



CHEP-Adelaide, Nov. 4-8th 2019

Installing and administrating the ATLAS Metadata Interface (AMI) V2 ecosystem



ATLAS Metadata Interface (AMI) is a generic ecosystem for metadata aggregation, transformation and cataloging benefiting from about 20 years of experience. This poster describes how to install and administrate AMI, register existing databases and generate high level HTML 5 search interfaces.

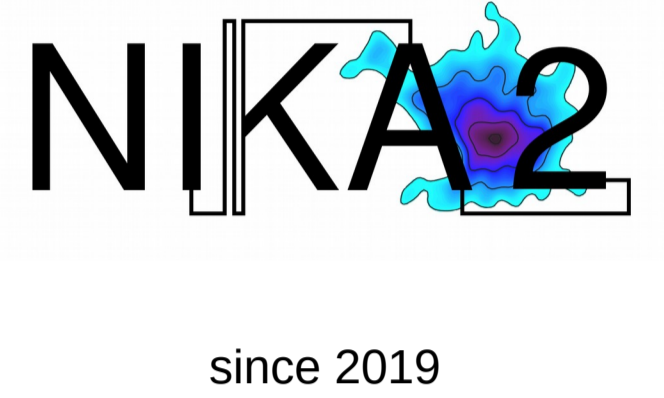
What is the AMI ecosystem

AMI Java Core (server-side): high-level primitives for aggregating, processing and storing metadata and for searching data by metadata criteria.

AMI Task Server (server-side): handy scheduler for running metadata aggregation and processing tasks in a distributed way.

AMI Web Framework (client-side): framework for developing metadata-oriented applications (for searching, editing, tagging, etc...).

Who is using AMI



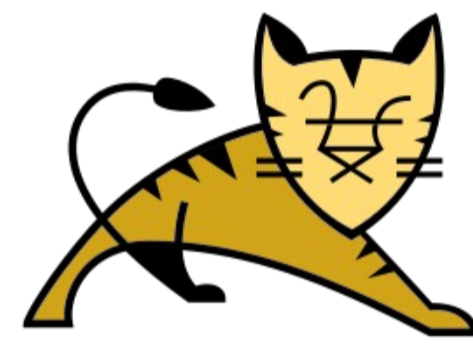
Installing Apache Tomcat 9

```
> curl -L http://apache.mirrors.benatherton.com/tomcat/tomcat-9/v9.0.26/bin/apache-tomcat-9.0.26.tar.gz > apache-tomcat-9.0.26.tar.gz
```

```
> tar xzf apache-tomcat-9.0.26.tar.gz
```

```
> cd apache-tomcat-9.0.26
```

```
> vim conf/server.xml # enable HTTPS via port 8443
```



Installing the AMI frontend

```
> mkdir webapps/ROOT
```

```
> curl -L https://raw.githubusercontent.com/ami-team/AMIWebFramework/master/tools/awf_stub.py > webapps/ROOT/awf.py
```

```
> ./webapps/ROOT/awf.py --update-prod
```

```
> ./webapps/ROOT/awf.py --create-home-page
```



Installing the AMI backend

```
> curl -L https://raw.githubusercontent.com/ami-team/AMICore/master/dist/AMI.war > webapps/AMI.war
```

Starting and stopping AMI

```
> ./bin/catalina.sh start
```

```
> ./bin/catalina.sh stop
```

