

## Building a workflow on Galaxy

Alt-text Figure 8 - A screenshot of the steps used to create a new workflow on Galaxy

A screenshot from Galaxy website depicts the following instructions: Hands-on: creating a new workflow. 1) Click on Workflow in the top panel of the Galaxy page. On the top right you will see 2 buttons: Create and Import. To create a new workflow click on Create. Enter a Name and Annotation for your workflow and click Save. The Workflow Editor will open with a new, empty workflow loaded. Below the information is the image of a blank (empty) New Workflow with a menu bar Tools on the left and on the right fields with Name, Version and Annotation to be completed.

Alt-text Figure 9 - The annotation naming of a galaxy workflow

A screenshot showing the window to create a New Workflow on Galaxy, where the following information is complete on respective fields: Name: flipping the burger workflow; Annotation: an example workflow for demonstrating data flipping. Below, the buttons Create and Cancel.

Alt-text Figure 10 - The blank canvas of a galaxy workflow

A screenshot showing a blank canvas on Galaxy entitled: flipping the burger workflow.

Alt-text Figure 11 - Adding the input dataset tool

A screenshot showing a box in the middle of the canvas with the following information: load burger data > output (input).

Alt-text Figure 12 - Adding the reverse a file tool and link to the input dataset

A screenshot of the Galaxy canvas showing a second box connected to the box described in Figure 11. The second box contains the information: flip burger > outfile (input).

Alt-text Figure 13 - The file upload menu

A screenshot of a Galaxy window entitled: Workflow: flipping the burger workflow. The Load Burguer Data field contains the information: 5: tac on data 1. There is a Upload (vertical arrow) button on right-hand side.

Alt-text Figure 14 - The file upload menu on the paste input section

A screenshot of the Drag-and-Drop window. Below buttons to search for files on the computer: Choose local files; Choose remote files; Paste/Fetch data, followed by the buttons Start; Pause; Reset; Cancel.

Alt-text Figure 15 - The run workflow window after upload set

A screenshot showing the uploaded file and its specifications. Name: burger.txt. Size: 39 b. Type: txt. Genome: unspecified. Content: Bread, Onions, Cheese.

Alt-text Figure 16 - The workflow complete screen

A screenshot of a green box with the information: Executed tac and successfully added 1 job to the queue. The tool uses this input: 6: burger.txt. It produces this output: 10: tac on data 6.