

UseGalaxy.fr

a Galaxy server for the French
bioinformatics community

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Introduction

Galaxy is an open source web-based interactive data analysis platform that supports defining and executing workflows.

Jobs are executed on HPC infra.

The image displays three side-by-side screenshots of the Galaxy web application interface:

- Tools List:** This screenshot shows the left sidebar of the Galaxy interface. It features a search bar at the top, followed by sections for "Tools" (listing "minimap2" and other tools), "Upload Data", "Show Sections", and "Map with minimap2". Below these are sections for "TB-Profiler Profile", "Purge overlaps", and "WORKFLOWS" (listing "All workflows").
- Tool Forms/Result Viewer:** This screenshot shows a configuration form for the "minimap2" tool. It includes sections for "Indexing options", "Mapping options" (with sub-options like "Retain at most INT secondary alignments" and "Max fragment length for PE alignment"), and "Workflow" (with sub-options like "Filter out top FLOAT fraction of repetitive minimizers" and "Specify an interval of k-mer occurrences").
- History:** This screenshot shows a list of recent jobs and datasets. It includes items such as "COG-UK NT1652837C" (status: 22 shown, 24 deleted, 4167 hidden, 217.95 GB), "4158: Preprocessing and mapping reports", "4157: MultiQC on data 4154, dat a 4153, and others: Plots", "4155: data 2165, data 2164, an d others (flattened)", "2777: SnpEff eff: on collection 2 689 - HTML stats", "2689: Replace Text on collection 2602", "2602: VCF-VCFIntersect: on collection 2515 and collection 234 1", "2428: VCF-VCFIntersect: on col lection 2341 and collection 874", "2167: Lofreq filter on collection 874", and "862: QuilfMan BamQC report s".

Tools List

Tool Forms/Result Viewer

History

Introduction



FAIR Data analysis :

→ Accessibility

- ◆ no CLI or programming needed
- ◆ but possible

→ Reproducibility

- ◆ capturing information about every step

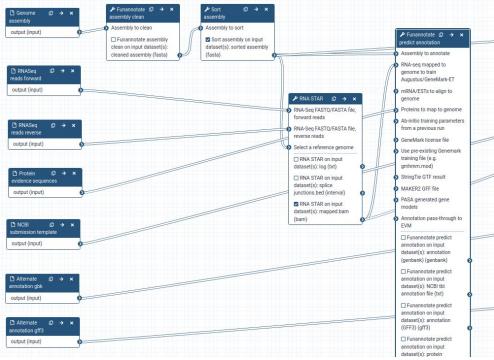
→ Transparency

- ◆ everything can be shared to anyone

Several ways to access and manage :

→ Workflows

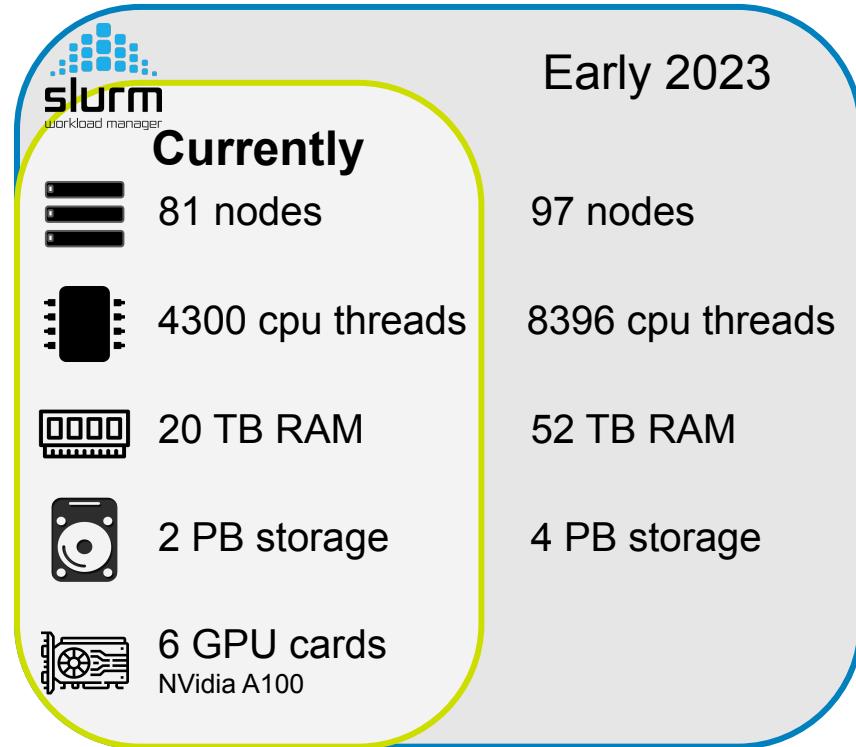
- ◆ Create from scratch
- ◆ Extract from history
- ◆ Editor
- ◆ Status tracker
- ◆ Markdown report



→ Data

- ◆ Data Libraries
- ◆ FTP
- ◆ Drag&Drop
- ◆ Histories

UseGalaxy.fr



The IFB Core Cluster Transversal Team:
15 mutualized engineers from 7 IFB platforms ~ 4.0 FTE





Phenotype Association

GENOMICS TOOLKITS

Picard

deepTools

Gemini

EMBOSS

Searching tools

RAD-seq

Trinity

METAGENOMICS

Metagenomic Analysis

DADA2

FROGS

Qiime

Obitools

PICRUSt

Mothur

Virology

WORKFLOW4METABOLOMICS

Get Data - Metabolomics

JOBI

Preprocessing LCMS

Preprocessing FIAMS



1 million jobs in one year



2700 subscribers - 1351 active users in one year



1850 tools

- General Text Tools
- Genomic File Manipulation
- Common Genomics Tools
- Genomics Analysis
- Genomics Toolkits
- Metagenomics
- Workflow4Metabolomics
- ProteoRE
- Galaxy-P
- Galaxy-E
- Statistics and Visualisation
- Miscellaneous Tools



Focus on your analysis

- Personalized welcome page
- Filtered tool list

The figure displays four separate screenshots of the Galaxy web interface, each representing a different subdomain:

- ecology**: Shows a personalized welcome page for the "ecology" subdomain, featuring a green lightbulb icon.
- metabarcoding**: Shows a personalized welcome page for the "metabarcoding" subdomain, featuring a colorful barcode-like pattern icon.
- proteore**: Shows a personalized welcome page for the "proteore" subdomain, featuring a magnifying glass over a protein structure icon.
- covid19**: Shows a personalized welcome page for the "covid19" subdomain, featuring a red COVID-19 virus icon.

Each screenshot shows the standard Galaxy navigation bar at the top and a filtered tool list and history panel on the right, all tailored to the specific subdomain's needs.

5 sub-domains | <sub-domain>.usegalaxy.fr



ecology



metabarcoding



proteore



covid19



workflow4metabolomics



Your project



Your community

Hall-of-fame



Featuring The IFB Core Cluster team



Featuring The Galaxy Community

community.france-bioinformatique.fr

IFB Community Support

The screenshot shows a forum post with the following details:

- Post title: "Ajouter apps dans UseGalaxy.fr" (with a blue link icon).
- Post status: "Récents".
- Post count: "Non lu (1)".
- Post author: "Top".
- Post subject: "Sujet" (with a search icon).
- Post content: "Need help Give help" (inside a black-bordered box).
- Post statistics: "Réponses" (0), "Vues" (17), and "Activité" (1j).
- Post footer: "multiBamSummary Fatal error: Exit code 2 () Fatal" (in red).

