requests.  |

# Details

possible fields: title, description, created\_at, updated\_at, objective

# Value

A tibble of narratives

get\_project\_objectives

Retrieve Highbond Project - Objectives

#### Description

Downloads the primary details of one or multiple objectives for a project. Also known as sections, processes, cycles, functional areas, application systems, or another custom term.

#### Usage

```
get_project_objectives(
  auth,
  project_id = NULL,
  objective_id = NULL,
  fields = NULL,
  pagesize = 50,
  waittime = 0.2
)
```

#### Arguments

| auth         | Highbond authentication credentials, created from setup_highbond                                       |
|--------------|--|
| project_id   | Required if other parameter is blank. May obtain multiple rows.  |
| objective_id | Required if other parameter is blank. Will get only one row.   |
| fields       | OPTIONAL. A character vector each field requested within the project. NULL will default to all fields. |
| pagesize     | Defaults to 50. Maximum is 100.  |
| waittime     | Time in seconds to wait between requests.  |

#### Details

possible fields: title, description, reference, division\_department, owner, executive\_owner, created\_at, updated\_at, project, assigned\_user, custom\_attributes, position, risk\_control\_matrix\_id, walkthrough\_summary\_id, testing\_round\_1\_id, testing\_round\_2\_id, testing\_round\_3\_id, testing\_round\_4\_id, entities

#### Value

A tibble of objectives

```
get_project_planning_files
```

Retrieve Highbond Project - Planning Files

# Description

Downloads the primary details of one or multiple planning files for a project.

# Usage

```
get_project_planning_files(
   auth,
   project_id = NULL,
   planning_file_id = NULL,
   fields = NULL,
   pagesize = 50,
   waittime = 0.2
)
```

# Arguments

| auth            | Highbond authentication credentials, created from setup_highbond                                       |
|-----------------|--|
| project_id      | Required if other parameter is blank. May obtain multiple rows.  |
| planning_file_i | d  |
|                 | Required if other parameter is blank. Will get only one row.   |
| fields          | OPTIONAL. A character vector each field requested within the project. NULL will default to all fields. |
| pagesize        | Defaults to 50. Maximum is 100.  |
| waittime        | Time in seconds to wait between requests.  |

# Details

possible fields: name, reference\_id, description, position, created\_at, updated\_at, custom\_attributes, project

# Value

A tibble of planning files.

get\_project\_request\_items

Retrieve Highbond Project - Request Items

# Description

Capture what you asked for

## Usage

```
get_project_request_items(
   auth,
   request_id,
   fields = NULL,
   pagesize = 50,
   waittime = 0.2
)
```

# Arguments

| auth       | Highbond authentication credentials, created from setup_highbond                                       |
|------------|--|
| request_id | Will get only one.   |
| fields     | OPTIONAL. A character vector each field requested within the project. NULL will default to all fields. |
| pagesize   | Defaults to 50. Maximum is 100.  |
| waittime   | Time in seconds to wait between requests.  |

## Value

A tibble of walkthroughs

get\_project\_result\_files

Retrieve Highbond Project - Result Files

# Description

Downloads the primary details of one or multiple result files for a project.

# Usage

```
get_project_result_files(
   auth,
   project_id = NULL,
   results_file_id = NULL,
   fields = NULL,
   pagesize = 50,
   waittime = 0.2
)
```

# Arguments

| auth            | Highbond authentication credentials, created from setup_highbond                                       |
|-----------------|--|
| project_id      | Required if other parameter is blank. May obtain multiple rows.  |
| results_file_id |  |
|                 | Required if other parameter is blank. Will get only one row.   |
| fields          | OPTIONAL. A character vector each field requested within the project. NULL will default to all fields. |
| pagesize        | Defaults to 50. Maximum is 100.  |
| waittime        | Time in seconds to wait between requests.  |

### Details

possible fields: name, reference\_id, description, position, created\_at, updated\_at, custom\_attributes, project

#### Value

A tibble of result files

get\_project\_risks Retrieve Highbond Project - Risks

# Description

"A narrative is a description of a business process or area under review. Narratives are also known as policies, process narratives, process descriptions, or control guides."

