Package ‘rdatacite’

March 4, 2020

Type Package

Title Client for the 'DataCite' API

Description Client for the web service methods provided
by 'DataCite' (<https://www.datacite.org/>), including functions to interface with
their 'RESTful' search API. The API is backed by 'Elasticsearch', allowing
expressive queries, including faceting.

Version 0.5.2

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URL https://docs.ropensci.org/rdatacite,
https://github.com/ropensci/rdatacite

BugReports https://github.com/ropensci/rdatacite/issues

Encoding UTF-8

Imports jsonlite, crul (>= 0.7.4), tibble
Suggests knitr, testthat, webmockr, vcr

RoxygenNote 7.0.2

X-schema.org-applicationCategory Data

X-schema.org-keywords data, scholarly, dataset, https, API,
web-services

X-schema.org-isPartOf https://ropensci.org

NeedsCompilation no

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rdatacite-package DataCite R client

Description

DataCite R client

HTTP Requests

All HTTP requests are GET requests, and are sent with the following headers:

- Accept: application/vnd.api+json; version=2
- User-Agent: r-curl/4.3 curl/0.9.0 rOpenSci(rdatacite/0.5.0)
- X-USER-AGENT: r-curl/4.3 curl/0.9.0 rOpenSci(rdatacite/0.5.0)

The user-agent strings change as the versions of each package change.

Methods in the package

- dc_providers()
- dc_reports()
- dc_check()
- dc_events()
- dc_dois()
- dc_clients()
- dc_client_prefixes()
- dc_provider_prefixes()
- dc_status()
- dc_prefixes()
- dc_activities()
rdatacite defunct functions

- dc_data_center
- dc_data_centers
- dc_facet
- dc_member
- dc_members
- dc_mlt
- dc_oai_getrecord
- dc_oai_identify
- dc_oai_listidentifiers
- dc_oai_listmetadataformats
- dc_oai_listrecords
- dc_oai_listsets
- dc_search
- dc_stats
- dc_work
- dc_works

Content negotiation

For content negotiation see rcrossref::cr_cn(), which can be used for Crossref, DataCite and Medra DOIs

GraphGL API

rdatacite does not support the GraphQL API https://support.datacite.org/docs/datacite-graphql-api-guide - we suggest trying the ghql package (https://github.com/ropensci/ghql/)

Author(s)

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dc_activities DataCite REST API: activities

Description

DataCite REST API: activities
Usage

dc_activities(
  ids = NULL,
  query = NULL,
  limit = 25,
  page = 1,
  cursor = NULL,
  ...
)

Arguments

ids (character) one or more activity IDs
query (character) Query string
limit (numeric/integer) results per page
page (numeric/integer) the page to get results for. default: 1
cursor (character) page cursor (used instead of limit param). to use cursor pagination,
set cursor = 1, then use the link in $links$next
...
curl options passed on to crul::verb-GET

Details

for more info on the /activities route see https://support.datacite.org/docs/tracking-provenance

Examples

## Not run:
if (dc_check()) {
  x <- dc_activities()
  x
  # dc_activities(x$data$id[1]) # FIXME: doesn’t work, returns no data
  # dc_activities(query = ”ecology”) # FIXME: this thlimit a 500 error
}
## End(Not run)

DataCite REST API: clients
dc_clients

Usage

dc_clients(
  ids = NULL,
  query = NULL,
  year = NULL,
  provider_id = NULL,
  software = NULL,
  include = NULL,
  limit = 25,
  page = 1,
  cursor = NULL,
  ...
)

Arguments

  ids            (character) one or more client IDs
  query          (character) Query string
  year           (integer/numeric/character) a year
  provider_id    a provider ID
  software       no idea what should go here, anyone?
  include        (character) vector of fields to return
  limit          (numeric/integer) results per page
  page           (numeric/integer) the page to get results for. default: 1
  cursor         (character) page cursor (used instead of limit param). to use cursor pagination,
                  set cursor = 1, then use the link in $links$next
  ...            curl options passed on to curl::verb-GET

Examples

## Not run:
if (dc_check()) {
  x <- dc_clients()
  x
  dc_clients(x$data$id[1])
  dc_clients(x$data$id[1:2], verbose = TRUE)
}
## End(Not run)
dc_client_prefixes  DataCite REST API: client prefixes

Description

DataCite REST API: client prefixes

Usage

dc_client_prefixes(
  query = NULL,
  year = NULL,
  client_id = NULL,
  prefix_id = NULL,
  sort = NULL,
  include = NULL,
  limit = 25,
  page = 1,
  cursor = NULL,
  ...
)

