

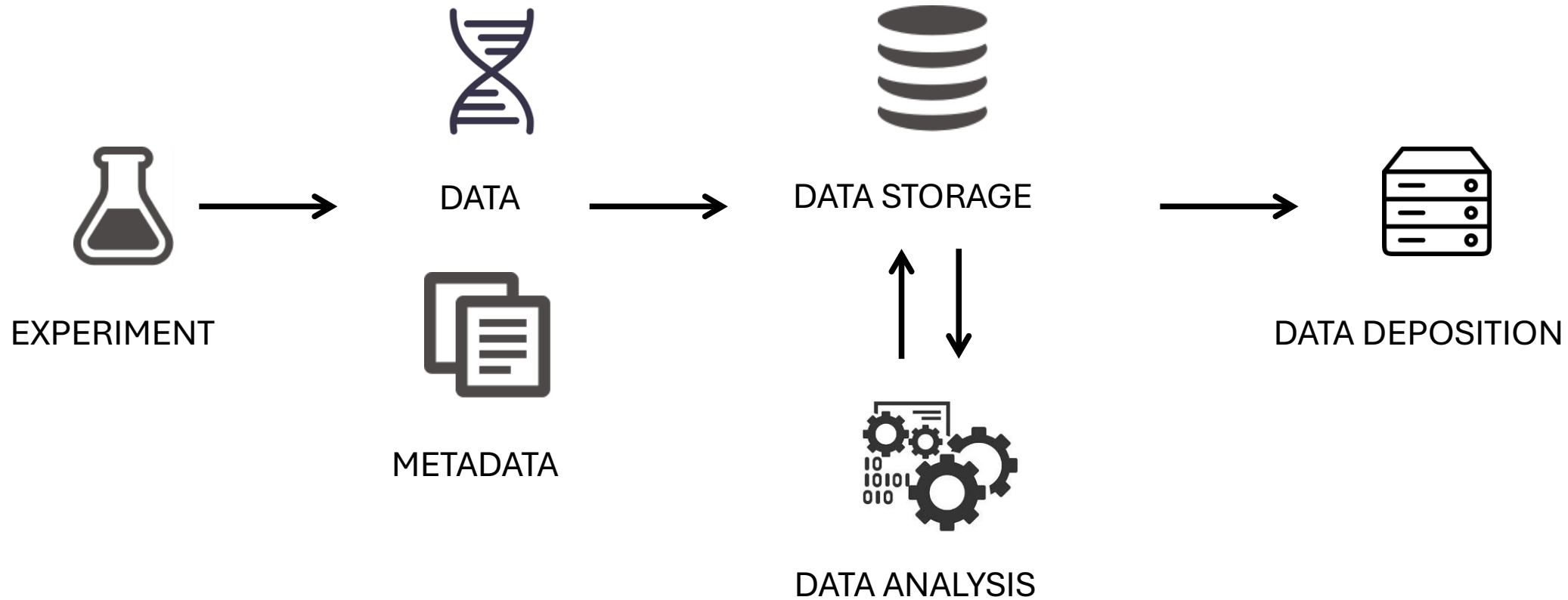


Local NMBU storage



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Data storage – from the researcher perspective



Storage of Research Data without personal information - tools

- **Research Data** generated in ongoing projects should normally be stored at the LargeFile server (W: or P:).
- **External cooperation (should not be used as the primary place for storage):** Sharing data using Office365 and OneDrive – NMBU services

LargeFile
server W:



Where to storage all these data?

NMBU has a set of file directory / areas for different proposes:





Home directory: OneDrive for Business - Norwegian University of Life Sciences (~ 1Tb)



Common directory (Y:) It serves to share data with intra faculty members

LargeFile area (W:)

Area for storing large amounts of data (> 1Tb)

- >  Research Home (J:)
- >  Research Project (P:)
- >  Research Home (W:)
- >  Public (Y:)