# Usage

```
get_project_risks(
  auth,
  objective_id = NULL,
  risk_id = NULL,
  fields = NULL,
  pagesize = 50,
  waittime = 0.2
)
```

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#### get\_project\_types

# Arguments

| auth         | Highbond authentication credentials, created from setup_highbond                                       |
|--------------|--|
| objective_id | Required if other parameter is blank. May obtain multiple rows.  |
| risk_id      | Required if other parameter is blank. Will get only one.   |
| fields       | OPTIONAL. A character vector each field requested within the project. NULL will default to all fields. |
| pagesize     | Defaults to 50. Maximum is 100.  |
| waittime     | Time in seconds to wait between requests.  |

# Details

possible fields: title, description, risk\_id, position, impact, likelihood, custom\_attributes, created\_at, updated\_at, objective, mitigations, entities

# Value

A tibble of Risks

get\_project\_types Retrieve Highbond Projects - Project Types

# Description

Downloads the primary details of one or all project types.

# Usage

```
get_project_types(
   auth,
   project_type_id = NULL,
   fields = NULL,
   pagesize = 50,
   waittime = 0.2
)
```

# Arguments

| auth            | Highbond authentication credentials, created from setup_highbond                                       |
|-----------------|--|
| project_type_id | 1  |
|                 | NULL Defaults to all project types   |
| fields          | OPTIONAL. A character vector each field requested within the project. NULL will default to all fields. |
| pagesize        | Defaults to 50. Maximum is 100.  |
| waittime        | Time in seconds to wait between requests.  |
|                 |  |

# Details

Possible fields include: name, description, workflow, project\_terms, certification\_terms, control\_terms, finding\_terms, control\_test\_terms, finding\_action\_terms, narrative\_terms, objective\_terms, planning\_terms, results\_terms, risk\_terms, test\_plan\_terms, walkthrough\_terms

#### Value

A tibble of project types

get\_project\_type\_custom\_attributes

Retrieve Highbond Projects - Project Type Custom Attributes

# Description

Get the custom attributes set within a project type. Note these are different than the custom terms used to rename fields. For those, see get\_project\_types

# Usage

```
get_project_type_custom_attributes(
  auth,
  project_type_id = NULL,
  custom_attributes_id = NULL,
  fields = NULL,
  pagesize = 50,
  waittime = 0.2
)
```

#### Arguments

| auth           | Highbond authentication credentials, created from setup_highbond   |
|----------------|--|
| project_type_i | d  |
|                | Required if other parameter is blank.  |
| custom_attribu | tes_id   |
|                | Required if the other parameter is blank. Base64 encoded parent resource id (project or framework) and user uid, encoded from format parent_resource_id:user_uid |
| fields         | OPTIONAL. A character vector each field requested within the project. NULL will default to all fields.   |
| pagesize       | Defaults to 50. Maximum is 100.  |
| waittime       | Time in seconds to wait between requests.  |

# Value

A tibble of custom attributes

get\_project\_walkthroughs

Retrieve Highbond Project - Walkthroughs / Execute Procedures

#### Description

"A walkthrough is a series of steps you perform to establish the reliability of controls and test the design of controls. Each control you define has a corresponding walkthrough that is used to verify that the control is designed appropriately. In a Workplan workflow project, a walkthrough is called an execute procedure."

#### Usage

```
get_project_walkthroughs(
  auth,
  walkthrough_id,
  fields = NULL,
  pagesize = 50,
  waittime = 0.2
)
```

#### Arguments

| auth           | Highbond authentication credentials, created from setup_highbond                                       |
|----------------|--|
| walkthrough_id | Will get only one.   |
| fields         | OPTIONAL. A character vector each field requested within the project. NULL will default to all fields. |
| pagesize       | Defaults to 50. Maximum is 100.  |
| waittime       | Time in seconds to wait between requests.  |

#### Value

A tibble of walkthroughs

get\_results\_analyses Retrieve Highbond Results - Analyses

#### Description

Downloads a list of Analyses in a Collection

# Usage

```
get_results_analyses(auth, collection_id = NULL, analysis_id = NULL)
```

# Arguments

| auth          | Highbond authentication credentials, created from setup_highbond |
|---------------|--|
| collection_id | Collection ID. Required if other parameter is blank.             |
| analysis_id   | Analyses ID. Required if other parameter is blank.               |

# Value

A data frame of Analyses in a Collection

get\_results\_collections

Retrieve Highbond Results - Collections

# Description

Downloads a list of collections

# Usage

get\_results\_collections(auth, collection\_id = NULL)

# Arguments

| auth          | Highbond authentication credentials, created from setup_highbond |
|---------------|--|
| collection_id | Collection ID. Optional.   |

# Value

A data frame of Collections

get\_results\_columns Retrieve Highbond Results - Columns

# Description

Gets the schema of a single table.