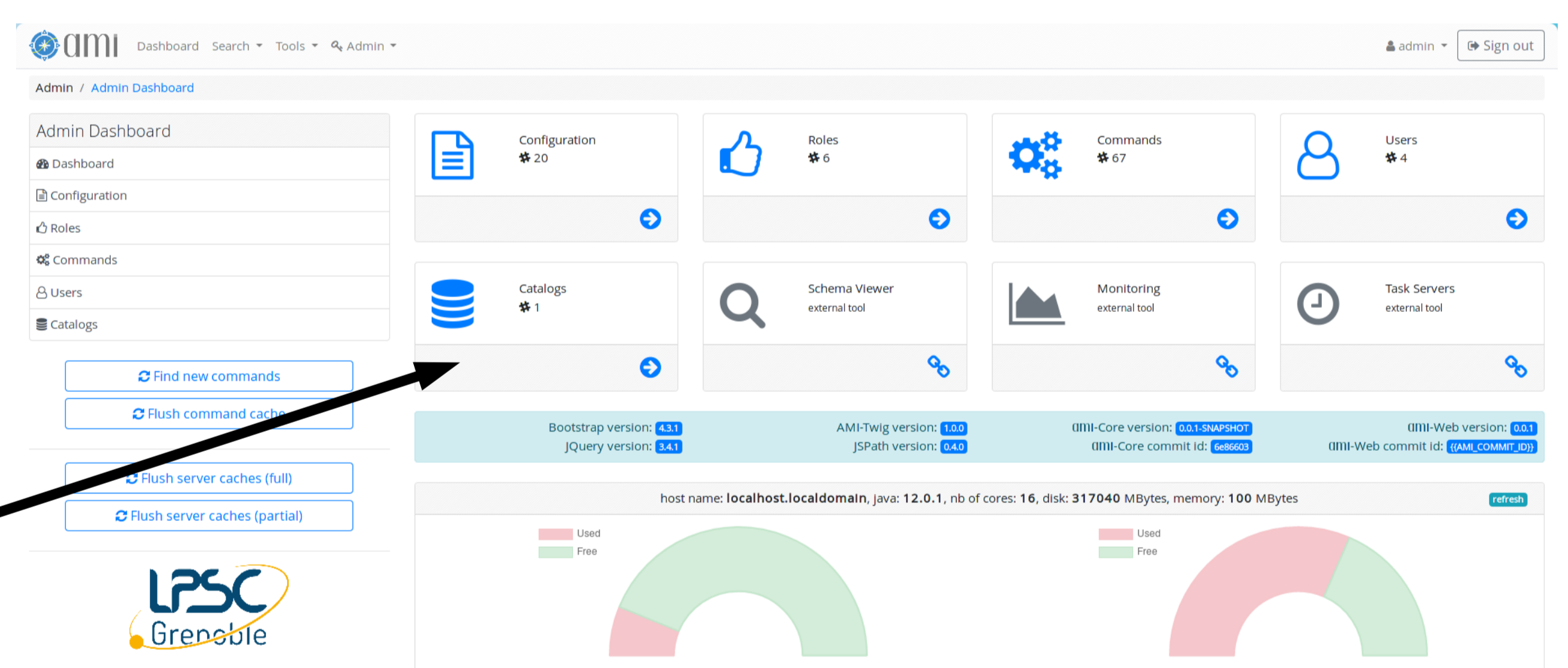
Setting up the AMI configuration database

<https://localhost:8443/AMI/Setup>
(must be done before using AMI)

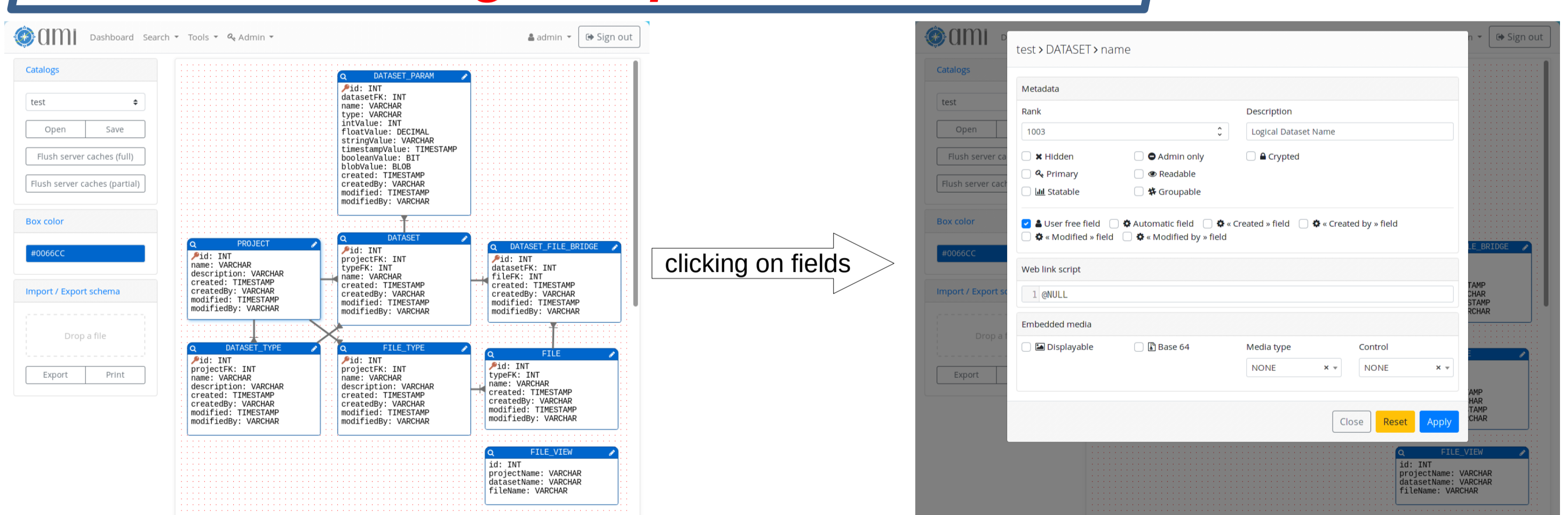
For registering new or existing catalogs (aka. database)