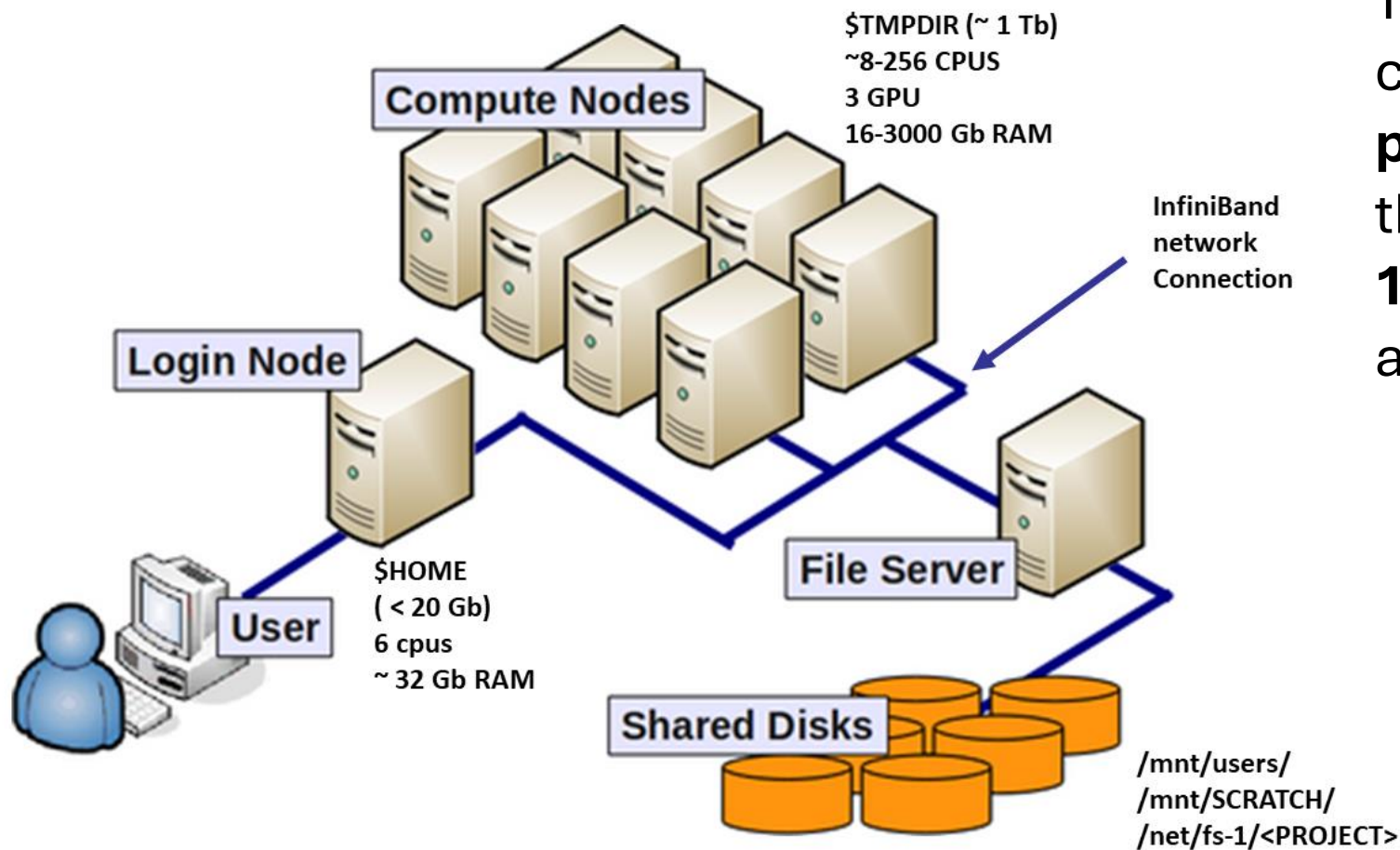
NMBU Full-managed client.

LabFile area (P:)

Area for storing data from Lab Machines.

