

Package ‘zen4R’

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Title Interface to 'Zenodo' REST API

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Description Provides an Interface to 'Zenodo' (<<https://zenodo.org>>) REST API, including management of depositions, attribution of DOIs by 'Zenodo' and upload and download of files.

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URL <https://github.com/eblondel/zen4R>

BugReports <https://github.com/eblondel/zen4R/issues>

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download_zenodo	<i>download_zenodo</i>
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Description

download_zenodo allows to download archives attached to a Zenodo record, identified by its DOI or concept DOI.

Usage

```
download_zenodo(
  doi,
  path = ".",
  files = list(),
  sandbox = FALSE,
  logger = NULL,
  quiet = FALSE,
  ...
)
```

Arguments

doi	a Zenodo DOI or concept DOI
path	the target directory where to download files
files	subset of filenames to restrain to download. If ignored, all files will be downloaded.
sandbox	Use the sandbox infrastructure. Default is FALSE
logger	a logger to print Zenodo API-related messages. The logger can be either NULL, "INFO" (with minimum logs), or "DEBUG" (for complete curl http calls logs)

quiet	Logical (FALSE by default). Do you want to suppress informative messages (not warnings)?
...	any other arguments for downloading (more information at ZenodoRecord , <code>downloadFiles()</code> documentation)

Examples

```
## Not run:
#simple download (sequential)
download_zenodo("10.5281/zenodo.2547036")

library(parallel)
#download files as parallel using a cluster approach (for both Unix/Win systems)
download_zenodo("10.5281/zenodo.2547036",
  parallel = TRUE, parallel_handler = parLapply, cl = makeCluster(2))

#download files as parallel using mclapply (for Unix systems)
download_zenodo("10.5281/zenodo.2547036",
  parallel = TRUE, parallel_handler = mclapply, mc.cores = 2)

## End(Not run)
```

export_zenodo	<i>export_zenodo</i>
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Description

export_zenodo allows to export a Zenodo record, identified by its DOI or concept DOI, using one of the export formats supported by Zenodo.

Usage

```
export_zenodo(
  doi,
  filename,
  format,
  append_format = TRUE,
  sandbox = FALSE,
  logger = NULL
)
```

Arguments

doi	a Zenodo DOI or concept DOI
filename	a base file name (without file extension) to export to.

format	a valid Zenodo export format among the following: BibTeX, CSL, DataCite (or DataCiteXML), DublinCore, DCAT, JSON, JSON-LD, GeoJSON, MARCXML, DataCiteJSON, CodeMeta, DataPackage, CFF.
append_format	wether format name has to be appended to the filename. Default is TRUE (for backward compatibility reasons). Set it to FALSE if you want to use only the filename.
sandbox	Use the sandbox infrastructure. Default is FALSE
logger	a logger to print Zenodo API-related messages. The logger can be either NULL, "INFO" (with minimum logs), or "DEBUG" (for complete curl http calls logs)

Value

the exported file name (with extension)

Examples

```
## Not run:
export_zenodo("10.5281/zenodo.2547036", filename = "test", format = "BibTeX", append_format = F)

## End(Not run)
```

<i>get_citation</i>	<i>get_citation</i>
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Description

get_citation allows to get the styled citation for Zenodo record, identified by its DOI or concept DOI, and the style name

Usage

```
get_citation(
  doi,
  sandbox = FALSE,
  style = c("havard-cite-them-right", "apa", "modern-language-association", "vancouver",
           "chicago-fullnote-bibliography", "ieee", "bibtex"),
  logger = NULL
)
```

Arguments

doi	a Zenodo DOI or concept DOI
sandbox	Use the sandbox infrastructure. Default is FALSE
style	the style character string among. Possible values "havard-cite-them-right", "apa", "modern-language-association", "vancouver", "chicago-fullnote-bibliography", "ieee", or "bibtex".

logger a logger to print messages. The logger can be either NULL, "INFO" (with minimum logs), or "DEBUG" (for complete curl http calls logs)

Value

an object of class `data.frame` giving the record versions including date, version number and version-specific DOI.

the record citation

Examples

```
## Not run:
  get_citation(doi = "10.5281/zenodo.2547036", style = "ieee")

## End(Not run)
```

get_licenses	<i>get_licenses</i>
--------------	---------------------

Description

`get_licenses` allows to list all licenses supported by Zenodo.

Usage

```
get_licenses(pretty = TRUE, sandbox = FALSE)
```

Arguments

pretty output delivered as `data.frame`
sandbox Use the sandbox infrastructure. Default is FALSE

Value

the licenses as `list` or `data.frame`

Examples

```
## Not run:
  get_licenses(pretty = TRUE)

## End(Not run)
```

get_versions

get_versions

Description

get_versions allows to execute a workflow

Usage

```
get_versions(doi, sandbox = FALSE, logger = NULL)
```

Arguments

doi	a Zenodo DOI or concept DOI
sandbox	Use the sandbox infrastructure. Default is FALSE
logger	a logger to print messages. The logger can be either NULL, "INFO" (with minimum logs), or "DEBUG" (for complete curl http calls logs)

Value

an object of class `data.frame` giving the record versions including date, version number and version-specific DOI.

Examples

```
## Not run:  
get_versions("10.5281/zenodo.2547036")  
  
## End(Not run)
```

get_zenodo*get_zenodo*

Description

get_zenodo allows to get a Zenodo record, identified by its DOI or concept DOI.

Usage

```
get_zenodo(doi, sandbox = FALSE, logger = NULL)
```

Arguments

doi	a Zenodo DOI or concept DOI
sandbox	Use the sandbox infrastructure. Default is FALSE
logger	a logger to print messages. The logger can be either NULL, "INFO" (with minimum logs), or "DEBUG" (for complete curl http calls logs)

Value

an object of class `data.frame` giving the record versions including date, version number and version-specific DOI.

object of class `ZenodoRecord`

Examples

```
## Not run:  
get_zenodo("10.5281/zenodo.2547036")  
  
## End(Not run)
```

zen4R

Interface to 'Zenodo' REST API

Description

Provides an Interface to 'Zenodo' (<<https://zenodo.org>>) REST API, including management of depositions, attribution of DOIs by 'Zenodo', upload and download of files.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

See Also

Useful links:

- <https://github.com/eblondel/zen4R>
- Report bugs at <https://github.com/eblondel/zen4R/issues>

zen4RLogger

zen4RLogger

Description

zen4RLogger

zen4RLogger

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a simple logger

Public fields

verbose.info logger info status

verbose.debug logger debug status

loggerType Logger type, either "INFO", "DEBUG" or NULL (if no logger)

Methods

Public methods:

- [zen4RLogger\\$logger\(\)](#)
- [zen4RLogger\\$INFO\(\)](#)
- [zen4RLogger\\$WARN\(\)](#)
- [zen4RLogger\\$ERROR\(\)](#)
- [zen4RLogger\\$new\(\)](#)
- [zen4RLogger\\$getClassname\(\)](#)
- [zen4RLogger\\$getClass\(\)](#)
- [zen4RLogger\\$clone\(\)](#)

Method [logger\(\)](#): internal logger function for the Zenodo manager

Usage:

`zen4RLogger$logger(type, text)`

Arguments:

type logger message type, "INFO", "WARN", or "ERROR"

text log message

Method [INFO\(\)](#): internal INFO logger function

Usage:

`zen4RLogger$INFO(text)`

Arguments:

text log message

Method WARN(): internal WARN logger function

Usage:

zen4RLogger\$WARN(text)

Arguments:

text log message

Method ERROR(): internal ERROR logger function

Usage:

zen4RLogger\$ERROR(text)

Arguments:

text log message

Method new(): initialize the Zenodo logger

Usage:

zen4RLogger\$new(logger = NULL)

Arguments:

logger logger type NULL, 'INFO', or 'DEBUG'

Method getClassName(): Get object class name

Usage:

zen4RLogger\$getClassName()

Returns: the class name, object of class character

Method getClass(): Get object class

Usage:

zen4RLogger\$getClass()

Returns: the class, object of class R6

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

Usage:

zen4RLogger\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Note

Logger class used internally by zen4R

ZenodoException	<i>ZenodoException</i>
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Description

ZenodoException

ZenodoException

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a generic Zenodo service exception

Super class

[zen4R::zen4RLogger](#) -> ZenodoException

Public fields

message message

status status

Methods**Public methods:**

- [ZenodoException\\$new\(\)](#)
- [ZenodoException\\$clone\(\)](#)

Method `new()`: Initializes a ZenodoException

Usage:

`ZenodoException$new(message, status, logger = NULL)`

Arguments:

message message

status status

logger the logger type

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

Usage:

`ZenodoException$clone(deep = FALSE)`

Arguments:

deep Whether to make a deep clone.

