

The New Web Portal for HMS' O2 Cluster: Simplifying the Experience of High Performance Computing with Open OnDemand

CCB SEMINAR – 6/27/22



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RESEARCH COMPUTING

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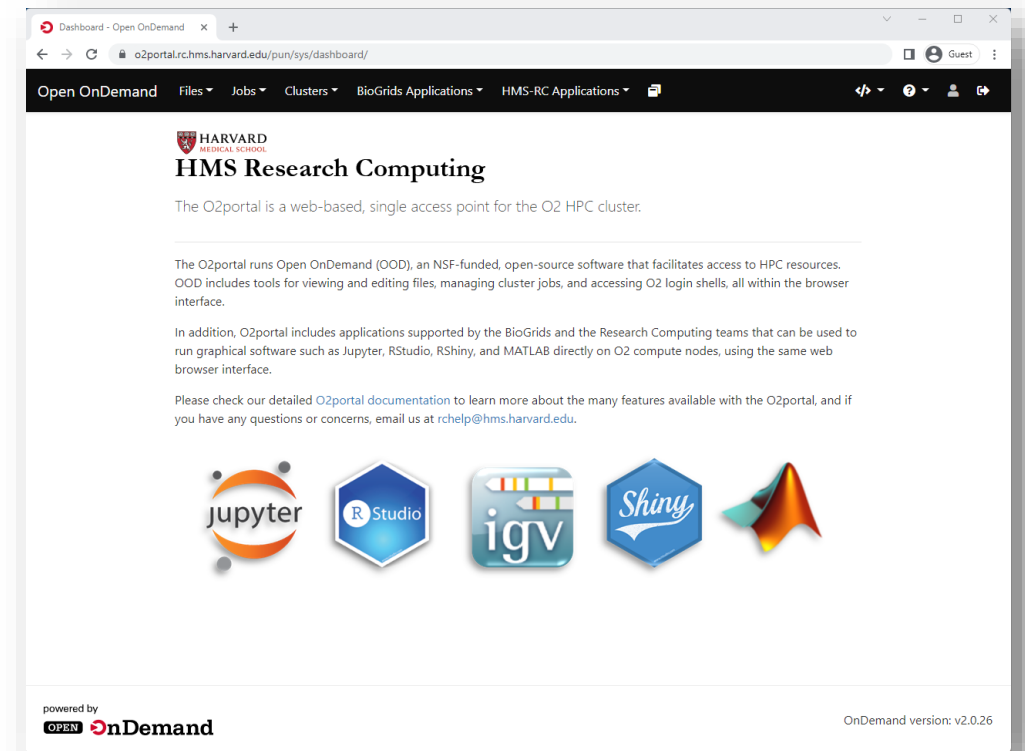
Agenda

- General Overview
- Open OnDemand Pilot – Highlights
- Access to O2 Portal
- Features and Documentation



Overview

- O2 Portal is web-based, single access point for the O2 HPC cluster
- Powered by Open OnDemand
 - [Hudak et al. \(2018\)](#)
 - NSF-funded
 - Open-source



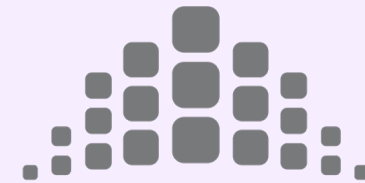
Open OnDemand Pilot – positive response from testers



**40+ Beta Testers
18 Labs/Groups**



**BioGrids & HMS-RC
Applications**



**1,130 jobs in the
last 6 months**



Open OnDemand Pilot – positive feedback

“My experience with the pilot has been overall really positive. It’s a nice intuitive UI that makes it easy to submit the jobs.” - Neurobiology researcher

“I haven't noticed a difference in latency when running RStudio via OOD or on my local machine. This opens up a slew of uses for O2 that didn't exist before.” - Center for Computational Biomedicine staff

“This is such an incredible resource for the users, and I am very excited about it” - Genetics researcher

“I've been telling other members of my lab about it.... I know a lot of people who are going to want to use it.” - Genetics researcher

“I’m thrilled to be able to use this [graphical] pipeline now on O2. I’m able to log onto OOD and the ClearMap viewer worked perfectly... This has been soooo helpful.” – Neurobiology researcher

