

MAD_CharteBiRD-EN_DI_v7

Object

The purpose of this Charter is to define the conditions for using the IT infrastructure of BiRD bioinformatics core facility (Bioinformatics Research and Development) and to formalize the commitments of the facility on the one hand and of users on the other hand.

The core facility's servers, clusters and storage bays are hosted in the University of Nantes datacenter building equipped with alarm, centralized access control and video surveillance. Only authorized personnel of the IT department of the University can physically access the machines.

The use of the BiRD's IT resources is subject to the acceptance and signature of the University of Nantes' IT charter.

This equipment is supported by the computer network of the University of Nantes. Internet access is provided by RENATER (http://www.renater.fr).

Contact: pf-bird@univ-nantes.fr

Services

The BiRD facility provides an infrastructure dedicated to biologists and bioinformaticians who need to launch intensive computations while taking advantage of a bioinformatics environment. The description of the computing resources is available on the web site: <u>https://pf-bird.univ-nantes.fr/resources</u>.

Access to these services is provided via the command line on the cluster's front-end server (login). Jobs are submitted through Job Manager system.

The different storage spaces are described on this page: https://pf-bird.univ-nantes.fr/resources/birdcluster

On all partitions you have a personal space with a free quota. You can ask for the creation of a shared project space. Quotas on « shares » are sized on request using the following form and invoiced on an annual fee basis.

https://pf-bird.univ-nantes.fr/ask-for/request-for-project-storage

Please note that none of the storage spaces are backed up.

Conditions of access and use

Accounts

Access to the BiRD infrastructure requires the creation of a user account, after approval of this Charter. Accounts are strictly personal, non-transferable, temporary and linked to a structure (Unit, research team, company, etc.).

The accounts are opened for the current calendar year and are renewable annually. An automatic account expiration system sends each user an email for account renewal.

An account may be closed at any time on request of the user or in the event of non-compliance with the Charter.

The use of resources is intended only for professional activities that comply with the legislation and comply with the missions of the BiRD core facility, namely the development of databases and bioinformatics tools and the execution of experimental intensive computing campaigns for data processing and analysis in bioinformatics. The use of resources for private purposes is strictly forbidden.

The conditions of access are different between academic structures and private companies. When creating your account, you are asked to indicate if you work for a company or for an academic structure.

Use of resources

The submission of command line jobs is delegated to a scheduler. From the front-end server, the programs must be encapsulated in an interactive or submission script. Any program launched directly on the front server or nodes is not allowed and will result in the task being deleted without notice by the administrators and possibly the account being suspended in the event of intentional recurrence.

Safety and security

Access to computing resources is secure: the computing job submission tool (SGE) is only accessible through SSH (Secure Shell: authenticated, encrypted communications).

When creating an account, users are asked to change their password by contributing to the security of the platform. The University's password definition policy prevails:

- it must be different from your username,
- it must be at least 7 characters long,
- it must contain at least 3 different characters,
- it must not contain accented characters,
- it must not belong to the dictionary.

User disk spaces are configured by default to be read/write accessible only to the holders of the associated computer account, except for the system administrators (who are responsible for the infrastructure proper functioning and availability). BIRD administrators use Linux permissions and access control lists (ACLs) to ensure that only people associated to a project have access to the directories containing the corresponding data.

Project spaces are shared with group members identified by the project leader. Users are responsible for positioning UNIX permissions on their directories and files. Under no circumstances can the core facility be held responsible for any misconfiguration of UNIX rights.

Data transfer

Data transfer between the user's workstation and the front-end server is done by the secure protocol (authentication, encryption) SFTP (SSH File Transfer Protocol). To do this, the scp command from a terminal or a software client such as FileZilla is recommended.

Software installation

Users are free to install on their disk space software necessary for bioinformatics activities, in compliance with the legislation in use. The installation of software for multiple users can only be done by the platform administrators and must be discussed beforehand.

Engagements

Supervision

Administrators have a responsibility to ensure the proper functioning of computer, hardware and software resources. They are entitled to take the necessary measures to remedy any malfunction or safety risk.

The platform is committed to minimizing service interruptions and ensuring the best availability of the cluster. In the event of a necessary interruption for hardware or system updates, users are notified as soon as possible.

All connections or attempts are recorded and logged.

In the event of non-compliance with this Charter, the core facility may remove access to resources and stop IT processes without notice.

Confidentiality

To ensure the good performance and availability of the platform, the directors may take all necessary measures to assume their responsibility while respecting the obligation of professional discretion. They must not disclose information that they have come to know in the course of their duties (respect for confidentiality).

BiRD is not authorized to host healthcare data, industrial data or more generally data of a confidential nature and of high importance. In this context, the users of the infrastructure are

responsible for compliance with the ethical framework and the law in vigor: they must rely on the approval of the Comité de Protection des Personnes (CPP), the Comité Consultatif sur le Traitement de l'Information en matière de Recherche dans le domaine de la Santé (CCTIRS), the Commission Nationale Informatique et Libertés (CNIL).

BiRD undertakes to comply with its obligations under the applicable legislation on the protection and processing of personal data, in particular Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 applicable from 25 May 2018 (RGPD) and Law No. 78-17 of 6 January 1978 on data processing, files and freedoms.

When applying for an account, the user is asked to choose whether he/she wishes to receive the newsletter and the annual satisfaction survey. The user has the right to access, update or delete its personal data and has the possibility to unsubscribe using a link at the bottom of the News. The only purpose of the personal information collected is to manage the database of cluster access accounts and our communication actions (newsletter and satisfaction survey). The data collected is only intended for the BIRD's own use and will be kept for the duration of your account on the cluster.

Pricing

A rate is in place for share storage requests exceeding 200Gb (and up to 20Tb) depending on the quota requested through the form on the website (https://pf-bird.univ-nantes.fr/ask-for/storage). Academic fees are available on the website. Private rates are available on request.

For requests over 20TB users should contact the facility to discuss the terms and conditions.

The monthly fee is based on the quotas requested during the year. (Ex: 10TB for 8 months, and 15TB for 4 months). Quota changes are possible on request for the following month. Invoicing will be established over a one-year period from June to May (based on the year's quotas).

The core facility reserves the right to apply an update of its rates during the year. A period of one month will be respected between the date of communication of the new rates and their application.

Valorization, intellectual property

In the context of scientific collaboration between users and facility staff, a collaboration contract must be negotiated in good faith between the parties. The intellectual property of the results produced by the platform will be subject to the terms of the collaboration agreement. When the use of the platform is made without a collaboration contract, the staff cannot make any intellectual property claim on the results produced.

The authors undertake to thank BiRD in their publications and communications, when they have used the core facility resources or expertise, in the following way:

"We are most grateful to the Bioinformatics Core Facility of Nantes BiRD, member of Biogenouest, Institut Français de Bioinformatique (IFB) (ANR-11-INBS-0013) for the use of its resources and for its technical support".

If the scale of the project, the technological investment, or the scientific contribution justifies it, one of the facility's staff will participate in the scientific publication work and will therefore be a co-author. The scientific manager of the platform will be consulted if necessary.

The core facility publishes their pipelines in the European bio.tools registry. If one of these analysis pipelines has been used for a publication, the authors undertake to cite this pipeline with the bio.tools ID.

The list of pipelines is available on the website: https://pf-bird.univ-nantes.fr/resources/pipelines/

Satisfaction

In a process of quality, improving its performance, and gathering the opinions of its users, the platform conducts an annual satisfaction survey.