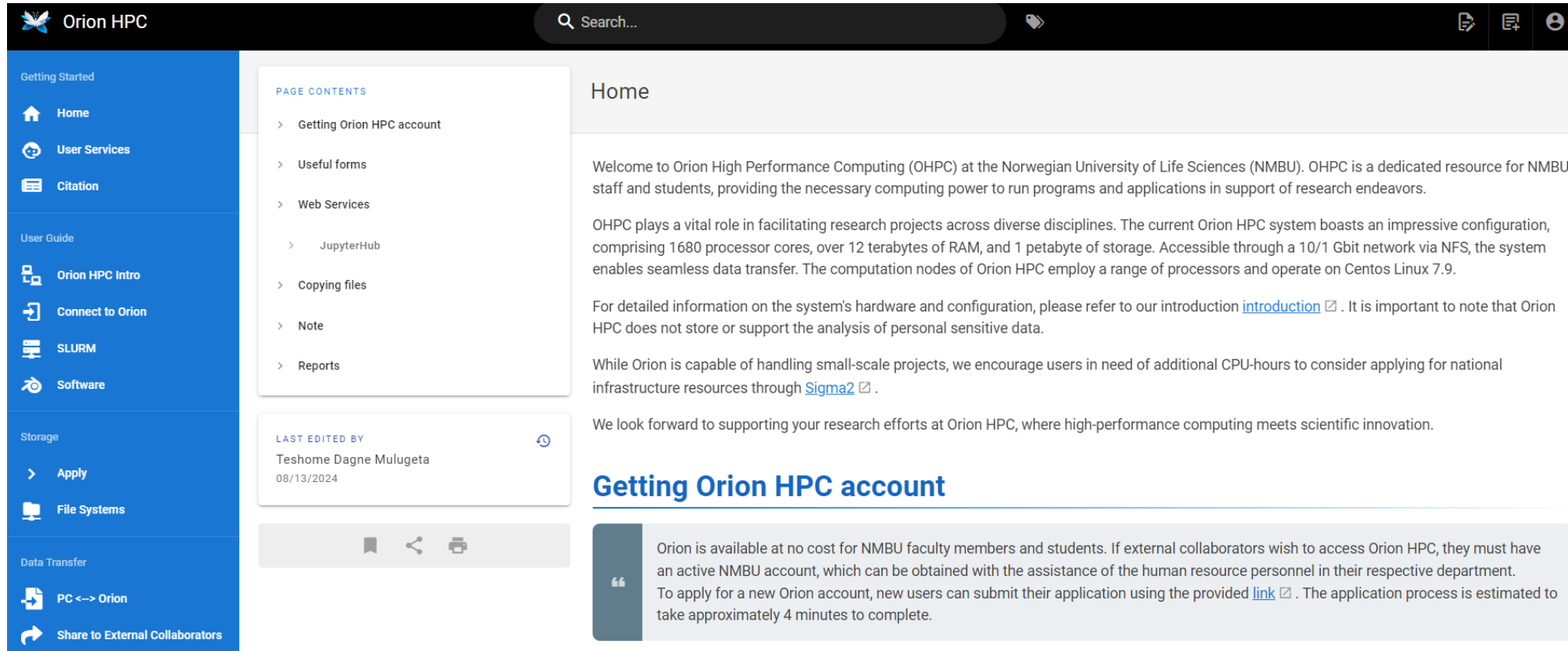
<https://nmbuhjelp.nmbu.no/>

Access to the NMBU High-Performance Computing (HPC) grid Orion



The Orion HPC system currently consists of **1680 processor cores** with more than **12 terabytes of RAM** and **1 Pb of storage** accessible on a 10/1 Gbit network via NFS.

How can I get access to Orion?



The screenshot shows the Orion HPC website. The top navigation bar includes the Orion HPC logo, a search bar, and icons for document, list, and user. The left sidebar is divided into sections: 'Getting Started' (Home, User Services, Citation), 'User Guide' (Orion HPC Intro, Connect to Orion, SLURM, Software), 'Storage' (Apply, File Systems), and 'Data Transfer' (PC <--> Orion, Share to External Collaborators). The main content area is titled 'Home' and contains a 'PAGE CONTENTS' sidebar with links to 'Getting Orion HPC account', 'Useful forms', 'Web Services', 'JupyterHub', 'Copying files', 'Note', and 'Reports'. The main text area welcomes users to Orion High Performance Computing (OHPC) at NMBU, describes the system's capabilities (1680 processor cores, 12 terabytes of RAM, 1 petabyte of storage), and provides information on how to get an account. A 'Getting Orion HPC account' section highlights that access is free for NMBU faculty and students, and provides a link for external collaborators. A QR code is located in the bottom right corner of the page.

Orion HPC

Search...

