

# RENKU CHEATSHEET

# **GETTING STARTED**

## \$ pip install renku

Install with pip

\$ renku init my-renku-project \$ cd my-renku-project

Starting a Renku project.

# **DATASETS**

#### \$ renku dataset create <dataset>

Create a new dataset.

#### \$ renku dataset ls

List all datasets in the project.

#### \$ renku dataset rm <dataset>

Remove a dataset.

#### \$ renku dataset add <dataset> <url>

Add data from <url> to a dataset. <url> can be a local file path, an http(s) address or a Git git+http or git+ssh repository.

# \$ renku dataset add <dataset> --source <path> [--destination <rel-path>] <git-url>

Add only data in <path> from Git. With -destination: location the data is copied to.

#### \$ renku dataset update <dataset>

Update files in a dataset based on their source.

# \$ renku dataset tag <dataset> <tag> [-d <desc>]

Add a tag to the current version of the dataset, with description <desc>.

## \$ renku dataset ls-tags <dataset>

List all tags for a dataset.

# \$ renku dataset rm-tags <dataset> <tags...>

Remove tags from a dataset.

## \$ renku dataset import <uri>>

Import a dataset. <uri> can be a Renku, Zenodo or Dataverse URL or DOI.

# \$ renku dataset export <dataset> <pre

Dataverse.

# \$ renku dataset ls-files

List all dataset files in project.

# \$ renku dataset unlink <dataset> [--include <path|pattern>]

Remove files from a dataset.

# RUNNING

#### \$ renku rerun <path>

Recreate the file(s) <path> by rerunning the commands that created them.

# \$ renku run --name <name> <command> [--input <in\_file>...] [--output <out\_file>...]

Execute a <command> with Renku tracking inputs and outputs. Input and output files are automatically detected from the command string. Creates a workflow template named <name>. With -input and/or -output: Manually specify input or output files to track.

#### \$ renku run --name <name> <command> --no-output

Run a <command> that produces no output.

### \$ renku status

The the status of generated output files in the project.

# \$ renku update [--all] [<path>...]

Update outdated output files created by renku run. With <path>'s: Only recreate these files. With –all: Update all outdated output files.

# Workflows

### \$ renku workflow ls

List Plans (workflow templates).

## \$ renku workflow show <name>

Show details for Plan < name>.

# \$ renku workflow execute --provider provider> [--set <param-name>=<value>...] <name>

Execute a Plan using provider> as a backend, overriding parameter <param-name>'s value.

# \$ renku workflow iterate [--map <param-name>=[value,value,...]] <name>

Repeatedly execute a Plan, taking values from the list specified with -map.









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# \$ renku workflow export --format <format> <plan>

Export a Plan in a given format (e.g. 'cwl').

# \$ renku workflow compose <composed-name> <plan>

Create a new Plan composed of child Plans.

# \$ renku workflow edit <plan>

Create a new Plan composed of child Plans.

## \$ renku workflow delete <plan>

Remove a Plan.

# \$ renku workflow visualize [--interactive]

Show linked workflows as a graph.

#### \$ renku workflow revert <activity ID>

Undo a Run.

## \$ renku workflow inputs

\$ renku workflow outputs

Show input respectively output files used by workflows.

# CONFIG

# \$ renku config set <key> <value>

Set entry <key> to <value> in renku config.

#### \$ renku config remove <key>

Unset entry <key> renku config.

## \$ renku config show [<key>]

Show current configuration.



## \$ renku doctor

Check your system and repository for potential problems.

### \$ renku gc

Free up disk space used for caches and temporary files.

#### \$ renku log

Show a history of renku actions.

### \$ renku migrate

Migrate old metadata to the current Renku version.

# \$ renku mv <path>... <destination>

Safely move files within a project.

### \$ renku rm <path>...

Safely delete files from a project.

# \$ renku save [-m <message>]

Save (commit) and push all local changes. with optional message.

### \$ renku storage pull <path>...

Pull <path>'s from external storage (LFS).

# CONFIGURATION OPTIONS

registry: Docker image registry

zenodo.access\_token: Token for Zenodo export

dataverse.access\_token: Token for Dataverse export

show\_lfs\_message: Whether to show the LFS warning message

Ifs\_threshold: Size threshold below which files aren't added to LFS

# RESOURCES

Public instance of Renku:

https://renkulab.io/

https://github.com/SwissDataScienceCenter/renku

Documentation:

https://renku.readthedocs.io/en/latest/

Renku-Python Documentation:

https://renku-python.readthedocs.io/en/latest/

https://datascience.ch/





