Package 'zen4R'

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

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`download_zenodo` *download_zenodo*

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, downloadFiles() 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 *export_zenodo*

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)
```

---

get_citation *get_citation*

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 *get_licenses*

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)

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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 *ZenodoException*

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 emtpy. 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 emtpy. 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 emtpy. 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 emtpy. 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 emtpy. 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 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, reserveDOI = TRUE, publish = FALSE)
```

Arguments:

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

`reserveDOI` 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 defaut 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 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/ela 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 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, istc, lissn, lsid, pubmed id, purl, upc, url, urn, w3id

`relation_type` relation type among following values: iscitedby, cites, issupplementto, issupplementedby, iscontinuedby, continues, isdescribedby, describes, hasmetadata, ismetadatafor, 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, issupplementedby, iscontinuedby, continues, isdescribedby, describes, hasmetadata, ismetadatafor, 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` 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`.

Returns: the writen file name (with extension)

Method `exportAsBibTeX()`**:** Exports record as BibTeX

Usage:

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

Arguments:

`filename` the target filename (without extension)

Returns: the writen file name (with extension)

Method `exportAsCSL()`**:** Exports record as CSL

Usage:

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

Arguments:

`filename` the target filename (without extension)

Returns: the writen 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 writen file name (with extension)

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

Usage:

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

Arguments:

`filename` the target filename (without extension)

Returns: the writen file name (with extension)

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

Usage:

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

Arguments:

`filename` the target filename (without extension)

Returns: the writen file name (with extension)

Method `exportAsDublinCore()`**:** Exports record as DublinCore

Usage:

```
ZenodoRecord$exportAsDublinCore(filename)
```

Arguments:

`filename` the target filename (without extension)

Returns: the writen file name (with extension)

Method `exportAsDCAT()`**:** Exports record as DCAT

Usage:

```
ZenodoRecord$exportAsDCAT(filename)
```

Arguments:

`filename` the target filename (without extension)

Returns: the writen file name (with extension)

Method `exportAsJSON()`**:** Exports record as JSON

Usage:

```
ZenodoRecord$exportAsJSON(filename)
```

Arguments:

`filename` the target filename (without extension)

Returns: the writen 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 writen file name (with extension)

Method `exportAsMARCXML()`**:** Exports record as MARCXML

Usage:

```
ZenodoRecord$exportAsMARCXML(filename)
```

Arguments:

`filename` the target filename (without extension)

Returns: the writen file name (with extension)

Method `exportAsCodeMeta()`**:** Exports record as CodeMeta

Usage:

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

Arguments:

`filename` the target filename (without extension)

Returns: the writen 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 writen file name (with extension)

Method `exportAsDataPackage()`**:** Exports record as DataPackage

Usage:

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

Arguments:

`filename` the target filename (without extension)

Returns: the writen 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). Attemps 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** DCEntry. Note: applies only to published records.

Usage:

```
ZenodoRecord$toDCEntry()
```

Returns: an object of class `DCEntry`

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)

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ZenodoRequest *ZenodoRequest*

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**

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`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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