Local NMBU storage

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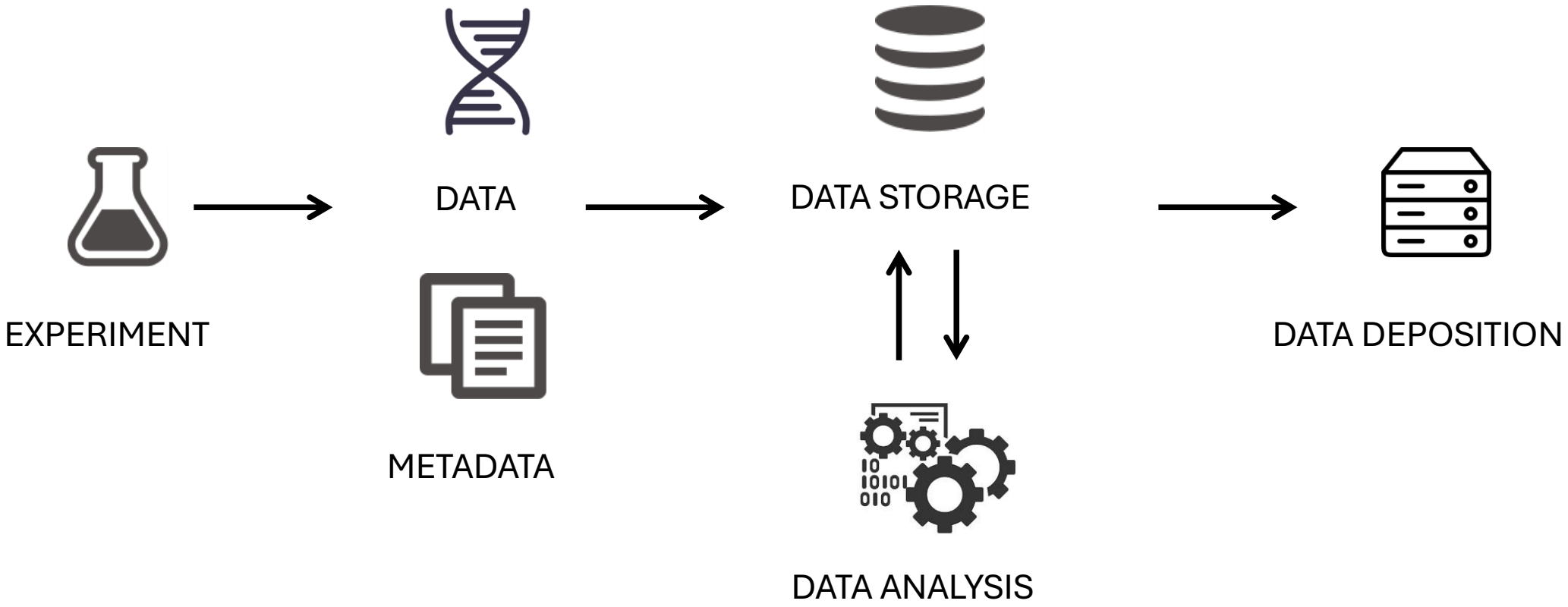
Data storage – from the researcher perspective



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 (<u>should not be</u> used as the primary place for storage):** Sharing data using Office365 and OneDrive – NMBU services

LargeFile server W:

Where to storage all these data?

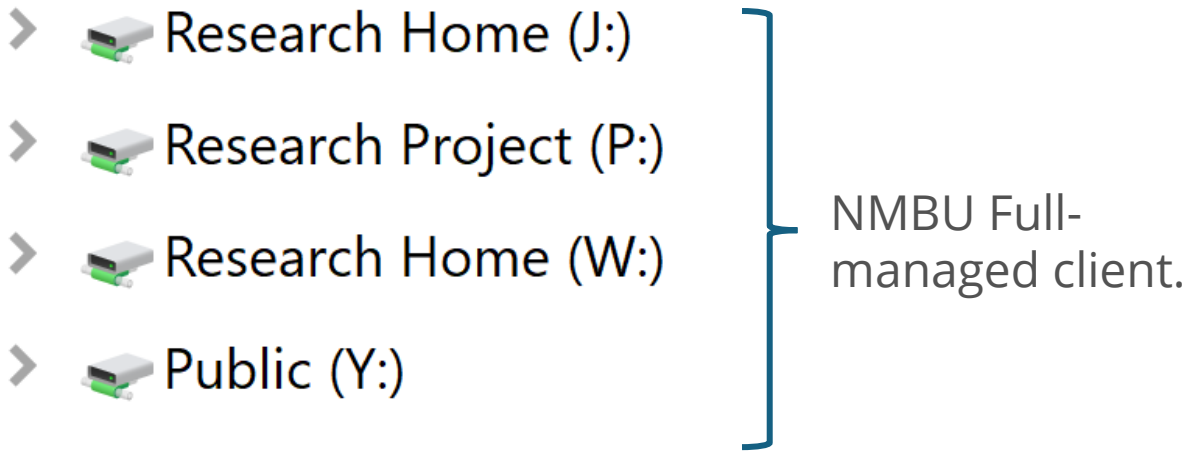
NMBU has a set of file directory / areas for different proposes:

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

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

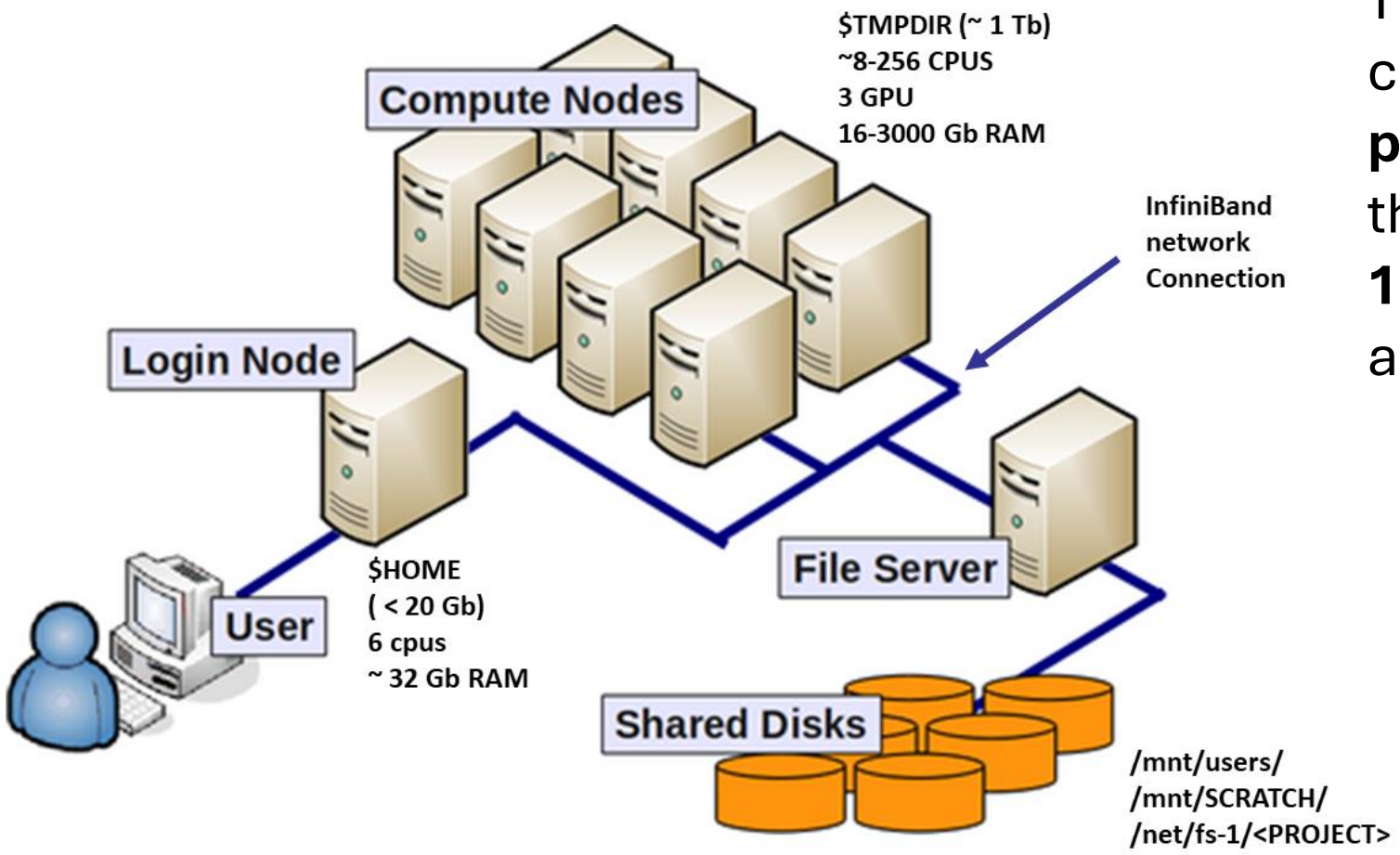
LargeFile area (W:)
Area for storing large amounts of data (> 1Tb)

LabFile area (P:)
Area for storing data from Lab Machines.