Note

Abstract class used internally by **zen4R**

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

ZenodoManager

ZenodoManager

Description

ZenodoManager

ZenodoManager

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ZenodoManager

Super class

[zen4R](#): : [zen4RLogger](#) -> ZenodoManager

Public fields

sandbox Zenodo manager sandbox status, TRUE if we interact with Sandbox infra

anonymous Zenodo manager anonymous status, TRUE when no token is specified

Methods**Public methods:**

- [ZenodoManager\\$new\(\)](#)
- [ZenodoManager\\$getToken\(\)](#)
- [ZenodoManager\\$checkUserAuthentication\(\)](#)
- [ZenodoManager\\$getLanguages\(\)](#)
- [ZenodoManager\\$getLanguageById\(\)](#)
- [ZenodoManager\\$getLicenses\(\)](#)
- [ZenodoManager\\$getLicenseById\(\)](#)
- [ZenodoManager\\$getResourceTypes\(\)](#)
- [ZenodoManager\\$getResourceTypeById\(\)](#)
- [ZenodoManager\\$getCommunities\(\)](#)

- `ZenodoManager$getCommunityById()`
- `ZenodoManager$submitRecordToCommunities()`
- `ZenodoManager$removeRecordFromCommunities()`
- `ZenodoManager$getRecordCommunities()`
- `ZenodoManager$createReviewRequest()`
- `ZenodoManager$getReviewRequest()`
- `ZenodoManager$deleteReviewRequest()`
- `ZenodoManager$submitRecordForReview()`
- `ZenodoManager$getGrants()`
- `ZenodoManager$getAwards()`
- `ZenodoManager$getGrantsByName()`
- `ZenodoManager$getAwardsByName()`
- `ZenodoManager$getGrantById()`
- `ZenodoManager$getAwardById()`
- `ZenodoManager$getAffiliations()`
- `ZenodoManager$getAffiliationByName()`
- `ZenodoManager$getAffiliationById()`
- `ZenodoManager$getFunders()`
- `ZenodoManager$getFundersByName()`
- `ZenodoManager$getFunderById()`
- `ZenodoManager$getDepositions()`
- `ZenodoManager$getDepositionByConceptDOI()`
- `ZenodoManager$getDepositionByDOI()`
- `ZenodoManager$getDepositionById()`
- `ZenodoManager$getDepositionByConceptId()`
- `ZenodoManager$depositRecord()`
- `ZenodoManager$reserveDOI()`
- `ZenodoManager$deleteDOI()`
- `ZenodoManager$depositRecordVersion()`
- `ZenodoManager$deleteRecord()`
- `ZenodoManager$deleteRecordByDOI()`
- `ZenodoManager$deleteRecords()`
- `ZenodoManager$createEmptyRecord()`
- `ZenodoManager$editRecord()`
- `ZenodoManager$discardChanges()`
- `ZenodoManager$publishRecord()`
- `ZenodoManager$getFiles()`
- `ZenodoManager$getFile()`
- `ZenodoManager$startFileUpload()`
- `ZenodoManager$completeFileUpload()`
- `ZenodoManager$uploadFile()`
- `ZenodoManager$deleteFile()`

- `ZenodoManager$getRecords()`
- `ZenodoManager$getRecordByConceptDOI()`
- `ZenodoManager$getRecordByDOI()`
- `ZenodoManager$getRecordById()`
- `ZenodoManager$getRecordByConceptId()`
- `ZenodoManager$getRequests()`
- `ZenodoManager$getRequest()`
- `ZenodoManager$isActionableRequest()`
- `ZenodoManager$acceptRequest()`
- `ZenodoManager$declineRequest()`
- `ZenodoManager$cancelRequest()`
- `ZenodoManager$clone()`

Method `new()`: initializes the Zenodo Manager

Usage:

```
ZenodoManager$new(
  url = "https://zenodo.org/api",
  token = zenodo_pat(),
  sandbox = FALSE,
  logger = NULL,
  keyring_backend = "env"
)
```

Arguments:

`url` Zenodo API URL. By default, the url is set to "https://zenodo.org/api". For tests, the Zenodo sandbox API URL can be used: https://sandbox.zenodo.org/api

`token` the user token. By default an attempt will be made to retrieve token using `zenodo_pat`

`sandbox` Indicates if the Zenodo sandbox platform should be used. Default is FALSE

`logger` logger type. The logger can be either NULL, "INFO" (with minimum logs), or "DEBUG" (for complete curl http calls logs)

`keyring_backend` The **keyring** backend used to store user token. The `keyring_backend` can be set to use a different backend for storing the Zenodo token with **keyring** (Default value is 'env').

Method `getToken()`: Get user token

Usage:

```
ZenodoManager$getToken()
```

Returns: the token, object of class character

Method `checkUserAuthentication()`: Check whether the user is authenticated

Usage:

```
ZenodoManager$checkUserAuthentication()
```

Method `getLanguages()`: Get Languages supported by Zenodo.

Usage:

ZenodoManager\$getLanguages(pretty = TRUE)

Arguments:

pretty Prettify the output. By default the argument *pretty* is set to TRUE which will returns the list of languages as `data.frame`. Set *pretty* = FALSE to get the raw list of languages

Returns: list of languages as `data.frame` or list

Method `getLanguageById()`: Get language by Id.

Usage:

ZenodoManager\$getLanguageById(id)

Arguments:

id license id

Returns: the license

Method `getLicenses()`: Get Licenses supported by Zenodo.

Usage:

ZenodoManager\$getLicenses(pretty = TRUE)

Arguments:

pretty Prettify the output. By default the argument *pretty* is set to TRUE which will returns the list of licenses as `data.frame`. Set *pretty* = FALSE to get the raw list of licenses.

Returns: list of licenses as `data.frame` or list

Method `getLicenseById()`: Get license by Id.

Usage:

ZenodoManager\$getLicenseById(id)

Arguments:

id license id

Returns: the license

Method `getResourceTypes()`: Get Resource types supported by Zenodo.

Usage:

ZenodoManager\$getResourceTypes(pretty = TRUE)

Arguments:

pretty Prettify the output. By default the argument *pretty* is set to TRUE which will returns the list of resource types as `data.frame`. Set *pretty* = FALSE to get the raw list of resource types

Returns: list of resource types as `data.frame` or list

Method `getResourceTypeById()`: Get resource type by Id.

Usage:

ZenodoManager\$getResourceTypeById(id)

Arguments:

id resource type id

Returns: the resource type

Method `getCommunities()`: Get Communities supported by Zenodo.

Usage:

```
ZenodoManager$getCommunities(pretty = TRUE, q = "", size = 500)
```

Arguments:

`pretty` Prettify the output. By default the argument `pretty` is set to `TRUE` which will returns the list of communities as `data.frame`. Set `pretty = FALSE` to get the raw list of communities
`q` an ElasticSearch compliant query, object of class character. Default is empty. Note that the Zenodo API restrains a maximum number of 10,000 records to be retrieved. Consequently, not all communities can be listed from Zenodo, a query has to be specified.
`size` number of communities to be returned. By default equal to 500

Returns: list of communities as `data.frame` or list

Method `getCommunityById()`: Get community by Id.

Usage:

```
ZenodoManager$getCommunityById(id)
```

Arguments:

`id` community id

Returns: the community

Method `submitRecordToCommunities()`: Submit a published record to one or more community

Usage:

```
ZenodoManager$submitRecordToCommunities(  
  record,  
  communities = list(),  
  message = NULL  
)
```

Arguments:

`record` an object of class [ZenodoRecord](#)

`communities` communities to which the record will be submitted

`message` message to send to the community curator(s), either a text or a named list for each community in case a community-specific message should be sent

Returns: a submission object of class `list`, or `NULL` if nothing was submitted

Method `removeRecordFromCommunities()`: Remove a record from one or more community

Usage:

```
ZenodoManager$removeRecordFromCommunities(record, communities = list())
```

Arguments:

`record` an object of class [ZenodoRecord](#)

`communities` communities to which the record will be submitted

Returns: `TRUE` if removed, `FALSE` otherwise

Method `getRecordCommunities():` Get record communities

Usage:

`ZenodoManager$getRecordCommunities(record)`

Arguments:

`record` object of class `ZenodoRecord`

Returns: the list of communities in which the record was included

Method `createReviewRequest():` Creates a record review request in a community

Usage:

`ZenodoManager$createReviewRequest(record, community)`

Arguments:

`record` an object of class `ZenodoRecord`

`community` a community to which the record is submitted for review and publication

Returns: a review request object of class `list`, or `NULL` if nothing was submitted

Method `getReviewRequest():` Get a record review request

Usage:

`ZenodoManager$getReviewRequest(record)`

Arguments:

`record` an object of class `ZenodoRecord`

Returns: a review request object of class `list`, or `NULL` if nothing exists

Method `deleteReviewRequest():` Deletes a review request

Usage:

`ZenodoManager$deleteReviewRequest(record)`

Arguments:

`record` an object of class `ZenodoRecord`

Returns: `TRUE` if deleted, `FALSE` otherwise

Method `submitRecordForReview():` Submits a record for review. Prior to this submission, a community has to be selected for a record. This is done by using the method `createReviewRequest(record, community)`.

Usage:

`ZenodoManager$submitRecordForReview(recordId, message = NULL)`

Arguments:

`recordId` the ID of a `Zenodo` record

`message` message content for the submission. Optional

Returns: `TRUE` if submitted, `FALSE` otherwise

Method `getGrants():` Get Grants supported by Zenodo. DEPRECATED: replaced by `getAwards`

Usage:

`ZenodoManager$getGrants(q = "", pretty = TRUE, size = 500)`

Arguments:

q an Elasticsearch compliant query, object of class character. Default is empty. Note that the Zenodo API restrains a maximum number of 10,000 records to be retrieved. Consequently, not all grants can be listed from Zenodo, a query has to be specified.

pretty Prettify the output. By default the argument *pretty* is set to TRUE which will returns the list of grants as data.frame. Set *pretty* = FALSE to get the raw list of grants

size number of grants to be returned. By default equal to 500.

Returns: list of grants as data.frame or list

Method `getAwards()`: Get Awards supported by Zenodo.

Usage:

```
ZenodoManager$getAwards(q = "", pretty = TRUE, size = 500)
```

Arguments:

q an Elasticsearch compliant query, object of class character. Default is empty. Note that the Zenodo API restrains a maximum number of 10,000 records to be retrieved. Consequently, not all awards can be listed from Zenodo, a query has to be specified.

pretty Prettify the output. By default the argument *pretty* is set to TRUE which will returns the list of awards as data.frame. Set *pretty* = FALSE to get the raw list of awards

size number of awards to be returned. By default equal to 500.

Returns: list of awards as data.frame or list

Method `getGrantsByName()`: Get grants by name. DEPRECATED: replaced by `getAwardByName`

Usage:

```
ZenodoManager$getGrantsByName(name, pretty = TRUE)
```

Arguments:

name name

pretty Prettify the output. By default the argument *pretty* is set to TRUE which will returns the list of grants as data.frame. Set *pretty* = FALSE to get the raw list of grants

Returns: list of grants as data.frame or list

Method `getAwardsByName()`: Get awards by name.

