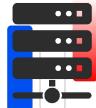


# Usegalaxy.fr

<https://frama.link/ifb-ag20-usegalaxyfr>

Gildas Le Corguillé, Julien Seiler, Anthony Bretaudau  
David Christiany et la TaskForce IFB NNCR Cluster

*Service offered to you, the user!*



Hosted by the IFB Core Cluster : 4300 CPU / 20 TB of RAM



ELIXIR AAI authentification



100 GB for registered users - more on demand



Ready to host your training session with a dedicated submission SLURM

All the  datasets are already available as [Data Libraries](#)



End user support - One place **to get help** <https://community.france-bioinformatique.fr/>



New (11/2020) Galaxy Interactive Tools





search tools



1175 tools from tools - regularly up-to-date  
Sorted by thematic sections

- General
- Genomic (RNASeq, DNASeq, ChipSeq ...)
- Metagenomics
- Population Genetics
- Metabolomics (Workflow4Metabolomics)
- Proteomics (ProteoRE)



37 databank indexes synced with  <http://datacache.galaxyproject.org/>



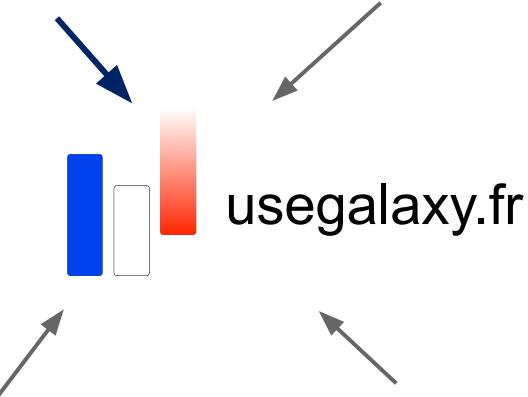
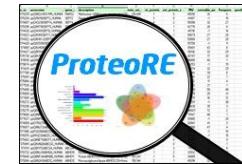
Main tools weekly tested with  workflows

Get Data  
Send Data  
Collection Operations  
Expression Tools  
**GENERAL TEXT TOOLS**  
Text Manipulation  
Filter and Sort  
Join, Subtract and Group  
**GENOMIC FILE MANIPULATION**  
Convert Formats  
FASTA/FASTQ  
FASTQ Quality Control  
SAM/BAM  
BED  
VCF/BCF  
Nanopore  
**COMMON GENOMICS TOOLS**  
Operate on Genomic Intervals  
Fetch Alignments/Sequences  
**GENOMICS ANALYSIS**  
Annotation  
Assembly  
Mapping



## <sub-domain>.usegalaxy.fr

- What is a sub-domain ?
  - same infrastructure (IFB NNCR cluster)
  - specific welcome page
  - sub tool panel with specific tools only
- ➡ transferred users can find the same interface



# One instance, some sub-domains



<sub-domain>.usegalaxy.fr

- What is a sub-domain ?
  - same infrastructure (IFB NNCR cluster)
  - specific welcome page
  - sub tool panel with specific tools only
  - ➡ transferred users can find the same interface



- 2 sub-domains for now
  - [workflow4metabolomics.usegalaxy.fr](http://workflow4metabolomics.usegalaxy.fr)
  - [proteore.usegalaxy.fr](http://proteore.usegalaxy.fr)

Welcome to usegalaxy.fr

By using this Galaxy instance, we assume that you have read and accept the [Term Of Use](#). For any questions or support: [community/france/bioinformatics@usegalaxy](#)

Galaxy Project

James Taylor died yesterday. Our dear @jtblx -> Galaxy began with you. We will make sure it continues. We have no words.

pic.twitter.com/LnJATJzTqF

6:57 6/3 PM - Apr 3, 2020

376 people are talking about this

Ask the GalaxyCat

Can't find a tool on usegalaxy.fr? Why not search on the IFB Galaxy Catalog?

Go to the GalaxyCat

Welcome to ProteoRE Galaxy !

By using this Galaxy instance, we assume that you have read and accept the [Term Of Use](#). For any questions or support: [community/france/bioinformatics@usegalaxy](#)

Galaxy Project

James Taylor died yesterday. Our dear @jtblx -> Galaxy began with you. We will make sure it continues. We have no words.

pic.twitter.com/LnJATJzTqF

6:57 6/3 PM - Apr 3, 2020

376 people are talking about this

Workflow4metabolomics

By using this Galaxy Instance, we assume that you have read and accept the [Term Of Use](#). For any questions or support: [community/france/bioinformatics@usegalaxy](#)

Galaxy Project

James Taylor died yesterday. Our dear @jtblx -> Galaxy began with you. We will make sure it continues. We have no words.

