Deploying the ATLAS Metadata Interface in the cloud with Jenkins

The ATLAS Metadata Interface\(^1\) (AMI) is a mature application of more than 15 years of existence. Recently we developed a Jenkins-based system to on-demand deploy and monitor AMI in the cloud.

**What is AMI?**
AMI is a generic framework to quickly design **metadata-oriented** applications. It provides facilities for aggregating and searching data with easy-to-use web interfaces and lightweight clients.

**Deployment system’s benefits**
- Dedicated web application to centralize:
  - cloud server administration,
  - application deployments.
- Jenkins has made on-demand deployment possible.

**AMI Infrastructure**
- **Web front**
- **AMI Web framework** (HTML5/JavaScript)
- **AMI Web**
- **AMI databases**
- **AMI tasks**

**Deployment workflow**
- **AMI infrastructure DB**
- **REST API**
- **Jenkins**
- **Cloud module**
- **Jenkins module**
- **job management**
- **cloud management**
- **build and deployment**
- **To optimize availability and reliability**
- **To improve scalability**

**Web 2.0 interfaces**
- **Monitoring**
- **Cloud node management**
- **Jenkins triggered by AMI**
  - **Installed application view**