Usage:

```
ZenodoManager$getAwardsByName(name, pretty = TRUE)
```

Arguments:

name name

pretty Prettify the output. By default the argument *pretty* is set to TRUE which will returns the list of awards as data.frame. Set *pretty* = FALSE to get the raw list of awards

Returns: list of awards as data.frame or list

Method `getGrantById()`: Get grant by Id. DEPRECATED: replaced by `getAwardById`

Usage:

```
ZenodoManager$getGrantById(id)
```

Arguments:

id grant id

Returns: the grant

Method `getAwardById()`: Get award by Id.

Usage:

`ZenodoManager$getAwardById(id)`

Arguments:

id award id

Returns: the award

Method `getAffiliations()`: Get Affiliations supported by Zenodo.

Usage:

`ZenodoManager$getAffiliations(q = "", pretty = TRUE, size = 500)`

Arguments:

q an ElasticSearch compliant query, object of class character. Default is empty. Note that the Zenodo API restrains a maximum number of 10,000 records to be retrieved. Consequently, not all affiliations can be listed from Zenodo, a query has to be specified.

pretty Prettify the output. By default the argument pretty is set to TRUE which will returns the list of affiliations as data.frame. Set pretty = FALSE to get the raw list of affiliations

size number of affiliations to be returned. By default equal to 500.

Returns: list of affiliations as data.frame or list

Method `getAffiliationByName()`: Get affiliations by name.

Usage:

`ZenodoManager$getAffiliationByName(name, pretty = TRUE)`

Arguments:

name name

pretty Prettify the output. By default the argument pretty is set to TRUE which will returns the list of affiliations as data.frame. Set pretty = FALSE to get the raw list of affiliations

Returns: list of affiliations as data.frame or list

Method `getAffiliationById()`: Get affiliation by Id.

Usage:

`ZenodoManager$getAffiliationById(id)`

Arguments:

id affiliation id

Returns: the affiliation

Method `getFunders()`: Get Funders supported by Zenodo based on a query.

Usage:

`ZenodoManager$getFunders(q = "", pretty = TRUE, size = 500)`

Arguments:

`q` an ElasticSearch compliant query, object of class `character`. Default is empty. Note that the Zenodo API restrains a maximum number of 10,000 records to be retrieved. Consequently, not all funders can be listed from Zenodo, a query has to be specified.

`pretty` Prettify the output. By default the argument `pretty` is set to `TRUE` which will returns the list of funders as `data.frame`. Set `pretty = FALSE` to get the raw list of funders

`size` number of funders to be returned. By default equal to 500

Returns: list of funders as `data.frame` or `list`

Method `getFundersByName()`: Get funders by name.

Usage:

```
ZenodoManager$getFundersByName(name, pretty = TRUE)
```

Arguments:

`name` name

`pretty` Prettify the output. By default the argument `pretty` is set to `TRUE` which will returns the list of funders as `data.frame`. Set `pretty = FALSE` to get the raw list of funders

Returns: list of funders as `data.frame` or `list`

Method `getFunderById()`: Get funder by Id.

Usage:

```
ZenodoManager$getFunderById(id)
```

Arguments:

`id` funder id

Returns: the funder

Method `getDepositions()`: Get the list of Zenodo records deposited in your Zenodo workspace (user records). By default the list of depositions will be returned by page with a size of 10 results per page (default size of the Zenodo API). The parameter `q` allows to specify an ElasticSearch-compliant query to filter depositions (default query is empty to retrieve all records). The argument `all_versions`, if set to `TRUE` allows to get all versions of records as part of the depositions list. The argument `exact` specifies that an exact matching is wished, in which case paginated search will be disabled (only the first search page will be returned). Examples of ElasticSearch queries for Zenodo can be found at <https://help.zenodo.org/guides/search/>.

Usage:

```
ZenodoManager$getDepositions(
  q = "",
  size = 10,
  all_versions = FALSE,
  exact = TRUE,
  quiet = FALSE
)
```

Arguments:

`q` Elastic-Search-compliant query, as object of class `character`. Default is ""

`size` number of depositions to be retrieved per request (paginated). Default is 10

`all_versions` object of class `logical` indicating if all versions of deposits have to be retrieved.
Default is `FALSE`

`exact` object of class `logical` indicating if exact matching has to be applied. Default is `TRUE`

`quiet` object of class `logical` indicating if logs have to be skipped. Default is `FALSE`

Returns: a list of `ZenodoRecord`

Method `getDepositionByConceptDOI()`: Get a Zenodo deposition record by concept DOI (generic DOI common to all deposition record versions).

Usage:

```
ZenodoManager$getDepositionByConceptDOI(conceptdoi)
```

Arguments:

`conceptdoi` the concept DOI, object of class `character`

Returns: an object of class `ZenodoRecord` if record does exist, `NULL` otherwise

Method `getDepositionByDOI()`: Get a Zenodo deposition record by DOI.

Usage:

```
ZenodoManager$getDepositionByDOI(doi)
```

Arguments:

`doi` the DOI, object of class `character`

Returns: an object of class `ZenodoRecord` if record does exist, `NULL` otherwise

Method `getDepositionById()`: Get a Zenodo deposition record by ID.

Usage:

```
ZenodoManager$getDepositionById(recid)
```

Arguments:

`recid` the record ID, object of class `character`

Returns: an object of class `ZenodoRecord` if record does exist, `NULL` otherwise

Method `getDepositionByConceptId()`: Get a Zenodo deposition record by concept ID.

Usage:

```
ZenodoManager$getDepositionByConceptId(conceptrecid)
```

Arguments:

`conceptrecid` the record concept ID, object of class `character`

Returns: an object of class `ZenodoRecord` if record does exist, `NULL` otherwise

Method `depositRecord()`: Deposits a record on Zenodo.

Usage:

```
ZenodoManager$depositRecord(record, reservedDOI = TRUE, publish = FALSE)
```

Arguments:

`record` the record to deposit, object of class `ZenodoRecord`

`reservedDOI` reserve DOI. By default `TRUE`

publish object of class logical indicating if record has to be published (default FALSE). Can be set to TRUE (to use CAUTIOUSLY, only if you want to publish your record)

Returns: object of class ZenodoRecord

Method reserveDOI(): Reserves a DOI for a deposition (draft record)

Usage:

```
ZenodoManager$reserveDOI(record)
```

Arguments:

record the record to deposit, object of class ZenodoRecord

Returns: object of class ZenodoRecord

Method deleteDOI(): Reserves a DOI for a deposition (draft record)

Usage:

```
ZenodoManager$deleteDOI(record)
```

Arguments:

record the record for which DOI has to be deleted, object of class ZenodoRecord

Returns: object of class ZenodoRecord

Method depositRecordVersion(): Deposits a record version on Zenodo.

Usage:

```
ZenodoManager$depositRecordVersion(  
  record,  
  delete_latest_files = TRUE,  
  files = list(),  
  publish = FALSE  
)
```

Arguments:

record the record version to deposit, object of class ZenodoRecord

delete_latest_files object of class logical indicating if latest files have to be deleted.
Default is TRUE

files a list of files to be uploaded with the new record version

publish object of class logical indicating if record has to be published (default FALSE)

Returns: TRUE if deposited (and eventually published), FALSE otherwise

Method deleteRecord(): Deletes a record given its ID

Usage:

```
ZenodoManager$deleteRecord(recordId)
```

Arguments:

recordId the ID of the record to be deleted

Returns: TRUE if deleted, FALSE otherwise

Method deleteRecordByDOI(): Deletes a record by DOI

Usage:

ZenodoManager\$deleteRecordByDOI(doi)

Arguments:

doi the DOI of the record to be deleted

Returns: TRUE if deleted, FALSE otherwise

Method deleteRecords(): Deletes all Zenodo deposited (unpublished) records. The parameter q allows to specify an ElasticSearch-compliant query to filter depositions (default query is empty to retrieve all records). Examples of ElasticSearch queries for Zenodo can be found at <https://help.zenodo.org/guides/search/>.

Usage:

ZenodoManager\$deleteRecords(q = "", size = 10)

Arguments:

q an ElasticSearch compliant query, object of class character

size number of records to be passed to \$getDepositions method

Returns: TRUE if all records have been deleted, FALSE otherwise

Method createEmptyRecord(): Creates an empty record in the Zenodo deposit. Returns the record newly created in Zenodo, as an object of class ZenodoRecord with an assigned identifier.

Usage:

ZenodoManager\$createEmptyRecord(reserveDOI = TRUE)

Arguments:

reserveDOI reserve DOI. By default TRUE

Returns: an object of class ZenodoRecord

Method editRecord(): Unlocks a record already submitted. Required to edit metadata of a Zenodo record already published.

Usage:

ZenodoManager\$editRecord(recordId)

Arguments:

recordId the ID of the record to unlock and set in editing mode.

Returns: an object of class ZenodoRecord

Method discardChanges(): Discards changes on a Zenodo record. Deleting a draft for an unpublished record will remove the draft and associated files from the system. Deleting a draft for a published record will remove the draft but not the published record.

Usage:

ZenodoManager\$discardChanges(recordId)

Arguments:

recordId the ID of the record for which changes have to be discarded.

Returns: an object of class ZenodoRecord

Method publishRecord(): Publishes a Zenodo record.

Usage:

ZenodoManager\$publishRecord(recordId)

Arguments:

recordId the ID of the record to be published.

Returns: an object of class ZenodoRecord

Method getFiles(): Get list of files attached to a Zenodo record.

Usage:

ZenodoManager\$getFiles(recordId)

Arguments:

recordId the ID of the record.

Returns: list of files

Method getFile(): Get a file record metadata.

