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# **Idcoolp-figshare**

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## OVERVIEW

`ldcoolp-figshare` is a command-line API used in [LD-Cool-P](#) to interact with the [Figshare API](#). It is used by [ReDATA](#) data curators for the curation of submitted research data products. This codebase is generalized such that other curators with a [Figshare for Institution](#) instance can use.

### 1.1 Getting Started

You will need Python. We recommend v3.9. This code will be tested with v3.7, v3.8, and v3.9.

This code will be published as `ldcoolp-figshare` on PyPI. Thus, the simplest installation will be:

```
pip install ldcoolp-figshare
```

#### 1.1.1 Requirements

All requirements will be given in the `requirements.txt`

### 1.2 Use Examples

The primary class/object that is used for all interactions with the Figshare API is `FigshareInstituteAdmin`. Below are for how to use this API:

```
from ldcoolp_figshare import FigshareInstituteAdmin

token = """ENTER YOUR API KEY """
stage = False # Set to False (True) for production (stage) instance

fs_admin = FigshareInstituteAdmin(token=token, stage=stage)
```

There are several methods available with `FigshareInstituteAdmin`. We refer users to the full API documentation for more details. Below we provide some examples to get users started.

### 1.2.1 Get a list of accounts

To retrieve a list of accounts for an institution:

```
fs_admin.get_account_list()
```

Note that this provides you with the `account_id` of a user

### 1.2.2 Obtain curation records

To retrieve a full list of curation records (of any state) for an institution:

```
curation_df = fs_admin.get_curation_list()
```

If you wish to retrieve all curation records for a specific item/deposit, then provide the `article_id`:

```
article_id = 12345678  
article_curation_df = fs_admin.get_curation_list(article_id)
```

To obtain more information about a specific curation record:

```
curation_id = 1234567  
details_dict = fs_admin.get_curation_details(curation_id)
```

### 1.2.3 DOI status and reservation

To check if a DOI is reserved for an item/deposit:

```
article_id = 12345678  
check, DOI_string = fs_admin.doi_check(article_id)
```

Here, `check` will either be `False` (no DOI) or `True`.

Alternatively, you can reserve a DOI if it hasn't been done so. This will provide an prompt before performing the task.

**Note: This step is irreversible!**

```
article_id = 12345678  
check, DOI_string = fs_admin.reserve_doi(article_id)
```

### 1.2.4 Retrieve list of institution groups

```
group_df = fs_admin.get_groups()
```



## 1.2.5 Retrieve list of articles for a user

```
account_id = 98765432
article_df = fs_admin.get_user_articles(account_id)
```

## 1.3 Continuous Integration

Under construction.

## 1.4 Versioning

We use [SemVer](#) for versioning. For the versions available, see the [tags](#).

Releases will be auto-generated using this [GitHub Actions script](#) following a `git tag vX.Y.Z`.

## 1.5 Authors

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See also the list of [contributors](#) who participated in this project.

## 1.6 License

This project is licensed under the [MIT License](#) - see the [LICENSE](#) file for details.

## 1.7 API Documentation

### 1.7.1 Idcoolp-figshare package

#### The FigshareInstituteAdmin Class

```
class FigshareInstituteAdmin(token, stage=False, admin_filter=None, log=<Logger stdout_logger (INFO)>)
```

Bases: object

A Python interface for administration and data curation with institutional Figshare instances

Most methods take an `article_id` or `curation_id` input

#### Parameters

- **token** (str) – Figshare OAuth2 authentication token
- **stage** (bool) – Flag to either use Figshare stage or production API. Default: production
- **admin\_filter** (Optional[list]) – List of filters to remove admin accounts from user list
- **log** (Logger) – Logger object for stdout and file logging. Default: stdout

#### Variables

- **token** – Figshare OAuth2 authentication token
- **stage** – Flag to either use Figshare stage or prod API
- **baseurl** – Base URL of Figshare API
- **baseurl\_institute** – Base URL of Figshare API for institutions
- **headers** – HTTP header information
- **admin\_filter** – List of filters to remove admin accounts from user list
- **ignore\_admin** – Flags whether to remove admin accounts from user list

**doi\_check**(*article\_id*)

Check if DOI is present/reserved for *article\_id*.

