The ATLAS Metadata Interface (AMI) has existed for over 10 years. Recently we have adapted the application to modern technologies; in particular JQuery, Twitter Bootstrap and an OpenStack cloud infrastructure.

AMI provides a framework for web application development.

- Used technologies:
  - JQuery
  - Twitter Bootstrap
  - AJAX and JSON

- Main features:
  - Internal content management system (CMS)
  - Authentication (certificates or credentials)
  - Authorization (high role granularity)
  - Dynamic application loading

AMI Java server overview

- SQL, MQL, Connections, transactions, JDBC drivers
- RESTful sub-system
- RESTful servlet
- Apache Tomcat
- Command sub-system
- Command servlet

* Metadata Query Language

Web 2.0 in AMI

- Common login interface
- Dynamic custom dashboards

AMI infrastructure

- 2 task servers
- 7 tomcat servers
- 1 integration server
- MySQL cluster
- Oracle cluster
- Load balancing

- CCIN2P3
- CERN
- ~3000 users
- Web 2.0 clients
- Python 2.X, 3.X clients
- C/C++, Java clients...

AMI Web framework

Official ATLAS applications

- Dataset Discovery: search for real and simulated data
- Tag Collector: software release management
- AMI-Tags: processing history for datasets
- etc...

Metadata search engines

Navigation trees

High level administration applications