Usage:

ZenodoManager\$getFile(recordId, filename)

Arguments:

recordId the ID of the record.

filename filename

Returns: the file metadata

Method startFileUpload(): Start a file upload. The method will create a key for the file to be uploaded. This method is essentially for internal purpose, and is called directly in uploadFile for user convenience and for backward compatibility with the legacy Zenodo API.

Usage:

ZenodoManager\$startFileUpload(path, recordId)

Arguments:

path Local path of the file

recordId ID of the record

Method completeFileUpload(): Completes a file upload. The method will complete a file upload through a commit operation. This method is essentially for internal purpose, and is called directly in uploadFile for user convenience and for backward compatibility with the legacy Zenodo API.

Usage:

ZenodoManager\$completeFileUpload(path, recordId)

Arguments:

path Local path of the file

recordId ID of the record

Method uploadFile(): Uploads a file to a Zenodo record. With the new Zenodo Invenio RDM API, this method internally calls startFileUpload to create a file record (with a filename key) at start, followed by the actual file content upload. At this stage, the file upload is in "pending" status. At the end, the function calls completeFileUpload to commit the file which status becomes "completed".

Usage:

ZenodoManager\$uploadFile(path, record = NULL)

Arguments:

path Local path of the file
record object of class ZenodoRecord

Method deleteFile(): Deletes a file for a record. With the new Zenodo Invenio RDM API, if a file is deleted although its status was pending, only the upload content is deleted, and the file upload record (identified by a filename key) is kept. If the status was completed (with a file commit), the file record is deleted.

Usage:

ZenodoManager\$deleteFile(recordId, filename)

Arguments:

recordId ID of the record
filename name of the file to be deleted

Method getRecords(): Get the list of Zenodo records. By default the list of records will be returned by page with a size of 10 results per page (default size of the Zenodo API). The parameter q allows to specify an ElasticSearch-compliant query to filter depositions (default query is empty to retrieve all records). The argument all_versions, if set to TRUE allows to get all versions of records as part of the depositions list. The argument exact specifies that an exact matching is wished, in which case paginated search will be disabled (only the first search page will be returned). Examples of ElasticSearch queries for Zenodo can be found at <https://help.zenodo.org/guides/search/>.

Usage:

ZenodoManager\$getRecords(q = "", size = 10, all_versions = FALSE, exact = TRUE)

Arguments:

q Elastic-Search-compliant query, as object of class character. Default is ""
size number of records to be retrieved per request (paginated). Default is 10
all_versions object of class logical indicating if all versions of records have to be retrieved. Default is FALSE
exact object of class logical indicating if exact matching has to be applied. Default is TRUE
quiet object of class logical indicating if logs have to be skipped. Default is FALSE

Returns: a list of ZenodoRecord

Method getRecordByConceptDOI(): Get Record by concept DOI

Usage:

ZenodoManager\$getRecordByConceptDOI(conceptdoi)

Arguments:

conceptdoi the concept DOI

Returns: a object of class ZenodoRecord

Method getRecordByDOI(): Get Record by DOI

Usage:

ZenodoManager\$getRecordByDOI(doi)

Arguments:

doi the DOI

Returns: a object of class ZenodoRecord

Method getRecordById(): Get Record by ID*Usage:*

ZenodoManager\$getRecordById(recid)

Arguments:

recid the record ID

Returns: a object of class ZenodoRecord

Method getRecordByConceptId(): Get Record by concept ID*Usage:*

ZenodoManager\$getRecordByConceptId(conceptrecid)

Arguments:

conceptrecid the concept ID

Returns: a object of class ZenodoRecord

Method getRequests(): Search requests*Usage:*

ZenodoManager\$getRequests(q = "", sort = "bestmatch", size = 10)

Arguments:

q Search query used to filter results based on Elasticsearch's query string syntax. e.g. <https://www.elastic.co/guide/en/elastic-search/current/dsl-query-string-query.html#query-string-syntax>

sort Sort search results. Built-in options are "bestmatch", "name", "newest", "oldest" (default: "bestmatch" or "newest").

size number of records to be retrieved per request (paginated). Default is 10

Returns: a list of ZenodoRecord

Method getRequest(): Get a request*Usage:*

ZenodoManager\$getRequest(request_id)

Arguments:

request_id the request ID

Returns: the request list object, NULL otherwise

Method isActionableRequest(): Checks if the request can be subject to an operation (accept, decline, cancel) depending on its status. To be subject to an operation, a request should not be closed or expired

Usage:

ZenodoManager\$isActionableRequest(request_id)

Arguments:

request_id the request ID

Returns: TRUE if

Method acceptRequest(): Accepts a request

Usage:

ZenodoManager\$acceptRequest(request_id, message = NULL)

Arguments:

request_id the request ID

message optional message reason for acceptance

Returns: TRUE if accepted, FALSE otherwise

Method declineRequest(): Declines a request

Usage:

ZenodoManager\$declineRequest(request_id, message = NULL)

Arguments:

request_id the request ID

message optional message reason for declination

Returns: TRUE if declined, FALSE otherwise

Method cancelRequest(): Cancels a request

Usage:

ZenodoManager\$cancelRequest(request_id, message = NULL)

Arguments:

request_id the request ID

message optional message reason for cancelation

Returns: TRUE if canceled, FALSE otherwise

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

Usage:

ZenodoManager\$clone(deep = FALSE)

Arguments:

deep Whether to make a deep clone.

Note

Main user class to be used with **zen4R**

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Examples

```
## Not run:
ZENODO <- ZenodoManager$new(
  url = "https://sandbox.zenodo.org/api",
  token = "<your_token>",
  logger = "INFO"
)

#create (deposit) an empty record
newRec <- ZENODO$createEmptyRecord()

#create and fill a local (not yet deposited) record
myrec <- ZenodoRecord$new()
myrec$setTitle("my R package")
myrec$setDescription("A description of my R package")
myrec$setUploadType("software")
myrec$addCreator(
  firstname = "John", lastname = "Doe",
  affiliation = "Independent", orcid = "0000-0000-0000-0000"
)
myrec$setLicense("mit")
myrec$setAccessRight("open")
myrec$setDOI("mydoi") #use this method if your DOI has been assigned elsewhere, outside Zenodo

#deposit the record
myrec <- ZENODO$depositRecord(myrec)

#publish a record (with caution!!)
#this method will PUBLISH the deposition done earlier
ZENODO$publishRecord(myrec$id)
#With even more caution the publication can be done with a shortcut argument at deposit time
ZENODO$depositRecord(myrec, publish = TRUE)

#delete a record (by id)
#this methods only works for unpublished deposits
#(if a record is published, it cannot be deleted anymore!)
ZENODO$deleteRecord(myrec$id)

#HOW TO UPLOAD FILES to a deposit

#upload a file
ZENODO$uploadFile("path/to/your/file", record = myrec)

#list files
zen_files <- ZENODO$getFiles(myrec$id)

#delete a file?
ZENODO$deleteFile(myrec$id, zen_files[[1]]$filename)

## End(Not run)
```

ZenodoRecord

ZenodoRecord

Description

ZenodoRecord

ZenodoRecord

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling an ZenodoRecord

Super class

[zen4R](#) : [zen4RLogger](#) -> ZenodoRecord

Public fields

created record creation date

updated record update date

revision_id revision id

is_draft is draft

is_published is published

status record status

versions versions

access access policies

files list of files associated to the record

id record id

links list of links associated to the record

metadata metadata elements associated to the record

parent parent record

pids pids

stats stats

Methods**Public methods:**

- ZenodoRecord\$new()
- ZenodoRecord\$getStats()
- ZenodoRecord\$getId()
- ZenodoRecord\$getParentId()
- ZenodoRecord\$getConceptId()
- ZenodoRecord\$setDOI()
- ZenodoRecord\$getDOI()
- ZenodoRecord\$getConceptDOI()
- ZenodoRecord\$setAccessPolicyRecord()
- ZenodoRecord\$setAccessPolicyFiles()
- ZenodoRecord\$setAccessPolicyEmbargo()
- ZenodoRecord\$setResourceType()
- ZenodoRecord\$setUploadType()
- ZenodoRecord\$setPublicationType()
- ZenodoRecord\$setImageType()
- ZenodoRecord\$setPublisher()
- ZenodoRecord\$setPublicationDate()
- ZenodoRecord\$addDate()
- ZenodoRecord\$removeDate()
- ZenodoRecord\$setTitle()
- ZenodoRecord\$addAdditionalTitle()
- ZenodoRecord\$removeAdditionalTitle()
- ZenodoRecord\$setDescription()
- ZenodoRecord\$addAdditionalDescription()
- ZenodoRecord\$removeAdditionalDescription()
- ZenodoRecord\$addPersonOrOrg()
- ZenodoRecord\$removePersonOrOrg()
- ZenodoRecord\$addCreator()
- ZenodoRecord\$removeCreatorByName()
- ZenodoRecord\$removeCreatorByAffiliation()
- ZenodoRecord\$removeCreatorByORCID()
- ZenodoRecord\$removeCreatorByGND()
- ZenodoRecord\$removeCreatorByISNI()
- ZenodoRecord\$removeCreatorByROR()
- ZenodoRecord\$addContributor()
- ZenodoRecord\$removeContributorByName()
- ZenodoRecord\$removeContributorByAffiliation()
- ZenodoRecord\$removeContributorByORCID()
- ZenodoRecord\$removeContributorByGND()
- ZenodoRecord\$removeContributorByISNI()