Uses: [https://docs.figshare.com/#private\\_article\\_details](https://docs.figshare.com/#private_article_details)

**Parameters** *article\_id* (int) – Figshare article ID

**Return type** Tuple[bool, str]

**Returns** Flag to indicate whether DOI is reserved and DOI (empty string if not)

**endpoint**(*link*, *institute=True*)

Concatenate the endpoint to the baseurl for requests

**Parameters**

- **link** (str) – API endpoint to append to baseurl
- **institute** (bool) – Flag to use regular of institute baseurl

**Return type** str

**Returns** URL for HTTPS API

**get\_account\_details**(*flag=True*)

Retrieve account details. This includes group association, number of articles, projects, and collections, and administrative and reviewer role flags

**Parameters** *flag* (bool) – Populate administrative and reviewer roles to database

**Return type** DataFrame

**Returns** Relational database of details of all accounts for an institution

**get\_account\_group\_roles**(*account\_id*)

Retrieve group roles for a given account, *account\_id*.

See: [https://docs.figshare.com/#private\\_institution\\_account\\_group\\_roles](https://docs.figshare.com/#private_institution_account_group_roles)

**Parameters** *account\_id* (int) – Figshare account ID

**Return type** dict

**Returns** Python dictionary of all group roles for a user

**get\_account\_list**()

Return pandas DataFrame of user accounts.

See: [https://docs.figshare.com/#private\\_institution\\_accounts\\_list](https://docs.figshare.com/#private_institution_accounts_list)

**Return type** DataFrame

**Returns** Relational database of all user accounts for an institution

**get\_articles()**

Retrieve information about all articles within institutional instance

See: [https://docs.figshare.com/#private\\_institution\\_articles](https://docs.figshare.com/#private_institution_articles)

**Return type** DataFrame

**Returns** Relational database of all articles for an institution

**get\_curation\_comments(*curation\_id*)**

Retrieve comments about specified curation, *curation\_id*.

See: [https://docs.figshare.com/#account\\_institution\\_curation\\_comments](https://docs.figshare.com/#account_institution_curation_comments)

**Parameters** *curation\_id* (int) – Figshare curation ID

**Return type** dict

**Returns** Python dictionary with curation comments

**get\_curation\_details(*curation\_id*)**

Retrieve details about a specified curation, *curation\_id*.

See: [https://docs.figshare.com/#account\\_institution\\_curation](https://docs.figshare.com/#account_institution_curation)

**Parameters** *curation\_id* (int) – Figshare curation ID

**Return type** dict

**Returns** Python dictionary with curation metadata

**get\_curation\_list(*article\_id=None*)**

Retrieve list of curation records for *article\_id*. If not specified, all curation records are retrieved.

See: [https://docs.figshare.com/#account\\_institution\\_curations](https://docs.figshare.com/#account_institution_curations)

**Parameters** *article\_id* (Optional[int]) – Figshare article ID

**Return type** DataFrame

**Returns** Relational database of all curation records

**get\_groups()**

Retrieve information about groups within institutional instance.

See: [https://docs.figshare.com/#private\\_institution\\_groups\\_list](https://docs.figshare.com/#private_institution_groups_list)

**Return type** DataFrame

**Returns** Relational database of all Figshare groups for an institution

**get\_user\_articles(*account\_id*)**

Impersonate a user, *account\_id*, to retrieve articles associated with the user.

See: [https://docs.figshare.com/#private\\_articles\\_list](https://docs.figshare.com/#private_articles_list)

**Parameters** *account\_id* (int) – Figshare account ID

**Return type** DataFrame

**Returns** Relational database of all articles owned by user

**get\_user\_collections(*account\_id*)**

Impersonate a user, *account\_id*, to retrieve collections associated with the user.

See: [https://docs.figshare.com/#private\\_collections\\_list](https://docs.figshare.com/#private_collections_list)

**Parameters** *account\_id* (int) – Figshare account ID

**Return type** DataFrame

**Returns** Relational database of all collections owned by user

**get\_user\_projects**(*account\_id*)

Impersonate a user, *account\_id*, to retrieve projects associated with the user.

See: [https://docs.figshare.com/#private\\_projects\\_list](https://docs.figshare.com/#private_projects_list)

**Parameters** *account\_id* (int) – Figshare account ID

**Return type** DataFrame

**Returns** Relational database of all projects owned by user

**reserve\_doi**(*article\_id*)

Reserve DOI if one has not been reserved for *article\_id*.

See: [https://docs.figshare.com/#private\\_article\\_reserve\\_doi](https://docs.figshare.com/#private_article_reserve_doi)

**Parameters** *article\_id* (int) – Figshare article ID

**Return type** str

**Returns** DOI string

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