Arguments

query (character) Query string
year (integer/numeric/character) a year
client_id a client ID
prefix_id a prefix ID
sort (character) variable to sort by
include (character) vector of fields to return
limit (numeric/integer) results per page
page (numeric/integer) the page to get results for. default: 1
cursor (character) page cursor (used instead of limit param). to use cursor pagination, set cursor = 1, then use the link in $links$next

Examples

## Not run:
if (dc_check()) {
  x <- dc_client_prefixes()
  x
}
## End(Not run)
dc_dois

DataCite REST API: dois

Description

DataCite REST API: dois

Usage

dc_dois(
  ids = NULL,
  query = NULL,
  created = NULL,
  registered = NULL,
  provider_id = NULL,
  client_id = NULL,
  person_id = NULL,
  resource_type_id = NULL,
  subject = NULL,
  schema_version = NULL,
  random = NULL,
  sample_size = NULL,
  sample_group = NULL,
  include = NULL,
  sort = NULL,
  limit = 25,
  page = 1,
  cursor = NULL,
  ...
)

Arguments

ids (character) one or more DOIs
query (character) Query string. See Querying below.
created (character) metadata where year of DOI creation is created. See Filtering Responses below.
registered (character) metadata where year of DOI registration is year. See Filtering Responses below.
provider_id (character) metadata associated with a specific DataCite provider. See Filtering Responses below.
client_id (character) metadata associated with a specific DataCite client. See Filtering Responses below.
person_id (character) metadata associated with a specific person’s ORCID iD. See Filtering Responses below.
resource_type_id
(character) metadata for a specific resourceTypeGeneral. See Filtering Responses below.

subject
(character)

schema_version
(character) metadata where schema version of the deposited metadata is schema-version. See Filtering Responses below.

random
(logical) return random set of results, can be combined with any kind of query. default: FALSE.

sample_size
(character)

sample_group
(character)

include
(character) vector of fields to return

sort
(character) variable to sort by

limit
(numeric/integer) results per page

page
(numeric/integer) the page to get results for. default: 1

cursor
(character) page cursor (used instead of limit param). to use cursor pagination, set cursor = 1, then use the link in $links$next

... curl options passed on to crul::verb-GET

Querying
See https://support.datacite.org/docs/api-queries for details

Filtering Responses
See https://support.datacite.org/docs/api-queries#section-filtering-list-responses for details

Examples
```r
# Not run:
if (dc_check()) {
  x <- dc_dois()
  x

dc_dois(query = "birds")
dc_dois(query = "climate change")
dc_dois(query = "publicationYear:2016")
  x <- dc_dois(query = "creators.familyName:mil*", verbose = TRUE)
lapply(x$data$attributes$creators, "{\"familyName\"}
  x <- dc_dois(query = "titles.title:climate +change")
lapply(x$data$attributes$titles, "{\"title\"
  dc_dois(client_id = "dryad.dryad")
dc_dois(x$data$id[1])
dc_dois(x$data$id[1:3])
dc_dois("10.5281/zenodo.1308060")

  # pagination
dc_dois(limit = 1)
  x <- dc_dois(cursor = 1)
  x$links$next
```
## dc_events

DataCite REST API: events

### Description

DataCite REST API: events

### Usage

```r
dc_events(
    ids = NULL,
    query = NULL,
    subj_id = NULL,
    obj_id = NULL,
    doi = NULL,
    orcid = NULL,
    prefix = NULL,
    subtype = NULL,
    subject = NULL,
    source_id = NULL,
    registrant_id = NULL,
    relation_type_id = NULL,
    issn = NULL,
    publication_year = NULL,
    year_month = NULL,
    include = NULL,
    sort = NULL,
    limit = 25,
    page = 1,
    cursor = NULL,
    ...
)
```

