

Package ‘kntnr’

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Type Package

Title R Client for 'kintone' API

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Description Retrieve data from 'kintone' (<<https://www.kintone.com/>>) via its API.
'kintone' is an enterprise application platform.

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URL <https://github.com/yutannahilation/kntnr>

BugReports <https://github.com/yutannahilation/kntnr/issues>

Imports base64enc, dplyr (>= 0.7.0), httr, jsonlite, lazyeval,
lubridate, methods, purrr (>= 0.2.3), rstudioapi, stringr,
tibble

Suggests testthat, tidyr

LazyData TRUE

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R topics documented:

kntnr	2
kntn_auth	2
kntn_file	3
kntn_record	4
kntn_unnest	6
Index	7

kntnr	<i>R Client for 'kintone' API</i>
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Description

Retrieve data from kintone.

kntn_auth	<i>Authorization Header for 'kintone'</i>
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Description

kntn_get_authorization_header() constructs a header for authorization using [add_headers](#). kntn_set_auth() interactively asks for the type of authentication and the credential and store them as environmental variables KNTN_URL, KNTN_AUTH_TYPE and KNTN_AUTH. If you want to avoid interaction, please manually set these. kntn_unset_auth() unsets these environmental variables.

Usage

```
kntn_get_authorization_header()

kntn_set_auth(auth_type = c("password", "token"), overwrite = FALSE)

kntn_unset_auth()
```

Arguments

auth_type	Type of Authentication. password uses username and password. token uses per-app token.
overwrite	If TRUE, overwrite the existing environmental variables.

See Also

<https://developer.kintone.io/hc/en-us/articles/212495188/#userauthentication>

Examples

```
## Not run:
# set KNTN_URL, KNTN_AUTH and KNTN_AUTH_TYPE interactively.
# By default, auth_type is password.
kntn_set_auth()

Sys.getenv(c("KNTN_URL", "KNTN_AUTH", "KNTN_AUTH_TYPE"))

# This will return `X-Cybozu-Authorization` header.
kntn_get_authorization_header()
```

```

# Clear environmental variables before trying to use another set of authorization info.
ktn_unset_auth()
ktn_set_auth(auth_type = "token")

# This will return `X-Cybozu-API-Token` header.
ktn_get_authorization_header()

# To avoid interaction, set these environmental variables manually.
Sys.setenv("KNTN_URL" = "https://example.cybozu.com/")
Sys.setenv("KNTN_AUTH" = "abcdefg")
Sys.setenv("KNTN_AUTH_TYPE" = "token")

## End(Not run)

```

ktn_file	<i>'kintone' File API</i>
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Description

Get a file from kintone API and parse it with [content](#). If you want to parse it by yourself, specify `as = "raw"` or `as = "text"`.

Usage

```
ktn_file(fileKey, verbose = FALSE, as = NULL, type = NULL,
         encoding = NULL)
```

Arguments

fileKey	File key.
verbose	If TRUE, output logs verbosely.
as	as parameter passed to content .
type	type parameter passed to content .
encoding	encoding parameter passed to content .

See Also

<https://developer.kintone.io/hc/en-us/articles/212494468/>

Examples

```

## Not run:
ktn_set_auth()
app <- 10

# get a single record with a file attachment field
d <- ktn_record(app, id = 1)

```

```
f <- kntn_file(fileKey = x$Attachment[[1]]$fileKey[1])
## End(Not run)
```

kntn_record *'kintone' Record API*

Description

kntn_record() gets a single record from the specified kintone application. kntn_records() retrieves multiple records at once. If the number of records is more than records_per_request (the default is 100), kntn_records() automatically splits the request into smaller subrequests.

Usage

```
kntn_record(app, id, as = c("data.frame", "list", "text"), verbose = FALSE)
```

```
kntn_records(app, fields = NULL, query = "", max_records = 1000L,
  offset = 0L, records_per_request = 100L, as = c("data.frame", "list",
  "text"), verbose = FALSE)
```

Arguments

app	App ID.
id	Record ID.
as	Desired type of output: data.frame, list or text (data.frame means tbl_df).
verbose	If TRUE, output logs verbosely.
fields	Names of fields.
query	Query (e.g. "updated_time > \"2012-02-03T09:00:00+0900\" and updated_time < \"2012-02-03T09:00:00+0900\"").
max_records	Max number of records to get.
offset	Offset of records.
records_per_request	Number of records per request (max: 100).

Details

A field will be converted to the correspondent object by the type:

- RECORD_NUMBER: character
- __ID__: integer
- __REVISION__: integer
- CREATOR: character (code)
- CREATED_TIME: POSIXct

- MODIFIER: character (code)
- UPDATED_TIME: POSIXct
- SINGLE_LINE_TEXT: character
- NUMBER: numeric
- CALC: character
- MULTI_LINE_TEXT: character
- RICH_TEXT: character
- CHECK_BOX: nested character
- RADIO_BUTTON: character
- DROP_DOWN: character
- MULTI_SELECT: nested character
- FILE: nested [tbl_df](#)
- LINK: character
- DATE: Date
- TIME: character (R has no correspondent class for this)
- DATETIME: POSIXct
- USER_SELECT: nested character (code)
- ORGANIZATION_SELECT: nested character (code)
- GROUP_SELECT: nested character (code)
- CATEGORY: nested character
- STATUS: character
- STATUS_ASSIGNEE: character
- SUBTABLE: nested tbl

Some types will be converted to nested objects. You can unnest these fields by [kntn_unnest](#).

See Also

<https://developer.kintone.io/hc/en-us/articles/213149287/>

Examples

```
## Not run:
kntn_set_auth()

app <- 10

# get a single record
d <- kntn_record(app, id = 1)

# get records up to 1000 (default)
d <- kntn_records(app)
```

```
# get records up to 5000 records at the latency of 500 records/request.
d <- kntn_records(app, max_records = 5000, records_per_request = 500L)

# get records as list
d <- kntn_records(app, as = "list")

# get records matched with the specified query and fields.
# See https://developer.kintone.io/hc/en-us/articles/213149287/ for the query syntax
d <- kntn_records(app, fields = c("timestamp", "value"),
                 query = "updated_time > \"2016-10-03T09:00:00+0900\"")

# Some types like SUBTABLE are converted as nested data.frame.
# You can unnest them by using kntn_unnest.
kntn_unnest(d)

## End(Not run)
```

kntn_unnest

Unnest 'kintone' Records

Description

The data retrieved by [kntn_records](#) may contain nested data.frames. `kntn_unnest()` unnests them by using [unnest](#). Note that this function is very experimental and may not work well for all data.

Usage

```
kntn_unnest(records)
```

Arguments

records Data.frame retrieved by `kntn_records()`

Index

`add_headers`, [2](#)

`content`, [3](#)

`kntn_auth`, [2](#)

`kntn_file`, [3](#)

`kntn_get_authorization_header`
(`kntn_auth`), [2](#)

`kntn_record`, [4](#)

`kntn_records`, [6](#)

`kntn_records` (`kntn_record`), [4](#)

`kntn_set_auth` (`kntn_auth`), [2](#)

`kntn_unnest`, [5](#), [6](#)

`kntn_unset_auth` (`kntn_auth`), [2](#)

`kntnr`, [2](#)

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

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

`unnest`, [6](#)