
pydora
Release 0.2

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CONTENTS:

1	PyDora	3
1.1	Installation	3
1.2	Quick start	3
1.3	Documentation	4
2	Python API	5
3	CLI - Command Line Interface	7
3.1	pydora	7
4	Example input files	9
4.1	Credentials file	9
4.2	Projects file	9
4.3	Tags file	9
5	Connecting outside MPI-EVA	11
6	Indices and tables	13
	Python Module Index	15
	Index	17

Homepage: github.com/sidora-tools/pydora

PYDORA

PyDora is a toolkit to retrieve samples and metadata from the MPI-EVA Pandora internal database. PyDora is the Python cousin of [Sidora](#).

You can use PyDora both as a [command line tool](#), or directly [from Python](#).

1.1 Installation

- Install using pip (most people)

1. If you **don't** have set up your GitHub ssh keys

```
$ pip install git+https://github.com/sidora-tools/pydora
```

1. If you have set up your GitHub ssh keys

```
$ pip install git+ssh://git@github.com/sidora-tools/pydora.git
```

- Install in dev environment

```
$ git clone git@github.com:sidora-tools/pydora.git
$ cd pydora
$ conda create -f environment.yml
$ conda activate pydora_dev
$ pip install -e .
```

1.2 Quick start

```
$ pydora -c credentials.json -t assets/example_tags.txt
Successfully Connected to Pandora Database
Making request to Pandora SQL server
Downloaded table
Samples and metadata have been written to /Users/maxime/Documents/github/pydora/
↳pandora_samples.csv
```

1.3 Documentation

The documentation of PyDora is available here: pydora.rtfd.io

CHAPTER
TWO

PYTHON API

`pydora.get_credentials(creds)`

Get credentials to access SQL server

Parameters `credentials (str)` – Json formatted files with credentials for accessing Pandora

Returns {host:'server_address', login:'login', password:'pwd'}

Return type dict

`pydora.retrieve_samples(host, port, login, password, projects=None, tags=None, output=None, join='sql')`

Retrive samples having projects or tags from Pandora DB

Parameters

- `host (str)` – Address of SQL server
- `port (int)` – Port of SQL server
- `login (str)` – login
- `password (str)` – password
- `projects (list)` – list of projects to include (one per line)
- `tags (list)` – list tags to include (one per line)
- `join (str)` – Table join method, either pandas (local) or sql (server)

Returns (pandas dataframe) Table of retrieved samples and metadata

CLI - COMMAND LINE INTERFACE

To access the help menu:

```
$ pydora --help
```

The list of arguments of options is detailed below

3.1 pydora

PyDora: Retrieve samples and metadata from MPI-EVA Pandora internal database

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Homepage: github.com/sidora-tools/pydora

```
pydora [OPTIONS]
```

Options

--version

Show the version and exit.

-c, --credentials <credentials>

Default credentials.json

-p, --projects <projects>

File listing projects to include (one per line)

-t, --tags <tags>

File listing tags to include (one per line)

--join <join>

Join method

Default sql

Options sql|pandas

-o, --output <output>

Warinner samples metadata information

Default pandora_samples.csv

EXAMPLE INPUT FILES

For the CLI usage of PyDora, you need up to 3 files:

4.1 Credentials file

An example `credentials.json` file. For real credentials, please ask on the [Sidora mattermost channel](#)

4.2 Projects file

An example `projects.txt` file

4.3 Tags file

- An example `tags.txt` file

**CHAPTER
FIVE**

CONNECTING OUTSIDE MPI-EVA

When connecting from outside the MPI-EVA servers (e.g.) from your laptop, through the VPN, you have to establish a ssh tunnel

```
ssh -L 10001:pandora.eva.mpg.de:3306 <yourusername>@daghead1
```

You will need to slightly modify the credentials.json file to account for the ssh tunnel. An example credentials.json file when working through a ssh tunnel can be found here [assets/example_credentials_ssh_tunnel.json](#)

**CHAPTER
SIX**

INDICES AND TABLES

- genindex
- modindex
- search

PYTHON MODULE INDEX

p

pydora, 5

INDEX

Symbols

```
--credentials <credentials>
    pydora command line option, 7
--join <join>
    pydora command line option, 7
--output <output>
    pydora command line option, 7
--projects <projects>
    pydora command line option, 7
--tags <tags>
    pydora command line option, 7
--version
    pydora command line option, 7
-c
    pydora command line option, 7
-o
    pydora command line option, 7
-p
    pydora command line option, 7
-t
    pydora command line option, 7
```

G

get_credentials() (*in module pydora*), 5

M

```
module
    pydora, 5
```

P

```
pydora
    module, 5
pydora command line option
    --credentials <credentials>, 7
    --join <join>, 7
    --output <output>, 7
    --projects <projects>, 7
    --tags <tags>, 7
    --version, 7
    -c, 7
    -o, 7
    -p, 7
```

-t, 7

R

retrieve_samples() (*in module pydora*), 5