### Arguments

- `ids` (character) one or more event IDs
- `query` (character) Query for any event information
- `subj_id` (character) The identifier for the event subject, expressed as a URL. For example: https://doi.org/10.7272/q6qn64nk
- `obj_id` (character) The identifier for the event object, expressed as a URL. For example: https://doi.org/10.7272/q6qn64nk
- `doi` (character) The subj-id or obj-id of the event, expressed as a DOI. For example: 10.7272/q6qn64nk
orcid  (character) an ORCID, presumably
prefix (character) The DOI prefix of the subj-id or obj-id of the event. For example: 10.7272
subtype (character) xxx
subject (character) xxx
source_id (character) a source ID. See Details
registrant_id (character)
relation_type_id (character) a relation-type ID. See Details
issn (character) an ISSN, presumably
publication_year (character) the publication year
year_month (character) The year and month in which the event occurred, in the format YYYY-MM. For example 2018-08
include (character) vector of fields to return
sort (character) variable to sort by
limit (numeric/integer) results per page
page (numeric/integer) the page to get results for. default: 1
cursor (character) page cursor (used instead of limit param). to use cursor pagination, set cursor = 1, then use the link in $links$next
... curl options passed on to crul::verb-GET

dc_prefixes

DataCite REST API: prefixes

Description
DataCite REST API: prefixes

Usage
dc_prefixes(include = NULL, limit = 25, page = 1, cursor = NULL, ...)

Details
See https://support.datacite.org/docs/eventdata-guide for details on possible values for parameters

Examples
### Not run:
if (dc_check()) {
  # dc_events(query = "birds")
}  
### End(Not run)
dc_providers

Arguments

include (character) vector of fields to return
limit (numeric/integer) results per page
page (numeric/integer) result page, the record to start at
cursor (character) page cursor (used instead of limit param)
...
curl options passed on to curl::HttpClient

Examples

```r
## Not run:
if (dc_check()) {
  x <- dc_prefixes()
  x
  dc_prefixes(limit = 3)
} ## End(Not run)
```

dc_providers  DataCite REST API: providers

Description

DataCite REST API: providers

Usage

```
dc_providers(
  ids = NULL,
  query = NULL,
  year = NULL,
  region = NULL,
  organization_type = NULL,
  focus_area = NULL,
  include = NULL,
  limit = 25,
  page = 1,
  cursor = NULL,
  ...
)
```

Arguments

ids (character) one or more provider IDs
query (character) query string
year (character) year
dc_provider_prefixes

region (character) region name
organization_type (character) organization type
focus_area (character) focus area
include (character) vector of fields to return
limit (numeric/integer) results per page
page (numeric/integer) result page, the record to start at
cursor (character) page cursor (used instead of limit param)
... curl options passed on to crul::HttpClient

Examples

```r
## Not run:
if (dc_check()) {
  x <- dc_providers()
  x
  dc_providers(limit = 3)
  dc_providers(ids = x$data$id[1:5])
}
## End(Not run)
```

dc_provider_prefixes  DataCite REST API: provider prefixes

Description

DataCite REST API: provider prefixes

Usage

dc_provider_prefixes(include = NULL, limit = 25, page = 1, cursor = NULL, ...)

Arguments

include (character) vector of fields to return
limit (numeric/integer) results per page
page (numeric/integer) result page, the record to start at
cursor (character) page cursor (used instead of limit param)
... curl options passed on to crul::HttpClient
Examples

```r
## Not run:
if (dc_check()) {
  x <- dc_provider_prefixes()
  x
dc_provider_prefixes(limit = 3)
}
## End(Not run)
```

---

### `dc_reports`

#### DataCite REST API: reports

**Description**

DataCite REST API: reports

**Usage**

```r
dc_reports(
  ids = NULL,
  platform = NULL,
  report_name = NULL,
  report_id = NULL,
  release = NULL,
  created = NULL,
  created_by = NULL,
  include = NULL,
  limit = 25,
  page = 1,
  ...
)
```

**Arguments**

- **ids** (character) one or more report IDs
- **platform** (character) Name of the Platform the usage is being requested for. This can be omitted if the service provides usage for only one platform.
- **report_name** (character) The long name of the report
- **report_id** (character) The report ID or code or shortname. Typically this will be the same code provided in the Report parameter of the request
- **release** (character) The release or version of the report
- **created** (character) Time the report was prepared. Format as defined by date-time - RFC3339
- **created_by** (character) Name of the organization producing the report
- **include** (character) vector of fields to return
### dc_status

**DataCite REST API: status of the API**

#### Description

DataCite REST API: status of the API

#### Usage

```r
dc_status(...)```

#### Arguments

- `...` curl options passed on to `crl::HttpClient`

#### Examples

```r
## Not run:
if (dc_check()) {
  x <- dc_reports()
  x
  dc_reports(created = "2019-08-01T07:00:00.000Z")
  dc_reports(created_by = "urn:node:GOA")
  dc_reports(limit = 3)
  dc_status() # dc_reports(ids = x$report$id[1:3]) # FIXME: doesn't work
} 
## End(Not run)
```
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