DCOR

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This is the official documentation of the Deformability Cytometry Open Repository (DCOR), a public repository for real-time deformability cytometry (RT-DC) datasets hosted by the Max-Planck-Gesellschaft.

This is version of the documentation.

CHAPTER 1

Introduction

1.1 Background

Necessity of DCOR.

1.2 Technology

DCOR is based on CKAN

CHAPTER 2

Accessing Public Datasets

CHAPTER 3

Using DCOR

CHAPTER 4

How-To Guides

4.1 Uploading data to DCOR

4.1.1 Data preparation with DCKit

In many cases, you should not upload your experimental data right away to DCOR. There may be several reasons for that, such as missing metadata, uncompressed raw data, or log files that contain sensitive or unnecessary information (such as the user name of the person that recorded or processed the raw data). Please also note that DCOR only works with DC data in the HDF5 file format (.rtdc file extension).

DCKit to the rescue! In most cases, it is sufficient to to run your data through DCKit. Load the files in question, run the integrity check, complete or correct any missing or bad metadata keys and either convert the data to the .rtdc file format (for tdms data) or compress the data. You can verify that everything went as intended by running the integrity check for the newly generated files. If you are certain that you are not losing valuable information, you may also use the repack and strip logs option.

4.1.2 Data upload with DCOR-Aid

4.1.3 Data upload via the web interface (not recommended)

4.2 Sharing (private) data with others

4.3 Citing data on DCOR

CHAPTER 5

Frequently Asked Questions

5.1 How DCOR handles data

For every DC file that you upload, DCOR performs the following tasks in the background:

- Generate a condensed version of the original data. This computationally expensive task is necessary to provide fast access to ancillary features, such as volume or principal inertia ratio, to Shape-Out 2 or dclab via the DCOR API. It also allows you to only upload the data you actually recorded (without any disadvantages).
- Generate a preview image and extract the configuration for visualization of the data in the web interface.
- The original file you uploaded is not changed. You can verify that the uploaded file is identical to the original file on your hard disk by comparing their sha256 sums. The sha256 sum is listed on each resource page under Additional Information.

Please note that, due to this data processing, it may take a few minutes until the preview is visible and the ancillary features are available via the DCOR API.

CHAPTER 6

Indices and tables

- genindex
- modindex
- search