- `ZenodoRecord$removeContributorByROR()`
- `ZenodoRecord$addRight()`
- `ZenodoRecord$setLicense()`
- `ZenodoRecord$setVersion()`
- `ZenodoRecord$addLanguage()`
- `ZenodoRecord$setLanguage()`
- `ZenodoRecord$addRelatedIdentifier()`
- `ZenodoRecord$removeRelatedIdentifier()`
- `ZenodoRecord$setReferences()`
- `ZenodoRecord$addReference()`
- `ZenodoRecord$removeReference()`
- `ZenodoRecord$setSubjects()`
- `ZenodoRecord$setKeywords()`
- `ZenodoRecord$addSubject()`
- `ZenodoRecord$addKeyword()`
- `ZenodoRecord$removeSubject()`
- `ZenodoRecord$removeKeyword()`
- `ZenodoRecord$setNotes()`
- `ZenodoRecord$addFunding()`
- `ZenodoRecord$addGrant()`
- `ZenodoRecord$setGrants()`
- `ZenodoRecord$removeGrant()`
- `ZenodoRecord$setJournalTitle()`
- `ZenodoRecord$setJournalVolume()`
- `ZenodoRecord$setJournalIssue()`
- `ZenodoRecord$setJournalPages()`
- `ZenodoRecord$setConferenceTitle()`
- `ZenodoRecord$setConferenceAcronym()`
- `ZenodoRecord$setConferenceDates()`
- `ZenodoRecord$setConferencePlace()`
- `ZenodoRecord$setConferenceUrl()`
- `ZenodoRecord$setConferenceSession()`
- `ZenodoRecord$setConferenceSessionPart()`
- `ZenodoRecord$setImprintPublisher()`
- `ZenodoRecord$setImprintISBN()`
- `ZenodoRecord$setImprintPlace()`
- `ZenodoRecord$setPartofTitle()`
- `ZenodoRecord$setPartofPages()`
- `ZenodoRecord$setThesisUniversity()`
- `ZenodoRecord$addThesisSupervisor()`
- `ZenodoRecord$removeThesisSupervisor()`
- `ZenodoRecord$removeThesisSupervisorByName()`

- `ZenodoRecord$removeThesisSupervisorByAffiliation()`
- `ZenodoRecord$removeThesisSupervisorByORCID()`
- `ZenodoRecord$removeThesisSupervisorByGND()`
- `ZenodoRecord$addLocation()`
- `ZenodoRecord$removeLocation()`
- `ZenodoRecord$exportAs()`
- `ZenodoRecord$exportAsBibTeX()`
- `ZenodoRecord$exportAsCSL()`
- `ZenodoRecord$exportAsDataCite()`
- `ZenodoRecord$exportAsDataCiteXML()`
- `ZenodoRecord$exportAsDataCiteJSON()`
- `ZenodoRecord$exportAsDublinCore()`
- `ZenodoRecord$exportAsDCAT()`
- `ZenodoRecord$exportAsJSON()`
- `ZenodoRecord$exportAsJSONLD()`
- `ZenodoRecord$exportAsGeoJSON()`
- `ZenodoRecord$exportAsMARCXML()`
- `ZenodoRecord$exportAsCodeMeta()`
- `ZenodoRecord$exportAsCFF()`
- `ZenodoRecord$exportAsDataPackage()`
- `ZenodoRecord$exportAsAllFormats()`
- `ZenodoRecord$getCitation()`
- `ZenodoRecord$listFiles()`
- `ZenodoRecord$downloadFiles()`
- `ZenodoRecord$print()`
- `ZenodoRecord$toDCEntry()`
- `ZenodoRecord$getFirstDOI()`
- `ZenodoRecord$getLastDOI()`
- `ZenodoRecord$getVersions()`
- `ZenodoRecord$clone()`

Method `new()`: method is used to instantiate a `ZenodoRecord`

Usage:

```
ZenodoRecord$new(obj = NULL, logger = "INFO")
```

Arguments:

`obj` an optional list object to create the record

`logger` a logger to print log messages. It can be either `NULL`, `"INFO"` (with minimum logs), or `"DEBUG"` (for complete curl http calls logs)

Method `getStats()`: Get record statistics

Usage:

```
ZenodoRecord$getStats()
```

Returns: statistics as data.frame

Method getId(): Get the record Id

Usage:

```
ZenodoRecord$getId()
```

Returns: the Id, object of class character

Method getParentId(): Get the parent record Id

Usage:

```
ZenodoRecord$getParentId()
```

Returns: the parent Id, object of class character

Method getConceptId(): Get the concept record Id

Usage:

```
ZenodoRecord$getConceptId()
```

Returns: the concept Id, object of class character

Method setDOI(): Set the DOI. This method can be used if a DOI has been already assigned outside Zenodo.

Usage:

```
ZenodoRecord$setDOI(doi, provider = NULL, client = NULL)
```

Arguments:

doi DOI to set for the record

provider DOI provider

client DOI client

Method getDOI(): Get the record DOI.

Usage:

```
ZenodoRecord$getDOI()
```

Returns: the DOI, object of class character

Method getConceptDOI(): Get the concept (generic) DOI. The concept DOI is a generic DOI common to all versions of a Zenodo record.

Usage:

```
ZenodoRecord$getConceptDOI()
```

Returns: the concept DOI, object of class character

Method setAccessPolicyRecord(): Set the access policy for record, among values "public" (default) or "restricted" In Zenodo, in principle, the access policy 'restricted' is not available for records.

Usage:

```
ZenodoRecord$setAccessPolicyRecord(access = c("public", "restricted"))
```

Arguments:

access access policy ('public' or 'restricted')

Method `setAccessPolicyFiles()`: Set the access policy for files, among values "public" (default) or "restricted"

Usage:

```
ZenodoRecord$setAccessPolicyFiles(access = c("public", "restricted"))
```

Arguments:

access access policy ('public' or 'restricted')

Method `setAccessPolicyEmbargo()`: Set access policy embargo options

Usage:

```
ZenodoRecord$setAccessPolicyEmbargo(active = FALSE, until = NULL, reason = "")
```

Arguments:

active whether embargo is active or not. Default is FALSE

until embargo date, object of class Date. Default is NULL. Must be provided if embargo is active

reason embargo reason, object of class character. Default is an empty string

Method `setResourceType()`: Set the resource type (mandatory).

Usage:

```
ZenodoRecord$setResourceType(resourceType)
```

Arguments:

resourceType record resource type

Method `setUpLoadType()`: Set the upload type (mandatory). Deprecated since zen4R 1.0

Usage:

```
ZenodoRecord$setUpLoadType(uploadType)
```

Arguments:

uploadType record upload type among the following values: 'publication', 'poster', 'presentation', 'dataset', 'image', 'video', 'software', 'lesson', 'physicalobject', 'other'

Method `setPublicationType()`: Set the publication type (mandatory if upload type is 'publication'). Deprecated since zen4R 1.0

Usage:

```
ZenodoRecord$setPublicationType(publicationType)
```

Arguments:

publicationType record publication type among the following values: 'annotationcollection', 'book', 'section', 'conferencepaper', 'datamanagementplan', 'article', 'patent', 'preprint', 'deliverable', 'milestone', 'proposal', 'report', 'softwaredocumentation', 'taxonomictreatment', 'technicalnote', 'thesis', 'workingpaper', 'other'

Method `setImageType()`: Set the image type (mandatory if image type is 'image'). Deprecated since zen4R 1.0

Usage:

ZenodoRecord\$setImageType(imageType)

Arguments:

imageType record publication type among the following values: 'figure', 'plot', 'drawing', 'diagram', 'photo', or 'other'

Method setPublisher(): Set the publisher

Usage:

ZenodoRecord\$setPublisher(publisher)

Arguments:

publisher publisher object of class character

Method setPublicationDate(): Set the publication date. For more information on the accepted format, please check <https://inveniordm.docs.cern.ch/reference/metadata/#publication-date-1>

Usage:

ZenodoRecord\$setPublicationDate(publicationDate)

Arguments:

publicationDate object of class character

Method addDate(): Add date

Usage:

ZenodoRecord\$addDate(date, type, description = NULL)

Arguments:

date date

type type of date, among following values: 'accepted', 'available', 'collected', 'copyrighted', 'created', 'issued', 'other', 'submitted', 'updated', 'valid', 'withdrawn'

description free text, specific information about the date

Method removeDate(): Remove a date

Usage:

ZenodoRecord\$removeDate(date, type)

Arguments:

date the date to remove

type the date type of the date to be removed

Returns: TRUE if removed, FALSE otherwise

Method setTitle(): Set the record title.

Usage:

ZenodoRecord\$setTitle(title)

Arguments:

title object of class character

Method addAdditionalTitle(): Add additional record title

Usage:

```
ZenodoRecord$addAdditionalTitle(title, type, lang = "eng")
```

Arguments:

title title free text

type type of title, among following values: alternative-title, subtitle, translated-title, other

lang language id

Returns: TRUE if added, FALSE otherwise

Method `removeAdditionalTitle()`: Removes additional record title.

Usage:

```
ZenodoRecord$removeAdditionalTitle(title, type, lang = "eng")
```

Arguments:

title title free text

type type of title, among following values: abstract, methods, series-information, table-of-contents, technical-info, other

lang language id

Returns: TRUE if removed, FALSE otherwise

Method `setDescription()`: Set the record description

Usage:

```
ZenodoRecord$setDescription(description)
```

Arguments:

description object of class character

Method `addAdditionalDescription()`: Add additional record description

Usage:

```
ZenodoRecord$addAdditionalDescription(description, type, lang = "eng")
```

Arguments:

description description free text

type type of description, among following values: abstract, methods, series-information, table-of-contents, technical-info, other

lang language id

Returns: TRUE if added, FALSE otherwise

Method `removeAdditionalDescription()`: Removes additional record description

Usage:

```
ZenodoRecord$removeAdditionalDescription(description, type, lang = "eng")
```

Arguments:

description description free text

type type of description, among following values: abstract, methods, series-information, table-of-contents, technical-info, other

lang language id

Returns: TRUE if removed, FALSE otherwise

Method `addPersonOrOrg()`: Add a person or organization for the record. For persons, the approach is to use the `firstname` and `lastname` arguments, that by default will be concatenated for Zenodo as `lastname, firstname`. For organizations, use the `name` argument.