Getting Started

- Home
- User Services
- Citation

User Guide

- Orion HPC Intro
- Connect to Orion
- SLURM
- Software

Storage

- Apply
- File Systems

Data Transfer

- PC <--> Orion
- Share to External Collaborators

PAGE CONTENTS

- Getting Orion HPC account
- Useful forms
- Web Services
- JupyterHub
- Copying files
- Note
- Reports

Home

Welcome to Orion High Performance Computing (OHPC) at the Norwegian University of Life Sciences (NMBU). OHPC is a dedicated resource for NMBU staff and students, providing the necessary computing power to run programs and applications in support of research endeavors.

OHPC plays a vital role in facilitating research projects across diverse disciplines. The current Orion HPC system boasts an impressive configuration, comprising 1680 processor cores, over 12 terabytes of RAM, and 1 petabyte of storage. Accessible through a 10/1 Gbit network via NFS, the system enables seamless data transfer. The computation nodes of Orion HPC employ a range of processors and operate on Centos Linux 7.9.

For detailed information on the system's hardware and configuration, please refer to our introduction [introduction](#). It is important to note that Orion HPC does not store or support the analysis of personal sensitive data.

While Orion is capable of handling small-scale projects, we encourage users in need of additional CPU-hours to consider applying for national infrastructure resources through [Sigma2](#).

We look forward to supporting your research efforts at Orion HPC, where high-performance computing meets scientific innovation.

Getting Orion HPC account

Orion is available at no cost for NMBU faculty members and students. If external collaborators wish to access Orion HPC, they must have an active NMBU account, which can be obtained with the assistance of the human resource personnel in their respective department. To apply for a new Orion account, new users can submit their application using the provided [link](#). The application process is estimated to take approximately 4 minutes to complete.

<https://orion.nmbu.no/>

Free for all NMBU community 😊



Virtual GUI services Orion offers



Server Options

Simple

Advanced

Partition

smallmem
without AVX2
(x86_86)
Partition:
smallmem

**RStudio
users
(x86_86)**
Partition:
RStudio

hugemem
(x86_86)
Partition:
hugemem

GPU (x86_86)
Partition: gpu

BIN320
Course
(x86_86)
Partition: test

CPUs

1 core

2 cores

4 cores

8 cores

Options

Jupyter environment: CentOS Linux release 7.9.2009 (Core) ▾

Launch JupyterLab: ☒

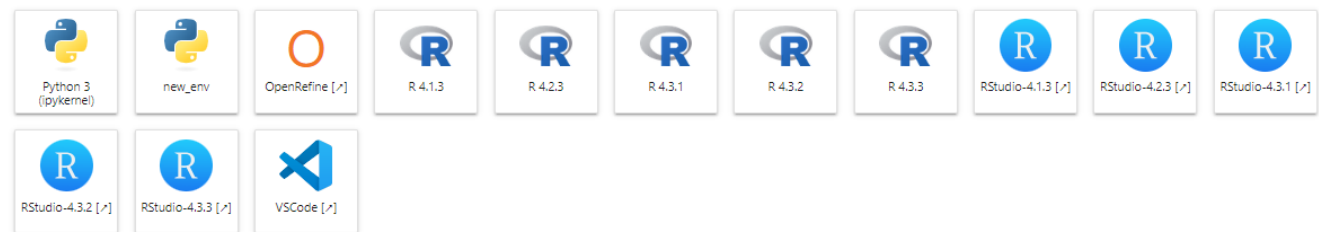
Job duration: 2 hours ▾

Available resources

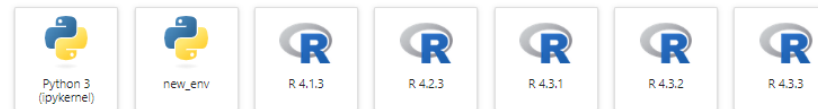
Partition	Idle CPU cores	Idle nodes
smallmem	102 / 192	1 / 6
RStudio	43 / 64	0 / 2
hugemem	12 / 112	0 / 2
gpu	56 / 64	0 / 1
test	254 / 256	0 / 1

Start

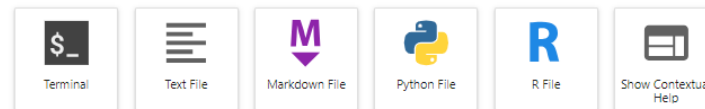
Notebook



Console



Other



Example - Data flow/handle using ELIXIR Norway

