



"CLOUD BILILLE" USAGE CHARTER

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This document outlines the best practices for using the computational resources of the Bilille platform, hereafter referred as "Cloud Bilille." Technically, these computational resources are a subset of the Mesocenter of Lille cloud (<http://hpc.univ-lille.fr/cloud-openstack>) to which Bilille users have specific access. These resources are managed by the IT department (DSI) of the University of Lille.

The aim is to make these resources available to the community so that they can be used by as many people as possible, in compliance with security rules. The use of Cloud Bilille implies unreserved acceptance of this charter, as well as the charters defined more specifically by the Mesocenter of Lille (<https://ssi.univ-lille.fr/chartes>).

If you need advice on how to use the Cloud Bilille, please contact the platform at bilille@univ-lille.fr.

Creation and Use of Virtual Machines, Volumes, and Snapshots

- **The name of your virtual machines, volumes, and snapshots** must be preceded by the first letter of your first name and your full last name. This way, any user can identify you and contact you if you are using resources they might need.
- **Resource Allocation:** Be sure to adapt the number of computing cores, memory and storage to your needs. Do not allocate more resources than necessary to avoid penalizing other users.
- **Port Opening:** Only open the ports and IP addresses that are essential for accessing the virtual machine (access and security).
- **A virtual machine should be launched for a specific duration.** This duration is not imposed but corresponds to the time needed to perform calculations and analyses. Once the calculations are completed, the user must delete the virtual machine to free up resources for other users. Note that there is currently no scheduler for managing cloud resources. It is therefore important that the user of a resource releases it for other users when it is no longer needed.
- **Creating Snapshots:** If you have configured a virtual machine that you will not need for a while but will be useful later, you can create a snapshot of the machine and delete its instance to free up the reserved resources. However, note that the snapshot will be usable by all "bilille-users" in the cloud. Therefore, do not store private data in it. Also, delete your snapshots as soon as they are no longer useful. It is also possible to request the creation of an image from a snapshot at hpc@univ-lille.fr, which can be private (visible only to the owner project), shared (visible to one or more projects), or public (visible to all projects). Images are generally less bulky than snapshots.
- **Preliminary Tests:** Tests or program installations should be performed on low-powered virtual machines (few CPUs, little RAM) to avoid reserving resources unnecessarily. Once the programs are installed, it is possible to create a snapshot of the virtual machine to start a more powerful one from this snapshot. As soon as your datasets are ready, calculations can be run on virtual machines with sufficient power to carry them out. It is also recommended to test your programs on small datasets before running them on large datasets and to split large datasets to be processed, if possible.
- **Creation and Deletion of Persistent Storage Volumes:** It is possible to create a persistent storage volume associated with the virtual machine. This volume and the data it contains are not deleted when the virtual machine is deleted. However, this volume must be deleted once you have retrieved the data after the calculations. All cloud storage should be only considered as "temporary" and should not be used for long-term data storage. This is not permanent storage.

- **Information Tool:** In the "Information" section of the main menu, the "Alerts," "Supervision," and "My Resources" tabs should be consulted regularly to detect anomalies in resource use and open accesses.

Need for Additional Resources

You can send an email to the list of Cloud Bilille users (bilille-cloud-users@univ-lille.fr) to request the release of specific resources. If there is no response within two days, you can contact the administrators (hpc@univ-lille.fr). The administrators can check the effective use of the required virtual machines and delete unused machines. You can also contact directly a user using a specific virtual machine to agree on resource allocation.

Data Usage and Confidentiality

- You agree to use Bilille's computational and storage resources only for professional purposes and not for personal use.
- You are responsible for the confidentiality of your data. Information and procedures for data confidentiality are available at <https://hpc-doc.univ-lille.fr/docs/category/cloudopenstack>. In particular, it is strictly forbidden to use patient data on Bilille resources as the IT department of the University of Lille is not approved for health data storage.

Other User Obligations

- **Publication or Communication of Your Results:** You must inform bilille@univ-lille.fr and hpc@univ-lille.fr of any publication or communication resulting from work that required the use of Cloud Bilille. You must also explicitly acknowledge Bilille and the intensive computing center of the University of Lille in these publications/communications.
- **Change of Email Address:** You must inform the cloud administrators (hpc@univ-lille.fr) and Bilille (bilille@univ-lille.fr). An invalid email will result in the deletion of the user's account.
- **Malfunction:** You must inform the cloud administrators (hpc@univ-lille.fr) of any malfunction related to the use of the cloud.

Account Closure

The request must be sent jointly to Bilille (bilille@univ-lille.fr) and the cloud administrators (hpc@univ-lille.fr).

Risks and Sanctions

Any user uses Bilille's resources at their own risk. Neither Bilille nor the cloud administrators can be held responsible in case of data loss, confidentiality loss, or errors in calculations. All cloud storage is considered "temporary" and offers no guarantee of data integrity.

In case of non-compliance with this charter and the charters of the Mesocenter of Lille, your account may be deleted without delay.

Charter Modification

In case of modification of this document, you will be informed by email. As a user, you can suggest improvements to bilille@univ-lille.fr.