THE MOC ALLIANCE

Pioneering Open-Source Cloud Computing

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The MOC Alliance is a partnership between higher education, government, and industry designed to enable an open-source production cloud. The goal of this collaboration is to provide predictable low-cost resources and facilitator support for researchers, and promote innovation in the public cloud. Housed at the Rafik B. Hariri Institute for Computing and Computational Science & Engineering, the MOC Alliance is operated by Boston University and Harvard University.

100+ GPUs

500+ SERVERS

156PB STORAGE

CONNECT WITH US!

MOC Alliance

@MassOpenCloudAlliance

@MOC_Alliance

www.massopen.cloud

A PUBLIC RESEARCH CLOUD

The Mass Open Cloud (MOC) Alliance enables the same rich interactions between research, development, and production that are common to today's public clouds, by creating an open-source production cloud that is uniquely designed for research. The MOC Alliance provides an attractive alternative to commercial cloud vendors that engages a broad community of domain and system researchers and open-source developers, in a cost-effective, research-focused environment.

MOC Alliance provides open-source production cloud services through the New England Research Cloud (NERC); a production cloud, operated by BU and Harvard Research IT, built on the strong foundation of the Massachusetts Green High Performance Computing Center (MGHPCC).

The NERC can benefit you if your research has outgrown your local computing resources and are looking for a cloud solution. The NERC enables researchers access to hardware and other resources at a low cost.

To use the NERC, please reach out by email at help@mghpcc.org or start a ticket at the MGHPCC Support Center.

"The NERC was an attractive option as we searched for a cloud solution for remote computation of our experiments. We wanted a flexible environment that we could expand as the project grew. The NERC offered a convenient platform for our software to run on. It is important to support a resource like the NERC to make sure it will stay available for other researchers."

Andreas Plesch, Senior Research Scientist, Harvard University

NERC SERVICES

The NERC offers storage and application services designed to facilitate research.

Virtual Machines (VMs) and Containers

- Provides you with environments to run your research programs.

Storage

- Provides object and block storage for all of your research data.

AI-as-a-Service

- Red Hat OpenShift AI allows you to access a suite of compiled tools and services including:
  - Less time managing AI infrastructure
  - Tested and supported AI/ML tooling
  - Flexibility across the hybrid cloud
  - Red Hat Consulting and Red Hat Open Innovation Labs services and best practices
  - Hosting of Jupyter Notebooks with GPUs

NERC BENEFITS

Elastic Storage

- The NERC allows access to the fastest resources and hardware on-demand, where you'll only be charged for the resources you use.

Cost Effective

- NERC services are offered at a significantly lower rate than those offered by commercial cloud vendors. There are no egress charges.

Facilitation

- The NERC provides live support for any complications you may have accessing NERC resources.

Customizable Environments

- The NERC offers a fully customizable platform to accommodate any of your research needs.

Ease of Use

- Setting up your research environment on the NERC is easy and simple, you can get started on the NERC today!