pic.twitter.com/LnJATJzTqF

6:57 6/3 PM - Apr 3, 2020

376 people are talking about this

Current version: 3.3

Publication: Franck Giacomoni, Gildas Le Cogadec, Michael Hosack, Mathieu Léon, Pierre Michel, Sébastien Broda, Christophe Dupérier, Marie Tremblay-François, Jean-François Martin, Daniel Jacob, Sophie Courtemanche, Étienne A. T. Trenet and Christophe Czerkassky (2018). [Galaxy4Metabolomics: A collaborative research infrastructure for computational metabolomics](#). *Bioinformatics* doi:10.1093/bioinformatics/bty483

Changelog

MS COMMON

*For you the g33k!*

# Contribute

<https://gitlab.com/ifb-elixirfr/usegalaxy-fr>

- Everything is managed by  **ANSIBLE**
- Tasks are launched by  **RUNNER**
- Ask to be added to the contributor list
- You will be able to:
  - Access all usegalaxy.fr gitlab repositories
  - Configure Galaxy
  - Add tools
  - Add/run data manager
  - Update sub-domain welcome pages



 Institut Français de Bioinformatique >  usegalaxy.fr > Details



usegalaxy.fr

Group ID: 5635840

**Subgroups and projects** Shared projects Archived projects

-  **howto-admin**   
How to administer usegalaxy.fr
-  **galaxy\_transfert** 
-  **data\_manager** 
-  **workflows tests**   
Differents workflows are tested with planemo.
-  **galaxy**   
Fork of the Galaxy repository including code changes that have not been merged int...
-  **trainings management** 
-  **cvmfs-stratum1** 
-  **welcome**   
Welcome page for usegalaxy.fr base and subdomains <https://usegalaxy-fr.gitlab.clu...>
-  **tools**   
Ansible playbooks to manage tools on usegalaxy.fr subdomains
-  **infrastructure**   
Ansible playbooks and custom roles to deploy the usegalaxy.fr infrastructure on IFB ...

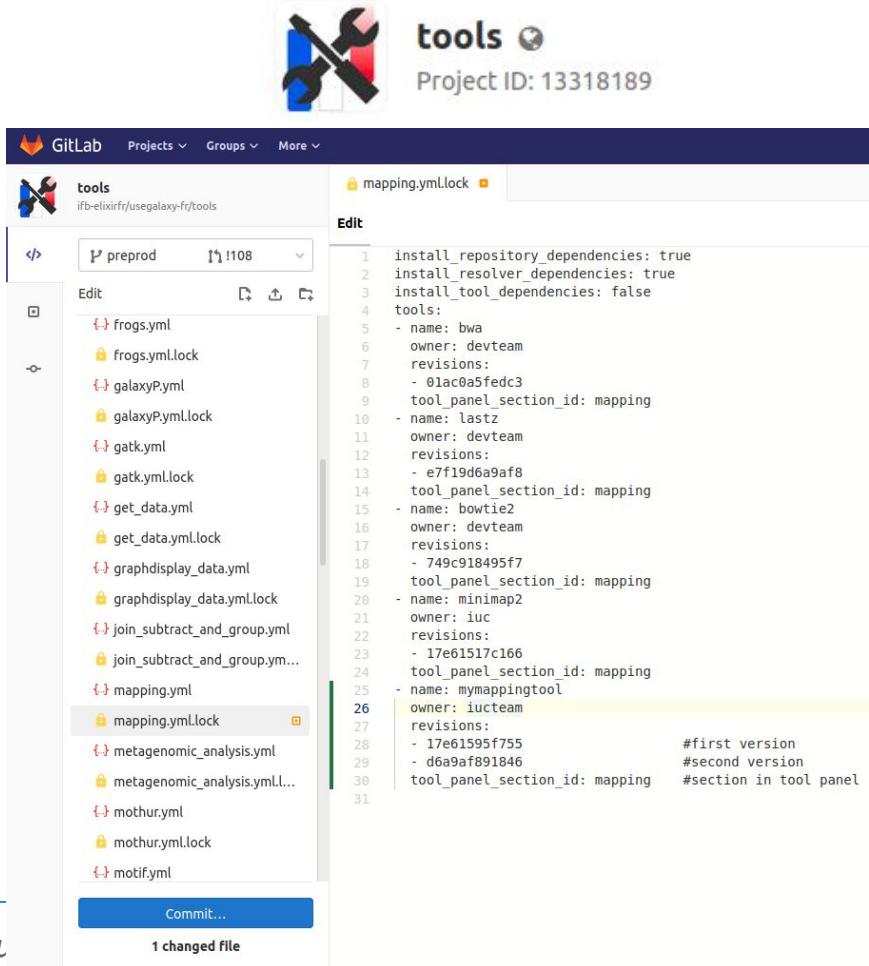
# Contribute - add a tool

<https://gitlab.com/ifb-elixirfr/usegalaxy-fr/tools>

- Add tools in proper `.yml.lock` file
  - git or via the gitlab web IDE
- Commit and make a merge request
- Validation by our team
- Tools automatically installed
- Tool panel automatically sorted
  - based on yaml files

