The ATLAS Metadata Interface (AMI) is a mature application of more than 15 years of existence. Mainly used by the ATLAS experiment at CERN, it consists of a very generic tool ecosystem for metadata aggregation and cataloging.

**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.

**AMI Web framework**
AMI provides a Web 2.0 framework.

- Technologies:
  - HTML5, CSS3
  - JavaScript, jQuery
  - Twitter Bootstrap

- Main features:
  - Components
  - Applications and sub-applications
  - Model–View–Controller (MVC) pattern
    - AMI commands (model)
    - Twig engine (view)
  - Internal Content Management System (CMS)

**AMI Java framework**

- SQL, MQL
- Connections, transactions
- JDBC drivers

- RESTful sub-system
- Command sub-system
- RESTful servlet
- Apache Tomcat
- Command servlet

- *Metadata Query Language

**Main applications**

- Advanced data display
- Customizable search engines:
  - Google-like search, hierarchical search
- Administration dashboard:
  - Users, commands, roles, tasks, infrastructure (cloud, Jenkins), monitoring

- Generic command system (via HTTPS)
- Distributed transaction engine (with JDBC)
- Authentication (certificates or credentials)
- Authorization (high role granularity)

- Task server (metadata aggregation)

**AMI Infrastructure**

- Apache Web front
- pyAMI (Python client)
- AMI Web framework (HTML5/JavaScript)
- AMI Web
- AMI Web
- AMI Web
- AMI tasks
- AMI tasks
- AMI Web
- AMI Web
- AMI databases
- To optimize availability and reliability