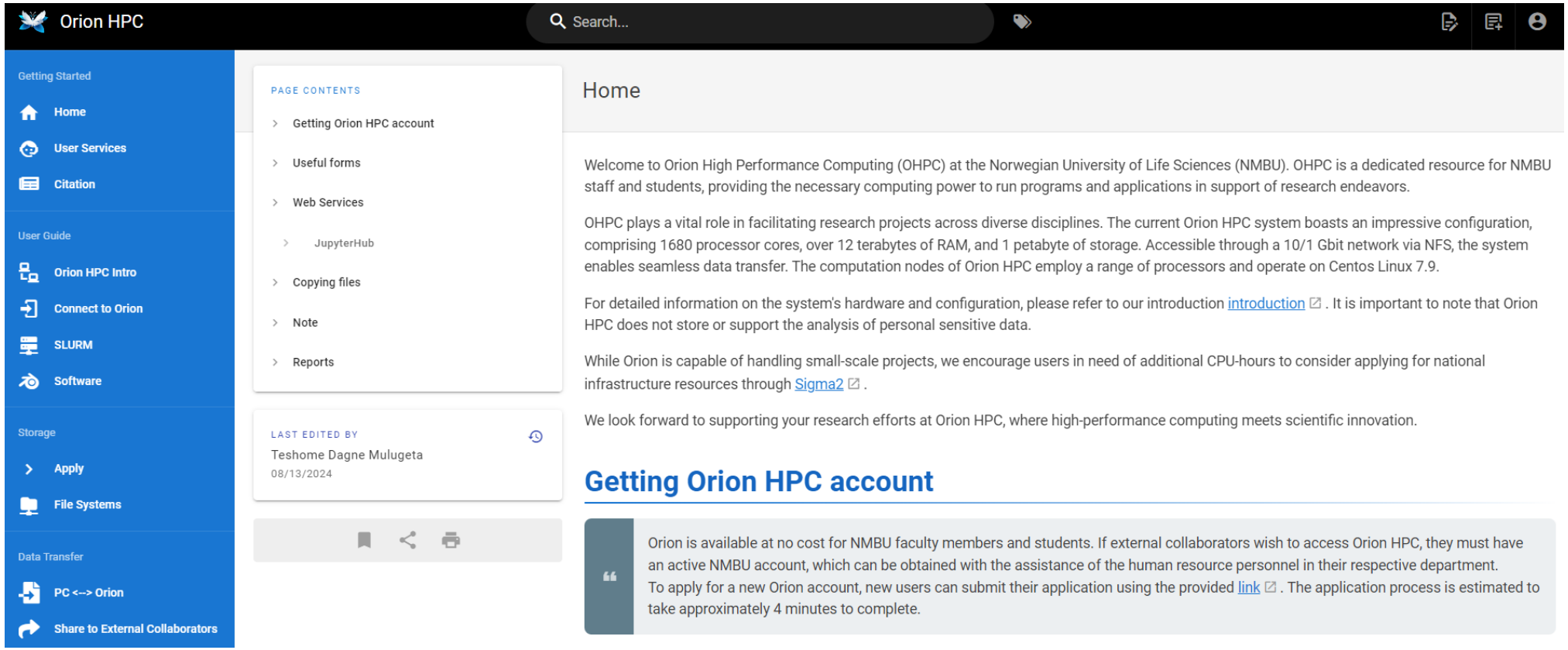
https://nmbuhjelp.nmbu.no/

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?



https://orion.nmbu.no/

Free for all NMBU community ☺

Virtual GUI services Orion offers

jupyterhub

A multi-user version of the notebook designed for companies, classrooms and research labs

RStudio®

Server Options

Simple | Advanced

Partition

smallmem without AVX2 (x86_86)	RStudio users (x86_86)	hugemem (x86_86)	GPU (x86_86)	BIN320 Course (x86_86)
Partition: smallmem	Partition: RStudio	Partition: hugemem	Partition: gpu	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

Python 3 (ipykernel) | new_env | OpenRefine [↗] | R 4.1.3 | R 4.2.3 | R 4.3.1 | R 4.3.2 | R 4.3.3 | RStudio-4.1.3 [↗] | RStudio-4.2.3 [↗] | RStudio-4.3.1 [↗]

RStudio-4.3.2 [↗] | RStudio-4.3.3 [↗] | VSCode [↗]

Console

Python 3 (ipykernel) | new_env | R 4.1.3 | R 4.2.3 | R 4.3.1 | R 4.3.2 | R 4.3.3

Other

Terminal | Text File | Markdown File | Python File | R File | Show Contextual Help

Example - Data flow/handle using ELIXIR Norway