Managing catalogs (aka. databases), users, roles, ...

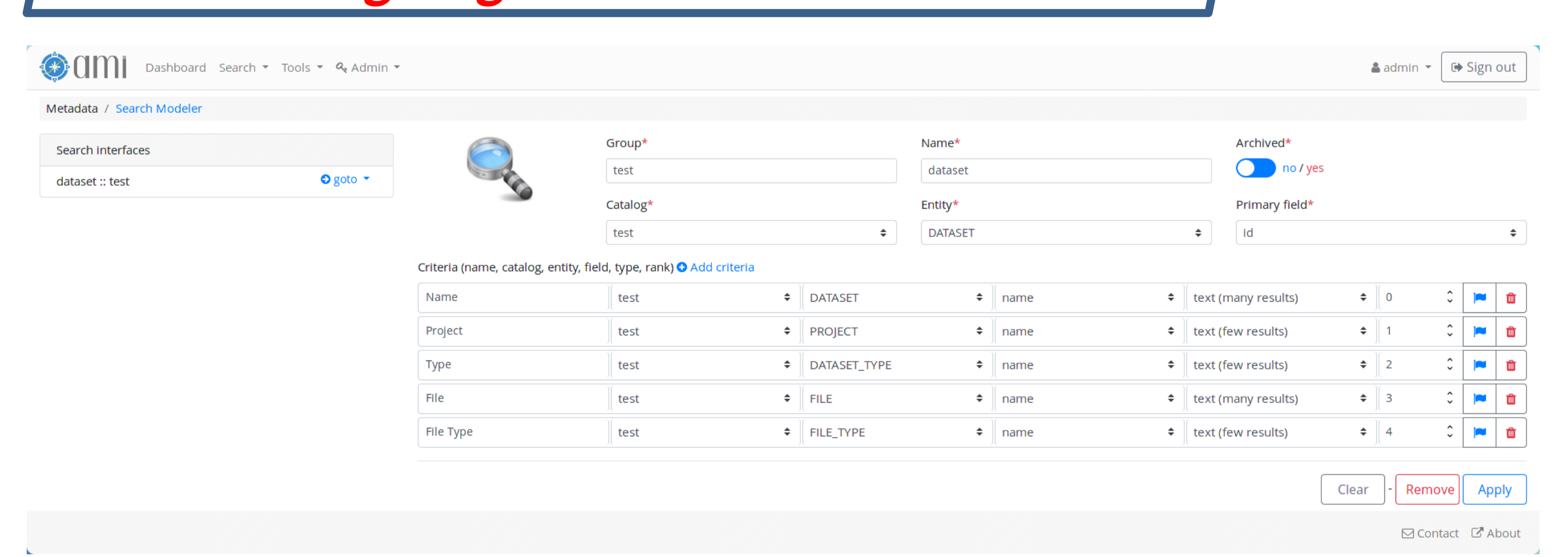
<https://localhost:8443/AMI/index.html?subapp=adminDashboard>



