

The Mass Open Cloud (MOC)  
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While cloud computing is transforming society, today's public clouds are black boxes, implemented and operated by a single provider that makes all business and technology decisions. The Massachusetts Open Cloud (MOC) is a new public cloud project based on alternative marketplace-driven model of a public cloud - that of an Open Cloud eXchange (OCX) - where many stakeholders (including multiple academic institutions) can participate in implementing and operating a shared open cloud. It is a collaboration between the Commonwealth of Massachusetts, universities (Boston University, Northeastern, MIT, Harvard and UMass), and industry (Red Hat, NetApp, Cisco, Intel, and TwoSigma).

A increasing focus of the MOC is on Data Analytics / AI workloads with Data Science Initiatives starting or growing at many academic institutions. These workloads are poorly served by today's institutional HPC clusters and individual research groups are challenged to set up the infrastructure and software stacks needed. As a result, the only viable alternative for many research groups is to use today's public clouds, with the attendant high cost and vendor lock in. We describe the vision and the status of the MOC and the key initiatives going on to support data driven science. We will announce and describe the new OpenDataHub initiative by Red Hat on the MOC. OpenDataHub is intended to become a flexible platform to enable the Research and Open Source communities to access AI capabilities on an Open Source stack with a level of service-abstraction comparable to the public clouds.