Usage:

```
ZenodoRecord$addPersonOrOrg(
  firstname = NULL,
  lastname = NULL,
  name = paste(lastname, firstname, sep = ", "),
  orcid = NULL,
  gnd = NULL,
  isni = NULL,
  ror = NULL,
  role = NULL,
  affiliations = NULL,
  sandbox = FALSE,
  type
)
```

Arguments:

`firstname` person first name

`lastname` person last name

`name` organization name

`orcid` person or organization ORCID (optional)

`gnd` person or organization GND (optional)

`isni` person or organization ISNI (optional)

`ror` person or organization ROR (optional)

`role` role, values among: `contactperson`, `datacollector`, `datacurator`, `datamanager`, `distributor`, `editor`, `funder`, `hostinginstitution`, `producer`, `projectleader`, `projectmanager`, `projectmember`, `registrationagency`, `registrationauthority`, `relatedperson`, `researcher`, `researchgroup`, `rightsholder`, `supervisor`, `sponsor`, `workpackageleader`, `other`

`affiliations` person or organization affiliations (optional)

`sandbox` Use the Zenodo sandbox infrastructure as basis to control available affiliations. Default is FALSE

`type` type of person or org (creators/contributors)

Returns: TRUE if added, FALSE otherwise

Method `removePersonOrOrg()`: Removes a person or organization by a property. The `by` parameter should be the name of the person or organization property (`'name'`, `'affiliation'`, `'orcid'`, `'gnd'`, `'isni'`, `'ror'`).

Usage:

```
ZenodoRecord$removePersonOrOrg(by, property, type)
```

Arguments:

`by` property used as criterion to remove the person or organization

`property` property value used to remove the person or organization

`type` type of person or org (creators / contributors)

Returns: TRUE if removed, FALSE otherwise

Method `addCreator()`: Add a creator for the record. For persons, the approach is to use the `firstname` and `lastname` arguments, that by default will be concatenated for Zenodo as `lastname, firstname`. For organizations, use the `name` argument.

Usage:

```
ZenodoRecord$addCreator(
  firstname = NULL,
  lastname = NULL,
  name = paste(lastname, firstname, sep = ", "),
  orcid = NULL,
  gnd = NULL,
  isni = NULL,
  ror = NULL,
  role = NULL,
  affiliations = NULL,
  sandbox = FALSE
)
```

Arguments:

`firstname` person first name

`lastname` person last name

`name` organization name

`orcid` creator ORCID (optional)

`gnd` creator GND (optional)

`isni` creator ISNI (optional)

`ror` creator ROR (optional)

`role` role, values among: `contactperson`, `datacollector`, `datacurator`, `datamanager`, `distributor`, `editor`, `funder`, `hostinginstitution`, `producer`, `projectleader`, `projectmanager`, `projectmember`, `registrationagency`, `registrationauthority`, `relatedperson`, `researcher`, `researchgroup`, `rightsholder`, `supervisor`, `sponsor`, `workpackageleader`, `other`

`affiliations` creator affiliations (optional)

`sandbox` Use the Zenodo sandbox infrastructure as basis to control available affiliations. Default is FALSE

Returns: TRUE if added, FALSE otherwise

Method `removeCreatorByName()`: Removes a creator by name.

Usage:

```
ZenodoRecord$removeCreatorByName(name)
```

Arguments:

`name` creator name

Returns: TRUE if removed, FALSE otherwise

Method `removeCreatorByAffiliation()`: Removes a creator by affiliation.

Usage:

ZenodoRecord\$removeCreatorByAffiliation(affiliation)

Arguments:

affiliation creator affiliation

Returns: TRUE if removed, FALSE otherwise

Method removeCreatorByORCID(): Removes a creator by ORCID.

Usage:

ZenodoRecord\$removeCreatorByORCID(orcid)

Arguments:

orcid creator ORCID

Returns: TRUE if removed, FALSE otherwise

Method removeCreatorByGND(): Removes a creator by GND.

Usage:

ZenodoRecord\$removeCreatorByGND(gnd)

Arguments:

gnd creator GND

Returns: TRUE if removed, FALSE otherwise

Method removeCreatorByISNI(): Removes a creator by ISNI.

Usage:

ZenodoRecord\$removeCreatorByISNI(isni)

Arguments:

isni creator ISNI

Returns: TRUE if removed, FALSE otherwise

Method removeCreatorByROR(): Removes a creator by ROR.

Usage:

ZenodoRecord\$removeCreatorByROR(ror)

Arguments:

ror creator ROR

Returns: TRUE if removed, FALSE otherwise

Method addContributor(): Add a contributor for the record. For persons, the approach is to use the `firstname` and `lastname` arguments, that by default will be concatenated for Zenodo as `lastname, firstname`. For organizations, use the `name` argument.

Usage:

```
ZenodoRecord$addContributor(  
  firstname = NULL,  
  lastname = NULL,  
  name = paste(lastname, firstname, sep = ", "),  
  orcid = NULL,
```

```

    gnd = NULL,
    isni = NULL,
    ror = NULL,
    role = NULL,
    affiliations = NULL,
    sandbox = FALSE
)

```

Arguments:

firstname person first name

lastname person last name

name organization name

orcid contributor ORCID (optional)

gnd contributor GND (optional)

isni contributor ISNI (optional)

ror contributor ROR (optional)

role role, values among: contactperson, datacollector, datacurator, datamanager, distributor, editor, funder, hostinginstitution, producer, projectleader, projectmanager, projectmember, registrationagency, registrationauthority, relatedperson, researcher, researchgroup, rightsholder, supervisor, sponsor, workpackageleader, other

affiliations contributor affiliations (optional)

sandbox Use the Zenodo sandbox infrastructure as basis to control available affiliations. Default is FALSE

Returns: TRUE if added, FALSE otherwise

Method removeContributorByName(): Removes a contributor by name.

Usage:

```
ZenodoRecord$removeContributorByName(name)
```

Arguments:

name contributor name

Returns: TRUE if removed, FALSE otherwise

Method removeContributorByAffiliation(): Removes a contributor by affiliation.

Usage:

```
ZenodoRecord$removeContributorByAffiliation(affiliation)
```

Arguments:

affiliation contributor affiliation

Returns: TRUE if removed, FALSE otherwise

Method removeContributorByORCID(): Removes a contributor by ORCID.

Usage:

```
ZenodoRecord$removeContributorByORCID(orcid)
```

Arguments:

orcid contributor ORCID

Returns: TRUE if removed, FALSE otherwise

Method removeContributorByGND(): Removes a contributor by GND.

Usage:

```
ZenodoRecord$removeContributorByGND(gnd)
```

Arguments:

gnd contributor GND

Returns: TRUE if removed, FALSE otherwise

Method removeContributorByISNI(): Removes a contributor by ISNI.

Usage:

```
ZenodoRecord$removeContributorByISNI(isni)
```

Arguments:

isni contributor ISNI

Returns: TRUE if removed, FALSE otherwise

Method removeContributorByROR(): Removes a contributor by ROR.

Usage:

```
ZenodoRecord$removeContributorByROR(ror)
```

Arguments:

ror contributor ROR

Returns: TRUE if removed, FALSE otherwise

Method addRight(): Add right/license. Please see <https://inveniordm.docs.cern.ch/reference/metadata/#rights-licenses-0-n>

Usage:

```
ZenodoRecord$addRight(
  id = NULL,
  title = NULL,
  description = NULL,
  link = NULL,
  sandbox = FALSE
)
```

Arguments:

id license id

title license title

description a multi-lingual list

link license link

sandbox Use the Zenodo sandbox infrastructure as basis to control available licenses. Default is FALSE

Method setLicense(): Set license. The license should be set with the Zenodo id of the license. If not recognized by Zenodo, the function will return an error. The list of licenses can be fetched with the ZenodoManager and the function \$getLicenses().

Usage:

```
ZenodoRecord$setLicense(licenseId, sandbox = FALSE)
```

Arguments:

licenseId a license Id

sandbox Use the Zenodo sandbox infrastructure as basis to control available licenses. Default is FALSE

Returns: TRUE if set, FALSE otherwise

Method setVersion(): Set record version.

Usage:

```
ZenodoRecord$setVersion(version)
```

Arguments:

version the record version to set

Method addLanguage(): Adds a language.

Usage:

```
ZenodoRecord$addLanguage(language)
```

Arguments:

language ISO 639-2 or 639-3 code

Method setLanguage(): Set the language

Usage:

```
ZenodoRecord$setLanguage(language)
```

Arguments:

language ISO 639-2 or 639-3 code

Method addRelatedIdentifier(): Adds a related identifier with a given scheme and relation type.