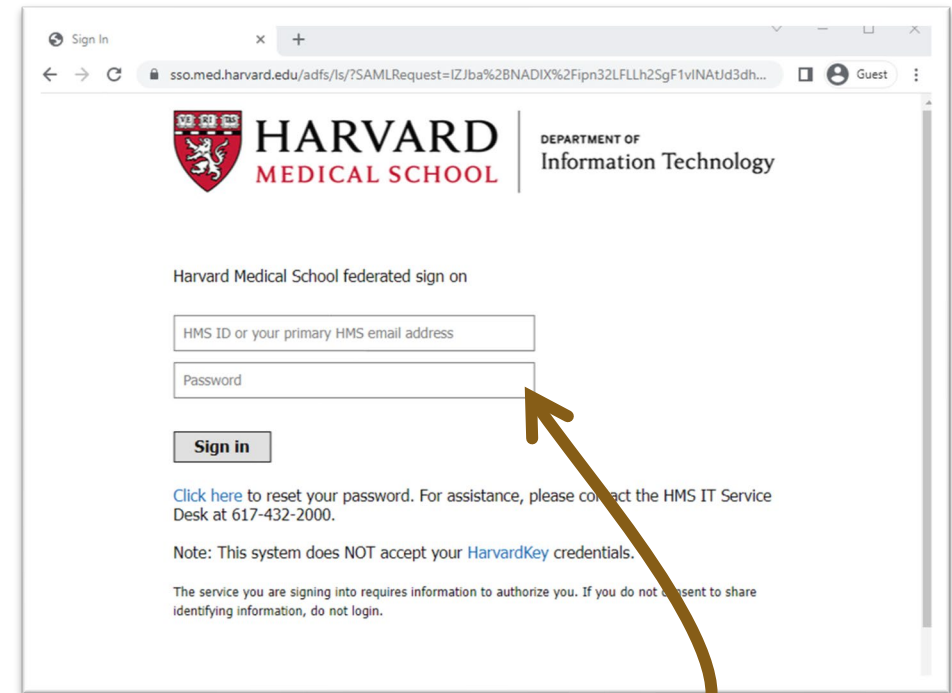
“I really like the drag-and-drop file transfer — it’s very convenient” - Systems Biology researcher



Access to O2 Portal


Requirements

- O2 account
- Setup 2FA authentication



Sign In

sso.med.harvard.edu/adfs/ls/?SAMLRequest=IZJba%2BNADIX%2Fipn32LFLh2SgF1vINAUd3dh...

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DEPARTMENT OF
Information Technology

Harvard Medical School federated sign on

Sign in

[Click here](#) to reset your password. For assistance, please contact the HMS IT Service Desk at 617-432-2000.

Note: This system does NOT accept your [HarvardKey](#) credentials.

The service you are signing into requires information to authorize you. If you do not consent to share identifying information, do not login.

Authenticate with HMS ID



VPN is not required



Transfer Files



Submit Jobs



Monitor Jobs

2Portal

Terminal



View/Edit Files



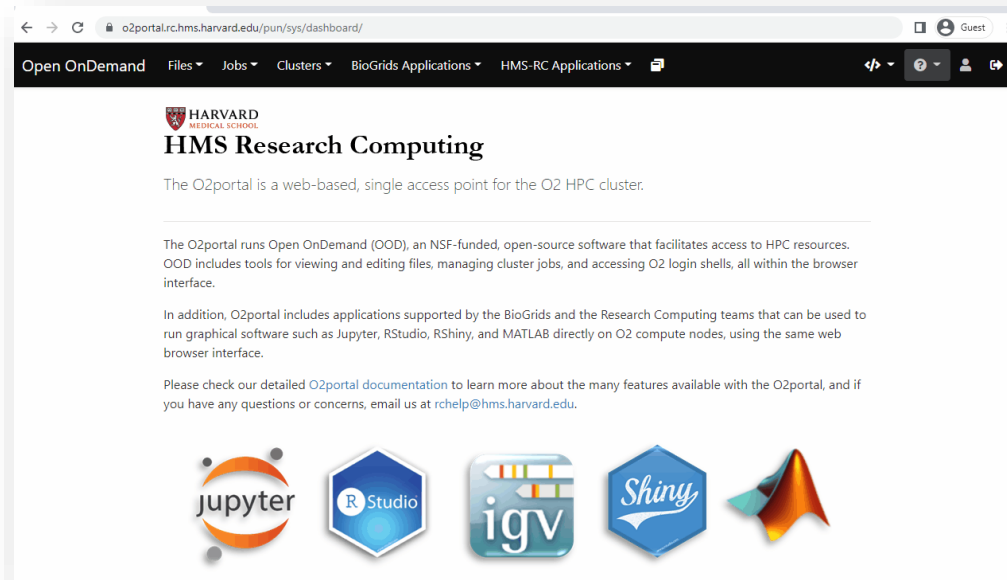
Applications



Applications



Documentation



O2 Portal Documentation in Confluence – ([Link](#))

How to use HMS RC Desktop App

O2Portal - Jupyter App

HMS - RStudio on O2

O2Portal



Created by William (Gaby) Rodriguez

Last updated: Jun 09, 2022 by Amir Karger • 4 min read • 8 people viewed

- [How to login to O2Portal](#)
- [Features available in O2Portal](#)
- [Computational Applications available in O2Portal](#)
 - [HMS Research Computing Applications](#)
 - [BioGrids Applications](#)
- [F.A.Q.](#)

The O2Portal runs Open OnDemand (OOD), an NSF-funded, open-source software that facilitates access to HPC resources. Open OnDemand was created and is maintained by the Ohio Supercomputer Center.

The O2Portal provides easy access to HMS' O2 cluster and includes tools for viewing/editing files, managing cluster jobs, accessing login shells and more, entirely via the same single-sign-on web-based interface.

How to login to O2Portal

⚠ You must have an [O2 account](#) in order to use the O2Portal



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Demo

<https://o2portal.rc.hms.harvard.edu/>