# Usage

get\_results\_columns(auth, table\_id)

# Arguments

| auth     | Highbond authentication credentials, created from setup_highbond |
|----------|--|
| table_id | Table ID. Required.  |

get\_results\_records

## Value

A data frame column name and types of a single Table

get\_results\_records Retrieve Highbond Results - Records

#### Description

Downloads the content in the structure as saved by Highbond Results, including metadata and questionnaire responses (if applicable).

#### Usage

```
get_results_records(auth, table_id, timezone = Sys.timezone())
```

# Arguments

| auth     | Highbond authentication credentials, created from setup_highbond                     |
|----------|--|
| table_id | The table to be downloaded   |
| timezone | Defaults to Sys.timezone(). See OlsonNames() for a list of allowable time-<br>zones. |

# Details

Table ID can be found in the path of your Result table. https://<company\_name>.results.highbond.com/projects/<COLLECTI

# Value

A list containing the contents, table requested and the original response

# Examples

```
## Not run:
response <- get_results_records(auth, 567890)</pre>
```

## End(Not run)

# Description

Downloads the primary details of one or all tables in an Analyses

# Usage

```
get_results_tables(auth, analysis_id = NULL, table_id = NULL)
```

# Arguments

| auth        | Highbond authentication credentials, created from setup_highbond |
|-------------|--|
| analysis_id | Analysis ID. Required if other parameter is blank.               |
| table_id    | Table ID. Required if other parameter is blank.                  |

# Value

A data frame of Tables in an Analyses

post\_results\_records Upload Highbond Results - Records

# Description

Uploads the content in to Highbond Results.

# Usage

```
post_results_records(
   auth,
   table_id,
   upload = NULL,
   purge = FALSE,
   skipquestions = FALSE,
   sizelimit = 75000
)
```

#### Arguments

| auth          | Highbond authentication credentials, created from setup_highbond  |
|---------------|---|
| table_id      | The table to be downloaded  |
| upload        | A data frame to be uploaded. Classes supported are c('character', 'numeric', 'logical', 'Date', 'POSIXct', 'POSIXlt')     |
| purge         | FALSE by default. Whether or not to delete the contents of the table before overwriting.                                  |
| skipquestions | FALSE by default. Set TRUE if not purging and you don't want to overwrite the responses within the Results table already. |
| sizelimit     | 75000 bytes (~75 kb) by default. Used to estimate chunk size. Reduce size if upload chunks tend to fail.                  |

#### Details

Current Results in the table can be purged or not. If data is not purged, a check is performed that compatible types are being upload and all fields exist. If purged, there will be no checks done beforehand, which may alter structure of existing table.

If the Result table contains questionnaire responses, then any records that are being updated may need to have the responses also included as well. These fields are usually prefixed with a 'q'.

A result row is generally appended, however a Primary Key field within the Data Analytic Settings for that table may be specified so a record with the same primary key may be merged, rather than duplicated.

#### Value

No return value, although errors will be verbose

#### Examples

```
## Not run:
upload <- data.frame(field_one = c('A','B','C'),
field_two = c(1, 2, 3),
field_three = c(10L, 11L, 12L),
field_four = c(TRUE, FALSE, TRUE),
field_five = c(as.Date('2019-01-01'), as.Date('2020-01-01'), as.Date('2021-12-31')),
field_six = c(as.POSIXct(Sys.time()), as.POSIXct(Sys.time()), as.POSIXct(Sys.time())))
post_results_records(auth, upload = upload, purge = TRUE)
```

## End(Not run)

setup\_highbond

#### Description

Assembles all the core authentication needed to connect to a Highbond instance.

# Usage

setup\_highbond(apikey, instance, datacenter)

# Arguments

| apikey     | Highbond API token  |
|------------|---|
| instance   | The HighBond instance ID, also known as the organization number |
| datacenter | The region code. Can be 'us', 'ca', 'eu', 'ap', 'au'            |

### Details

Requires a Highbond API token. Activate a token from https://help.highbond.com/helpdocs/ highbond/en-us/Content/launchpad/getting\_started/managing\_access\_tokens.html.

The Instance (Organization) number and datacenter can both be found from the Highbond launchpad, then accessing Options and Organization. https://accounts.highbond.com/orgs/<ORG\_ ID>/details

# Value

A Highbond Authentication credentials object to pass to your requests

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