Usage:

```
ZenodoRecord$addRelatedIdentifier(
  identifier,
  scheme,
  relation_type,
  resource_type = NULL
)
```

Arguments:

identifier identifier

scheme scheme among following values: ark, arxiv, bibcode, doi, ean13, eissn, handle, igsn, isbn, issn, istic, lissn, lsid, pubmed id, purl, upc, url, urn, w3id

relation_type relation type among following values: iscitedby, cites, issupplementto, is-supplementedby, iscontinuedby, continues, isdescribedby, describes, hasmetadata, ismeta-datafor, isnewversionof, ispreviousversionof, ispartof, haspart, isreferencedby, references, isdocumentedby, documents, iscompiledby, compiles, isvariantformof, isoriginalformof, isidenticalto, isalternateidentifier, isreviewedby, reviews, isderivedfrom, issourceof, requires, isrequiredby, isobsoletedby, obsoletes

resource_type optional resource type

Returns: TRUE if added, FALSE otherwise

Method removeRelatedIdentifier(): Removes a related identifier with a given scheme/relation_type

Usage:

ZenodoRecord\$removeRelatedIdentifier(identifier, scheme, relation_type)

Arguments:

identifier identifier

scheme scheme among following values: ark, arxiv, bibcode, doi, ean13, eissn, handle, igsn, isbn, issn, istc, lissn, lsid, pubmed id, purl, upc, url, urn, w3id

relation_type relation type among following values: iscitedby, cites, issupplementto, is-supplementedby, iscontinuedby, continues, isdescribedby, describes, hasmetadata, ismeta-datafor, isnewversionof, ispreviousversionof, ispartof, haspart, isreferencedby, references, isdocumentedby, documents, iscompiledby, compiles, isvariantformof, isoriginalformof, isidenticalto, isalternateidentifier, isreviewedby, reviews, isderivedfrom, issourceof, requires, isrequiredby, isobsoletedby, obsoletes

Returns: TRUE if removed, FALSE otherwise

Method setReferences(): Set references

Usage:

ZenodoRecord\$setReferences(references)

Arguments:

references a vector or list of references to set for the record

Method addReference(): Add a reference

Usage:

ZenodoRecord\$addReference(reference)

Arguments:

reference the reference to add

Returns: TRUE if added, FALSE otherwise

Method removeReference(): Remove a reference

Usage:

ZenodoRecord\$removeReference(reference)

Arguments:

reference the reference to remove

Returns: TRUE if removed, FALSE otherwise

Method setSubjects(): Set subjects

Usage:

ZenodoRecord\$setSubjects(subjects)

Arguments:

subjects a vector or list of subjects to set for the record

Method setKeywords(): Set keywords

Usage:

ZenodoRecord\$setKeywords(keywords)

Arguments:

keywords a vector or list of keywords to set for the record

Method addSubject(): Add a subject

Usage:

ZenodoRecord\$addSubject(subject)

Arguments:

subject the subject to add

Returns: TRUE if added, FALSE otherwise

Method addKeyword(): Add a keyword

Usage:

ZenodoRecord\$addKeyword(keyword)

Arguments:

keyword the keyword to add

Returns: TRUE if added, FALSE otherwise

Method removeSubject(): Remove a subject

Usage:

ZenodoRecord\$removeSubject(subject)

Arguments:

subject the subject to remove

Returns: TRUE if removed, FALSE otherwise

Method removeKeyword(): Remove a keyword

Usage:

ZenodoRecord\$removeKeyword(keyword)

Arguments:

keyword the keyword to remove

Returns: TRUE if removed, FALSE otherwise

Method setNotes(): Set notes. HTML is not allowed

Usage:

ZenodoRecord\$setNotes(notes)

Arguments:

notes object of class character

Method `addFunding()`: Adds funding. Used internally, prefer using `addGrant` instead.

Usage:

```
ZenodoRecord$addFunding(funder = NULL, grant = NULL, sandbox = FALSE)
```

Arguments:

`funder` funder id or name

`grant` grant id or title

`sandbox` Use the Zenodo sandbox infrastructure as basis to control available grants. Default is FALSE

Method `addGrant()`: Adds a grant to the record metadata.

Usage:

```
ZenodoRecord$addGrant(grant, sandbox = FALSE)
```

Arguments:

`grant` grant to add. The grant should be set with the id of the grant. If not recognized by Zenodo, the function will return an warning only. The list of grants can fetched with the `ZenodoManager` and the function `$getAwards()`.

`sandbox` Use the Zenodo sandbox infrastructure as basis to control available grants. Default is FALSE

Returns: TRUE if added, FALSE otherwise

Method `setGrants()`: Set a vector of character strings identifying grants

Usage:

```
ZenodoRecord$setGrants(grants, sandbox = FALSE)
```

Arguments:

`grants` a vector or list of grants Values should among known grants The list of grants can fetched with the `ZenodoManager` and the function `$getAwards()`. Each grant should be set with the Zenodo id of the grant If not recognized by Zenodo, the function will raise a warning only.

`sandbox` Use the Zenodo sandbox infrastructure as basis to control available grants. Default is FALSE

Method `removeGrant()`: Removes a grant from the record metadata.

Usage:

```
ZenodoRecord$removeGrant(grant)
```

Arguments:

`grant` grant to remove. The grant should be set with the Zenodo id of the grant

Returns: TRUE if removed, FALSE otherwise

Method `setJournalTitle()`: Set Journal title to the record metadata

Usage:

```
ZenodoRecord$setJournalTitle(title)
```

Arguments:

`title` a title, object of class character

Method setJournalVolume(): Set Journal volume to the record metadata

Usage:

ZenodoRecord\$setJournalVolume(volume)

Arguments:

volume a volume

Method setJournalIssue(): Set Journal issue to the record metadata

Usage:

ZenodoRecord\$setJournalIssue(issue)

Arguments:

issue an issue

Method setJournalPages(): Set Journal pages to the record metadata

Usage:

ZenodoRecord\$setJournalPages(pages)

Arguments:

pages number of pages

Method setConferenceTitle(): Set conference title to the record metadata

Usage:

ZenodoRecord\$setConferenceTitle(title)

Arguments:

title conference title, object of class character

Method setConferenceAcronym(): Set conference acronym to the record metadata

Usage:

ZenodoRecord\$setConferenceAcronym(acronym)

Arguments:

acronym conference acronym, object of class character

Method setConferenceDates(): Set conference dates to the record metadata

Usage:

ZenodoRecord\$setConferenceDates(dates)

Arguments:

dates conference dates, object of class character

Method setConferencePlace(): Set conference place to the record metadata

Usage:

ZenodoRecord\$setConferencePlace(place)

Arguments:

place conference place, object of class character

Method setConferenceUrl(): Set conference url to the record metadata

Usage:

ZenodoRecord\$setConferenceUrl(url)

Arguments:

url conference url, object of class character

Method setConferenceSession(): Set conference session to the record metadata

Usage:

ZenodoRecord\$setConferenceSession(session)

Arguments:

session conference session, object of class character

Method setConferenceSessionPart(): Set conference session part to the record metadata

Usage:

ZenodoRecord\$setConferenceSessionPart(part)

Arguments:

part conference session part, object of class character

Method setImprintPublisher(): Set imprint publisher to the record metadata

Usage:

ZenodoRecord\$setImprintPublisher(publisher)

Arguments:

publisher the publisher, object of class character

Method setImprintISBN(): Set imprint ISBN to the record metadata

Usage:

ZenodoRecord\$setImprintISBN(isbn)

Arguments:

isbn the ISBN, object of class character

Method setImprintPlace(): Set imprint place to the record metadata

Usage:

ZenodoRecord\$setImprintPlace(place)

Arguments:

place the place, object of class character

Method setPartofTitle(): Set title to which record is part of

Usage:

ZenodoRecord\$setPartofTitle(title)

Arguments:

title the title, object of class character

Method setPartofPages(): Set pages to which record is part of

Usage:

```
ZenodoRecord$setPartofPages(pages)
```

Arguments:

pages the pages, object of class character

Method setThesisUniversity(): Set thesis university

Usage:

```
ZenodoRecord$setThesisUniversity(university)
```

Arguments:

university the university, object of class character

Method addThesisSupervisor(): Adds thesis supervisor

Usage:

```
ZenodoRecord$addThesisSupervisor(  
  firstname,  
  lastname,  
  affiliation = NULL,  
  orcid = NULL,  
  gnd = NULL  
)
```

Arguments:

firstname supervisor first name

lastname supervisor last name

affiliation supervisor affiliation (optional)

orcid supervisor ORCID (optional)

gnd supervisor GND (optional)

Method removeThesisSupervisor(): Removes a thesis supervisor by a property. The by parameter should be the name of the thesis supervisor property ('name' - in the form 'lastname, firstname', 'affiliation', 'orcid' or 'gnd').

Usage:

```
ZenodoRecord$removeThesisSupervisor(by, property)
```

Arguments:

by property used as criterion to remove the thesis supervisor

property property value used to remove the thesis supervisor

Returns: TRUE if removed, FALSE otherwise

Method removeThesisSupervisorByName(): Removes a thesis supervisor by name.

Usage:

```
ZenodoRecord$removeThesisSupervisorByName(name)
```

Arguments:

name thesis supervisor name

Returns: TRUE if removed, FALSE otherwise

Method `removeThesisSupervisorByAffiliation()`: Removes a thesis supervisor by affiliation

Usage:

```
ZenodoRecord$removeThesisSupervisorByAffiliation(affiliation)
```

Arguments:

affiliation thesis supervisor affiliation

Returns: TRUE if removed, FALSE otherwise

Method `removeThesisSupervisorByORCID()`: Removes a thesis supervisor by ORCID

Usage:

```
ZenodoRecord$removeThesisSupervisorByORCID(orcid)
```

Arguments:

orcid thesis supervisor ORCID

Returns: TRUE if removed, FALSE otherwise

Method `removeThesisSupervisorByGND()`: Removes a thesis supervisor by GND

Usage:

```
ZenodoRecord$removeThesisSupervisorByGND(gnd)
```

Arguments:

gnd thesis supervisor GND

Returns: TRUE if removed, FALSE otherwise

Method `addLocation()`: Adds a location to the record metadata.

Usage:

```
ZenodoRecord$addLocation(place, description = NULL, lat = NULL, lon = NULL)
```

Arguments:

place place (required)

description description

lat latitude

lon longitude

Method `removeLocation()`: Removes a grant from the record metadata.

Usage:

```
ZenodoRecord$removeLocation(place)
```

Arguments:

place place (required)

Returns: TRUE if removed, FALSE otherwise

Method `exportAs()`: Exports record to a file by format.

Usage:

```
ZenodoRecord$exportAs(format, filename, append_format = TRUE)
```

Arguments:

format a valid Zenodo export format among the following: BibTeX, CSL, DataCite (or DataCiteXML), DublinCore, DCAT, JSON, JSON-LD, GeoJSON, MARCXML, DataCiteJSON, CodeMeta, DataPackage, CFF.

filename the target filename (without extension)

append_format whether format name has to be appended to the filename. Default is TRUE (for backward compatibility reasons). Set it to FALSE if you want to use only the filename.