Visualizing a catalog (tables + relations) and setting field parameters

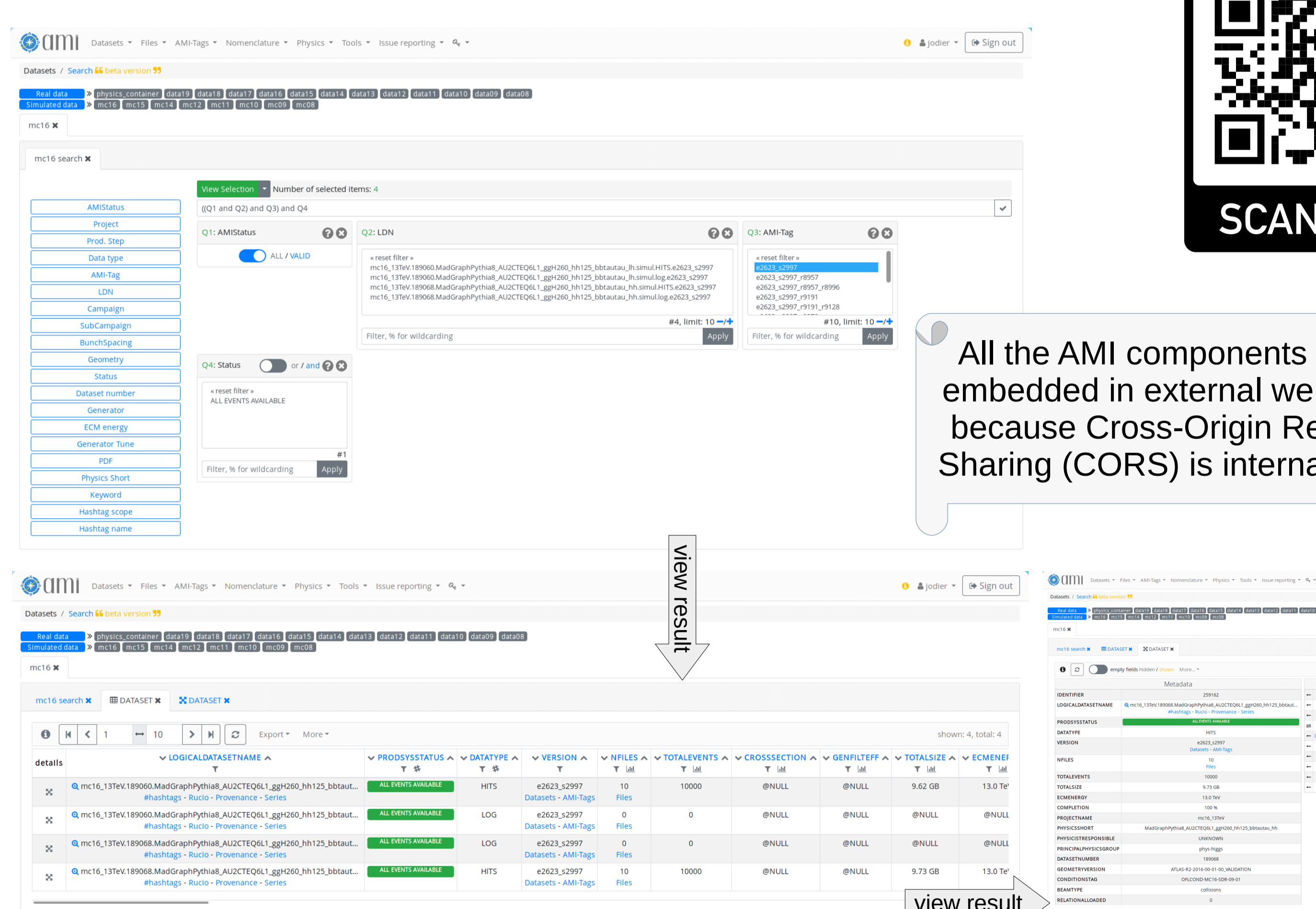


Online designing HTML 5 search interfaces



Resulting HTML 5 search interfaces

ATLAS experiment's interfaces



All the AMI components can be embedded in external web pages because Cross-Origin Resource Sharing (CORS) is internally used

+ additional REST interface and Python / Java / C++ / JS clients for accessing all the information in AMI from external softwares.

