

Plugin Architecture for The Massachusetts Open Cloud GUI (MOC)

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Outline

- Concepts
 - ▣ MOC-UI
 - ▣ HaaS
- Tools
 - ▣ Django (Python, HTML, Javascript)
- Sprint 1 – Demo
- What's next

MOC-UI

- ❑ Massachusetts Open Cloud
 - ▣ Open Cloud eXchange (OCX)
 - ▣ Customizable approach to Cloud Computing
- ❑ User Interface
 - ▣ Simpler for researchers and developers
 - ▣ Web app to manage and maintain projects and clusters on the MOC
 - ▣ Plugin architecture



HaaS

- ❑ Hardware as a Service
- ❑ Components:
 - ▣ Project: create/delete
 - ▣ Headnode: load base image, start/stop
 - ▣ Node: attach/detach
 - ▣ Networks: create/delete, set access

Django

- ❑ Python Web Application Framework
- ❑ Uses MVC architectural pattern:
- ❑ Why Django?
 - ▣ Free/open source
 - ▣ Efficient
 - ▣ Modularized:
 - Allows separation of concerns/parallel development

Sprint 1

- ❑ Learned about HaaS (~7 hours)
- ❑ How to use django (~5 hours)
- ❑ Designed UI and Templates (~4 hours)
- ❑ Implemented UI without HaaS integration (~12 hours)
- ❑ [DEMO]

What's Next

- ❑ Complete the UI
- ❑ Run development server of HaaS
- ❑ Integrate HaaS API calls

Q & A!