Returns: the written file name (with extension)

Method `exportAsBibTeX()`: Exports record as BibTeX

Usage:

```
ZenodoRecord$exportAsBibTeX(filename)
```

Arguments:

filename the target filename (without extension)

Returns: the written file name (with extension)

Method `exportAsCSL()`: Exports record as CSL

Usage:

```
ZenodoRecord$exportAsCSL(filename)
```

Arguments:

filename the target filename (without extension)

Returns: the written file name (with extension)

Method `exportAsDataCite()`: Exports record as DataCite (same as `exportAsDataCiteXML`)

Usage:

```
ZenodoRecord$exportAsDataCite(filename)
```

Arguments:

filename the target filename (without extension)

Returns: the written file name (with extension)

Method `exportAsDataCiteXML()`: Exports record as DataCite XML

Usage:

```
ZenodoRecord$exportAsDataCiteXML(filename)
```

Arguments:

filename the target filename (without extension)

Returns: the written file name (with extension)

Method `exportAsDataCiteJSON()`: Exports record as DataCite JSON

Usage:

```
ZenodoRecord$exportAsDataCiteJSON(filename)
```

Arguments:

filename the target filename (without extension)

Returns: the written file name (with extension)

Method exportAsDublinCore(): Exports record as DublinCore

Usage:

ZenodoRecord\$exportAsDublinCore(filename)

Arguments:

filename the target filename (without extension)

Returns: the written file name (with extension)

Method exportAsDCAT(): Exports record as DCAT

Usage:

ZenodoRecord\$exportAsDCAT(filename)

Arguments:

filename the target filename (without extension)

Returns: the written file name (with extension)

Method exportAsJSON(): Exports record as JSON

Usage:

ZenodoRecord\$exportAsJSON(filename)

Arguments:

filename the target filename (without extension)

Returns: the written file name (with extension)

Method exportAsJSONLD(): Exports record as JSONLD

Usage:

ZenodoRecord\$exportAsJSONLD(filename)

Arguments:

filename the target filename (without extension)

Method exportAsGeoJSON(): Exports record as GeoJSON

Usage:

ZenodoRecord\$exportAsGeoJSON(filename)

Arguments:

filename the target filename (without extension)

Returns: the written file name (with extension)

Method exportAsMARCXML(): Exports record as MARCXML

Usage:

ZenodoRecord\$exportAsMARCXML(filename)

Arguments:

filename the target filename (without extension)

Returns: the written file name (with extension)

Method exportAsCodeMeta(): Exports record as CodeMeta

Usage:

```
ZenodoRecord$exportAsCodeMeta(filename)
```

Arguments:

filename the target filename (without extension)

Returns: the written file name (with extension)

Method exportAsCFF(): Exports record as Citation File Format

Usage:

```
ZenodoRecord$exportAsCFF(filename)
```

Arguments:

filename the target filename (without extension)

Returns: the written file name (with extension)

Method exportAsDataPackage(): Exports record as DataPackage

Usage:

```
ZenodoRecord$exportAsDataPackage(filename)
```

Arguments:

filename the target filename (without extension)

Returns: the written file name (with extension)

Method exportAsAllFormats(): Exports record in all Zenodo record export formats. This function will create one file per Zenodo metadata formats.

Usage:

```
ZenodoRecord$exportAsAllFormats(filename)
```

Arguments:

filename the target filename (without extension)

Method getCitation(): Get record citation

Usage:

```
ZenodoRecord$getCitation(  
  style = c("havard-cite-them-right", "apa", "modern-language-association", "vancouver",  
           "chicago-fullnote-bibliography", "ieee", "bibtex")  
)
```

Arguments:

style the style character string among. Possible values "havard-cite-them-right", "apa", "modern-language-association", "vancouver", "chicago-fullnote-bibliography", "ieee", or "bibtex"

Returns: the citation text

Method `listFiles()`: list files attached to the record

Usage:

```
ZenodoRecord$listFiles(pretty = TRUE)
```

Arguments:

`pretty` whether a pretty output (data.frame) should be returned (default TRUE), otherwise the raw list of files is returned.

Returns: the files, as data.frame or list

Method `downloadFiles()`: Downloads files attached to the record

Usage:

```
ZenodoRecord$downloadFiles(
  path = ".",
  files = list(),
  parallel = FALSE,
  parallel_handler = NULL,
  cl = NULL,
  quiet = FALSE,
  overwrite = TRUE,
  timeout = 60,
  ...
)
```

Arguments:

`path` target download path (by default it will be the current working directory)

`files` (list of) file(s) to download. If not specified, by default all files will be downloaded.

`parallel` whether download has to be done in parallel using the chosen `parallel_handler`. Default is FALSE

`parallel_handler` The parallel handler to use eg. `mclapply`. To use a different parallel handler (such as eg `parLapply` or `parSapply`), specify its function in `parallel_handler` argument. For cluster-based parallel download, this is the way to proceed. In that case, the cluster should be created earlier by the user with `makeCluster` and passed as `cl` argument. After downloading all files, the cluster will be stopped automatically.

`cl` an optional cluster for cluster-based parallel handlers

`quiet` (default is FALSE) can be set to suppress informative messages (not warnings).

`overwrite` (default is TRUE) can be set to FALSE to avoid re-downloading existing files.

`timeout` (default is 60s) see `download.file`.

... arguments inherited from `parallel::mclapply` or the custom `parallel_handler` can be added (eg. `mc.cores` for `mclapply`)

Method `print()`: Prints a [ZenodoRecord](#)

Usage:

```
ZenodoRecord$print(..., format = "internal", depth = 1)
```

Arguments:

... any other parameter. Not used

format format to use for printing. By default, `internal` uses an **zen4R** internal printing method. Other methods available are those supported by Zenodo for record export, and can be used only if the record has already been published (with a DOI). Attempts to print using a Zenodo export format for a record will raise a warning message and revert to "internal" format

depth an internal depth parameter for indentation of print statements, in case of listing or recursive use of print

Method `toDCEntry()`: Maps to an **atom4R DCEnt**ry. Note: applies only to published records.

Usage:

```
ZenodoRecord$toDCEntry()
```

Returns: an object of class `DCEnt`ry

Method `getFirstDOI()`: Get DOI of the first record version.

Usage:

```
ZenodoRecord$getFirstDOI()
```

Returns: the first DOI, object of class `character`

Method `getLastDOI()`: Get DOI of the latest record version.

Usage:

```
ZenodoRecord$getLastDOI()
```

Returns: the last DOI, object of class `character`

Method `getVersions()`: Get record versions with creation/publication date, version (ordering number) and DOI.

Usage:

```
ZenodoRecord$getVersions()
```

Returns: a `data.frame` with the record versions

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

Usage:

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

Arguments:

`deep` Whether to make a deep clone.

Note

Internal method. Prefer using `addCreator` or `addContributor`

Internal method. Prefer using `removeCreator` or `removeContributor`

See examples in [download_zenodo](#) utility function.

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

ZenodoRequest	<i>ZenodoRequest</i>
---------------	----------------------

Description

ZenodoRequest

ZenodoRequest

Format

[R6Class](#) object.

Value

Object of [R6Class](#) for modelling a generic Zenodo request

Super class

[zen4R](#): : [zen4RLogger](#) -> ZenodoRequest

Methods**Public methods:**

- [ZenodoRequest\\$new\(\)](#)
- [ZenodoRequest\\$execute\(\)](#)
- [ZenodoRequest\\$getRequest\(\)](#)
- [ZenodoRequest\\$getRequestHeaders\(\)](#)
- [ZenodoRequest\\$getStatus\(\)](#)
- [ZenodoRequest\\$getResponse\(\)](#)
- [ZenodoRequest\\$getException\(\)](#)
- [ZenodoRequest\\$hasException\(\)](#)
- [ZenodoRequest\\$getResult\(\)](#)
- [ZenodoRequest\\$setResult\(\)](#)
- [ZenodoRequest\\$clone\(\)](#)

Method [new\(\)](#): Initializes a ZenodoRequest

Usage:

```
ZenodoRequest$new(  
  url,  
  type,  
  request,  
  data = NULL,  
  file = NULL,  
  progress = FALSE,  
  accept = "application/vnd.inveniordm.v1+json",
```

```
    token,  
    logger = NULL,  
    ...  
)
```

Arguments:

`url` request URL

`type` Type of request: 'GET', 'POST', 'PUT', 'DELETE'

`request` the method request

`data` payload (optional)

`file` to be uploaded (optional)

`progress` whether a progress status has to be displayed for download/upload

`accept` accept header. Default is "application/vnd.inveniordm.v1+json"

`token` user token

`logger` the logger type

... any other arg

Method `execute()`: Executes the request

Usage:

```
ZenodoRequest$execute()
```

Method `getRequest()`: Get request

Usage:

```
ZenodoRequest$getRequest()
```

Method `getRequestHeaders()`: Get request headers

Usage:

```
ZenodoRequest$getRequestHeaders()
```

Method `getStatus()`: Get request status

Usage:

```
ZenodoRequest$getStatus()
```

Method `getResponse()`: Get request response

Usage:

```
ZenodoRequest$getResponse()
```

Method `getException()`: Get request exception

Usage:

```
ZenodoRequest$getException()
```

Method `hasException()`: has exception?

Usage:

```
ZenodoRequest$hasException()
```

Returns: TRUE if request has exception, FALSE otherwise

Method getResult(): Get request result

Usage:

```
ZenodoRequest$getResult()
```

Method setResult(): Set request result

Usage:

```
ZenodoRequest$setResult(result)
```

Arguments:

result result to be set

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

Usage:

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

Arguments:

deep Whether to make a deep clone.

Note

Abstract class used internally by **zen4R**

Author(s)

Emmanuel Blondel <emmanuel.blondel1@gmail.com>

zenodo_pat

zenodo_pat

Description

Get Zenodo personal access token, looking in env var 'ZENODO_PAT'

Usage

```
zenodo_pat(quiet = TRUE)
```

Arguments

quiet Hide log message, default is TRUE

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