Galaxy

Galaxy 101: Workflows

www.galaxyproject.org

@jxtx / #usegalaxy

Exons and Repeats *History* → Reusable *Workflow?*

- The analysis we just finished was about

  - Human chr22

  - Overlap between exons and Repeats

- But, ...

  - there is nothing inherent in the analysis about humans, exons or repeats

  - It is a series of steps that sets the score of one set of features to the number of overlaps from another set of features.

Galaxy Workflows

An *abstract* representation of a multi-step analysis

Represented as a set of tools and the flow of datasets between them — without being tied to specific datasets

Two ways to create Galaxy Workflows

From scratch: compose a workflow directly using the Galaxy workflow editor

By example: perform any analysis interactively, and then extract the workflow from the resulting history
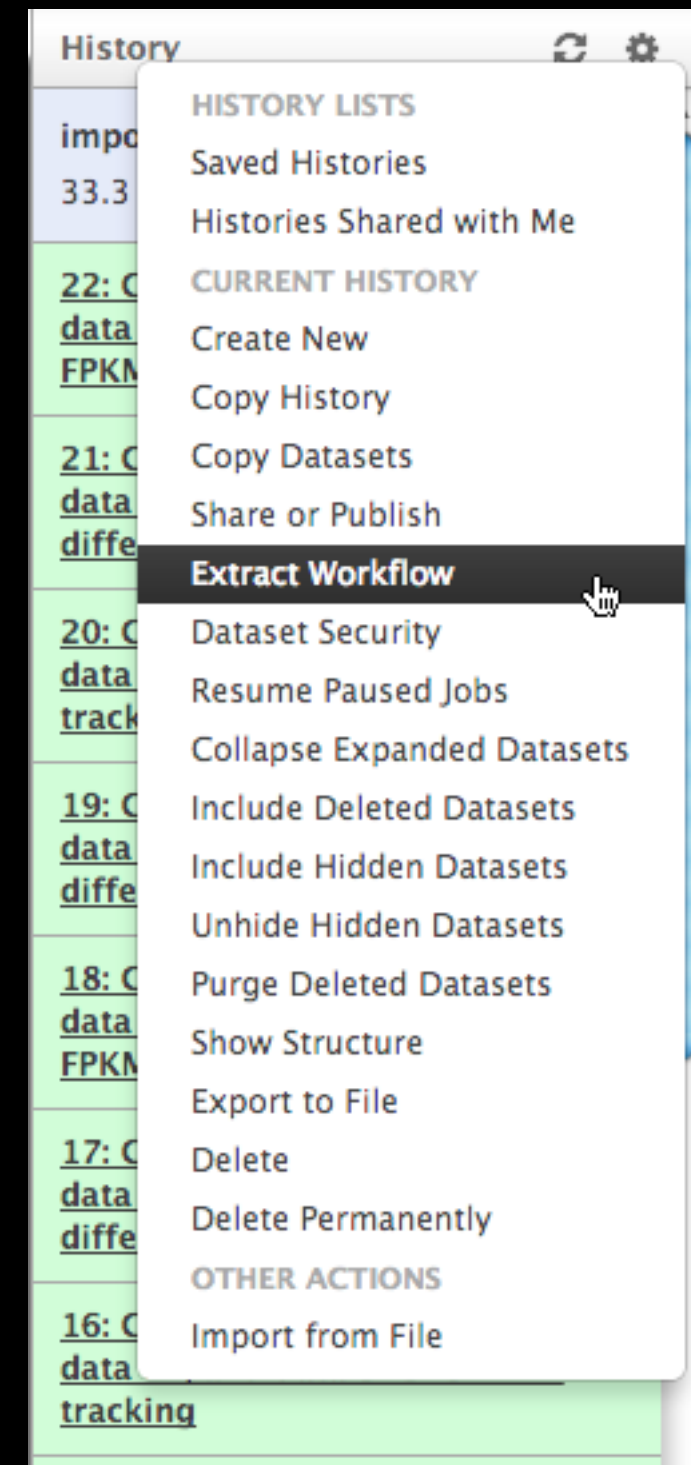
Create a Workflow from a History

Extract Workflow from history

Create a workflow from this history.
Edit it to make some things clearer.

⚙ (cog) → Extract Workflow

Use the workflow on a different type of feature

Advanced workflow features

Flagging output datasets

Post job actions

Summary

Galaxy workflows allow abstract multi-step analyses to be reused

Workflows can be constructed either by example or from scratch

The workflow editor allows workflows to be customized, and additional actions to be associated with each step