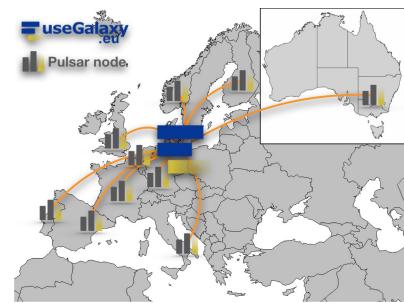
## In short:

- Fast and easy way to add tools
- In a secure way, since reviewed by our team
- Tools added for main and concerned subdomain



```
install_repository_dependencies: true
install_resolver_dependencies: true
install_tool_dependencies: false
tools:
  - name: bwa
    owner: devteam
    revisions:
      - 01ac0a5fedc3
    tool_panel_section_id: mapping
  - name: lastz
    owner: devteam
    revisions:
      - e7f19d6a9af8
    tool_panel_section_id: mapping
  - name: bowtie2
    owner: devteam
    revisions:
      - 749c918495f7
    tool_panel_section_id: mapping
  - name: minimap2
    owner: iuc
    revisions:
      - 17e61517c166
    tool_panel_section_id: mapping
  - name: mymappingtool
    owner: iucteam
    revisions:
      - 17e61595f755
      - d6a9af891846
    tool_panel_section_id: mapping
#first version
#second version
#section in tool panel
```

- Interactive tools (~~Shiny app, Jupyter notebook, RStudio~~)
  - ~~Need some rather complex settings: docker, dns, ssl, slurm ...~~
  - Adapted to Singularity
  
- CVMFS - CernVM File System
  - Enable the Galaxy project CVMFS directory
  - Use their content in order to align usegalaxy.fr to usegalaxy.\*
  - Provide Stratum1 mirrors
  
- Pulsar network - wide job execution system distributed across the world
  - Be part this network
  - Offer IFB computing resources to usegalaxy.eu
  
- TlaaS - Training Infrastructure as a Service



# End user support

One place **to get** help

- Based on discourse
  - open source discussion platform
- Originally only for cluster related issues
- Now also for Scientific support, RSAT, ProteoRE, Workflow4Metabolomics and **Galaxy** related issues



<https://community.france-bioinformatique.fr/>

The screenshot shows the homepage of the IFB Community Support platform. At the top, there are navigation links for 'catégories' (Categories), 'étiquettes' (Tags), 'Catégories' (highlighted in red), 'Récents' (Recent), 'Nouveaux (2)' (New (2)), 'Non lus' (Unread), and 'Top'. Below this, there are four main categories listed:

- IFB Core Cluster**:  
Demande de logiciel ou de banque de données 1 nouveau  
Support IFB Core Cluster
- Workflow4Metabolomics**:  
This category is dedicated to any questions, issues and requests regarding [workflow4metabolomics.usegalaxy.fr](http://workflow4metabolomics.usegalaxy.fr).  
LCMS | GCMS | NMR | MSMS
- Support scientifique**:  
Get help on a scientific thematic, a workflow, a software or a parameter.
- Galaxy**:  
For any questions, issues and request regarding [usegalaxy.fr](http://usegalaxy.fr) and its subdomains \*.usegalaxy.fr

On the right side, there is a sidebar with the heading 'Sujets Récents' (Recent subjects) and a list of recent posts:

- 231 R studio - "the previous R session w... 1 nouveau @team.bank Installation de gnom...
- 12 Troubleshooting - Galaxy 14 mai Job was terminated because it used Upload file + stockage 2 j
- 21 Comment bloquer les Cryptominers Ecriture wrapper Galaxy avec déper... Creation de recette conda 30 avr.
- 2 Metagenomics Mothur 22 mai A job resubmitted again and again

One place **to help**

- 11 expert teams



# The usegalaxy.fr team is hiring:

## Tasks:

- Develop and maintain the Galaxy instance
- Toward a better integration with usegalaxy.\*
- End-user helpdesk

## Skills:

- Good knowledge in Dev/Ops - Ansible/CI
- Bioinformatics would be a plus
- English speaker (better than the national average)

Salary: IE++

Location: Roscoff\*, Strasbourg\*, Rennes\*

# Task force members

Anthony Bretaudau



Gildas  
Le Corguillé



François Gerbes

Lain Pavot



Guillaume  
Seith



Didier Laborie

Nicole Charrière

David Christiany  
12/2019 - 08/2020



Julien Seiler



David Benaben



Jean-Christophe Haessig



usegalaxy.fr

+



IFB NNCR Cluster