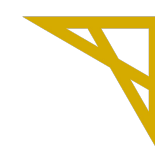




**University  
of Manitoba**



**Digital Research  
Alliance** of Canada

# Introduction to OpenOnDemand: Running jobs using the Job Composer

Ali Kerrache

HPC Specialist

UManitoba Autumn 2025 HPC and Cloud computing workshop - October 14–17, 2025

## How to use OpenOnDemand portal?

- How to connect to OOD?
- What you can do with OOD?
- Working with the files: **file browser**
- File transfer
- Applications
- Job composer: **templates**
- Jobs and metrics



**GREX, HPC AT THE UNIVERSITY OF MANITOBA**

OPEN ONDEMAND

OnDemand provides an integrated interface to your HPC resources.

**Message of the Day**

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***** IMPORTANT NOTICE *****

* High Performance Computing
  Join us for the spring 2022
  researchers from Manitoba institutions. The workshop will be
```

**Desktops**

- GreX Desktop
- GreX Desktop Simplified

**GUIs**

- BIRCH
- Feko
- GaussView
- MATLAB (CCEnv)
- MATLAB (SBEnv)
- MetashapePro
- OVITO
- RELION
- Stata 15.0
- Stata 18.0

**Servers**

- Code Server
- JupyterLab Server (CCEnv)
- MATLAB Server
- RStudio Server (CCEnv)
- RStudio Server (SBEnv)



## Sign in to your account

Username or email

username

Password

.....



Sign In

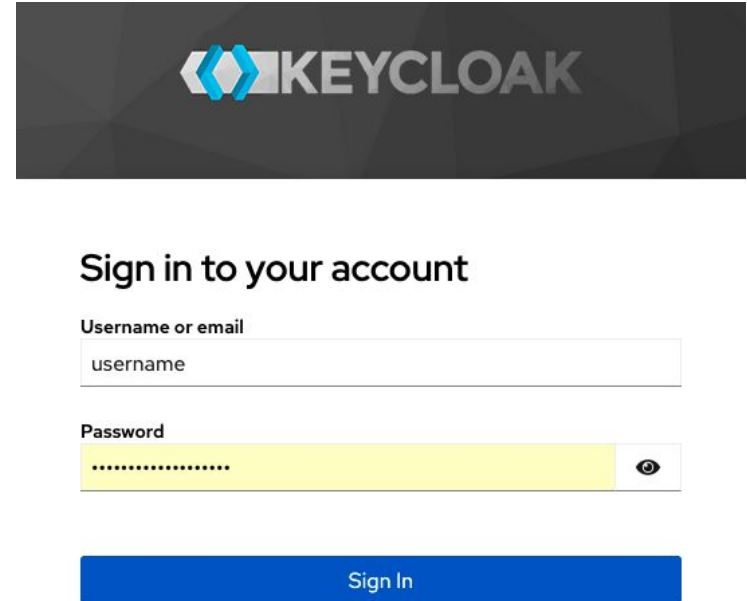
**Access to:** Desktops, Jupyter,  
Terminal, Jobs, Queue view, Jobs, ...

<https://um-grex.github.io/grex-docs/ood/>

Walk through OOD interface  
and its functionalities

URL: <https://ood.hpc.umanitaoba.ca>

- Requires Grex account: same as Alliance account.
- Requires IST VPN if used outside UM network.



KEYCLOAK

Sign in to your account

Username or email

Password

Sign In



OnDemand provides an integrated, single access point for all of your HPC resources.

- ◆ **Open OnDemand:** main dashboard
- ◆ **Apps:** link to available applications
- ◆ **Files:** file browser
- ◆ **Jobs:** links to active jobs and job composer
- ◆ **Clusters:** grex status and partition
- ◆ **Interactive Apps:** list of applications

[Open OnDemand](#) [Apps ▾](#) [Files ▾](#) [Jobs ▾](#) [Clusters ▾](#) [Interactive Apps ▾](#) [</> ▾](#) [? ▾](#) [user icon](#) [share icon](#)

# GREX, HPC AT UMANITOBA

## OPEN ON DEMAND PORTAL

OnDemand provides an integrated, single access point for all of your HPC resources.

### Pinned Apps

-  Grex Desktop Simplified
-  JupyterLab Server (CCEnv)
-  MATLAB Server
-  RStudio Server (SBEnv)

---

 All Apps

- Access to storage: home, project directories
- Create new directories and files
- View and edit text files
- Upload or download files
- Delete data: files or directories
- Copy or move files and directories
- Access to a path
- Open a terminal to a selected directory
- A link to globus



- Access to active jobs
- Job metrics
- Job composer

🕒 Active Jobs

A Grex JobComposer

🕒 Jobs Metrics

Open OnDemand

Apps ▾

Files ▾

Jobs ▾

Clusters ▾

Interactive Apps ▾



⌕ ▾

🔍 ▾



## Active Jobs

All Jobs ▾

All Clusters ▾

Show  entries

Filter:

ID

Name

User

Account

Time Used

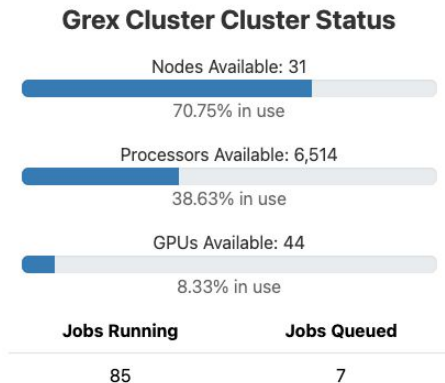
Queue

Status

Cluster

Actions

- Partition status
- System status
- Access to a terminal



Partition Status				2025-05-18
Partition	Free Nodes	Free Cores	Free Mem	
✓ agro	2	48	247.7	
✓ agro-b	2	48	247.7	
✓ chrim	4	768	746.1	
✓ chrmlm	1	192	1502.3	
✓ genlm	1	276	1497.6	
✓ genoa	4	2287	748.3	
✓ genoacpu-b	9	1750	1503.9	
✓ gpu	0	0	145.3	
✓ largemem	8	418	371.9	
✓ livi	0	40	1353.9	
✓ livi-b	0	40	1353.9	
✓ mcordcpu	4	790	1503.9	
✓ mcordgpu	2	64	499.0	
✓ mcordgpu-b	2	64	499.0	
✓ skylake	0	1485	175.2	
✓ stamps	3	96	178.5	
✓ stamps-b	3	96	178.5	
✓ test	1	18	496.7	

1 to 18 of 18

[Grex documentation - Partitions](#)

## Desktops

-  Grex Desktop
-  Grex Desktop Simplified


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- Desktops
- GUI applications
- Servers

## Desktops

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## Servers

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# How to start an application

- Desktops
  - ◆ Grec Desktop
  - ◆ Grex Simplified Desktop
- GUI applications
  - ◆ MATLAB, Gaussview, OVITO, ParaView, ...
- Servers
  - ◆ Jupyter
  - ◆ RStudio

<https://um-grex.github.io/grex-docs/ood/>

Top Application ▾ History

 Home Directory  Shell Access  Open OnDemand

## 01 - Generic



MPI



OpenMP



SLURM

## 02 - Applications



Gaussian



GROMACS



LAMMPS



ORCA



R

*Thank you for your attention*

*Any question?*