

# **Getting Started**

\$ pip install renku

Install with pip.

\$ brew tap swissdatasciencecenter/renku

\$ brew install renku

Install with Homebrew.

\$ cd my\_project

\$ renku init

Starting a Renku project.

### Workflows

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. A workflow template(Plan) called <name> is created. --input/--output: specify inputy/outputs manually.

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

Run a <command> that produces no output.

\$ renku rerun <path>...

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

\$ 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Update outdated output files created by renku run.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 With --all: Update all outdated output files.

\$ renku workflow ls

List recorded workflow templates (Plans)

\$ renku workflow edit <plan\_name>

Edit Plan <plan name> to set names/descriptions.

\$ renku workflow execute <plan\_name>

Execute a recorded Plan <plan name> with new values or a different backend.

\$ renku workflow compose <name> [<plan>...]

Create a meta-workflow by composing multiple plans.

\$ renku workflow visualize [<path>...]

Visualize a graph of workflows that were involved in creating <path>. Use -i for interactive mode.

\$ renku workflow export <plan\_name> Export a recorded Plan to a workflow language.

\$ renku workflow show <plan\_name> Show details about a recorded Plan.

#### 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>

--target <path> [--relative-to <rel-path>] <github-url>

Add only data contained in <path> from Git. With --relative-to: Trim <rel-path> from <path> locally.

\$ renku dataset ls-files

List all dataset files in the project.

\$ renku dataset unlink <dataset> [--include <path\_or\_pattern>]

Unlink (all) files from a dataset. With --include: Specify single path or pattern of files to unlink.

\$ renku dataset import <uri>

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

\$ renku dataset export <dataset>

Export the dataset <dataset> to covider>. Providers: Zenodo, Dataverse.

\$ renku dataset tag <dataset> <tag> [-d description]

Add a tag for the dataset at the current point in time.

\$ renku dataset ls-tags <dataset>

Show all tags for a dataset.

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

Remove tags from a dataset.









# Config

\$ renku config show [--global] <key>

Show Renku config value for <key>. With --global: Read from global settings.

\$ renku config set [--global] <key> <value>

Set Renku config <key> to <value>. With --global: Read from global settings.

\$ renku config remove [--global] <key>

Delete <key> from Renku config. With --global: Delete from global settings.

Available config options:

- registry: Docker image registry.
- zenodo.access\_token: Token for Zenodo export.
- dataverse.access\_token: Token for Dataverse export.
   dataverse.server\_url: Url of the Dataverse instance.
- show Ifs message: Whether to show the LFS warning
- Ifs threshold: Threshold below which files aren't added to git LFS. Accepts values like 100kb, 1mb or 0.5gb

### **Past Activities**

\$ renku log [--workflows]

Show past Renku workflow executions and dataset activities.

# Knowledge Graph

\$ renku graph export [--revision <revision>]

Export Renku metadata as JSON-LD. With --revision: only export metadata modified in a Git revision.

## Login/Logout

\$ renku login [--git] <endpoint>

Login to a Renku instance, e.g. renkulab.io. With --git: Also login to Gitlab.

\$ renku logout[<endpoint>]

Login from all logged in Renku instances. With <endpoint>: Only logout from this instance.

### Misc

\$ renku save [-m <message>]

Save (commit) and push all local changes. With -m: Set a message for the changes made.

\$ renku rm [<path>...]

Remove <path>'s from a renku repository. Removes from datasets and Git.

\$ renku mv [<path>...] <destination>

Move <path>'s to <destination>.

\$ renku migrate

Migrate metadata to the current Renku version.

\$ renku doctor

Check system and repository for potential problems.

\$ renku githooks install [--force]

Install Renku Git hooks. With --force: Override existing hooks.

\$ renku githooks uninstall

Uninstall Renku Git hooks.

\$ renku storage pull <path>...

Pull <path>'s from external storage.

\$ renku status

Show status of the Renku repository.

#### 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/





