



REST and WADL feedback in SITools2

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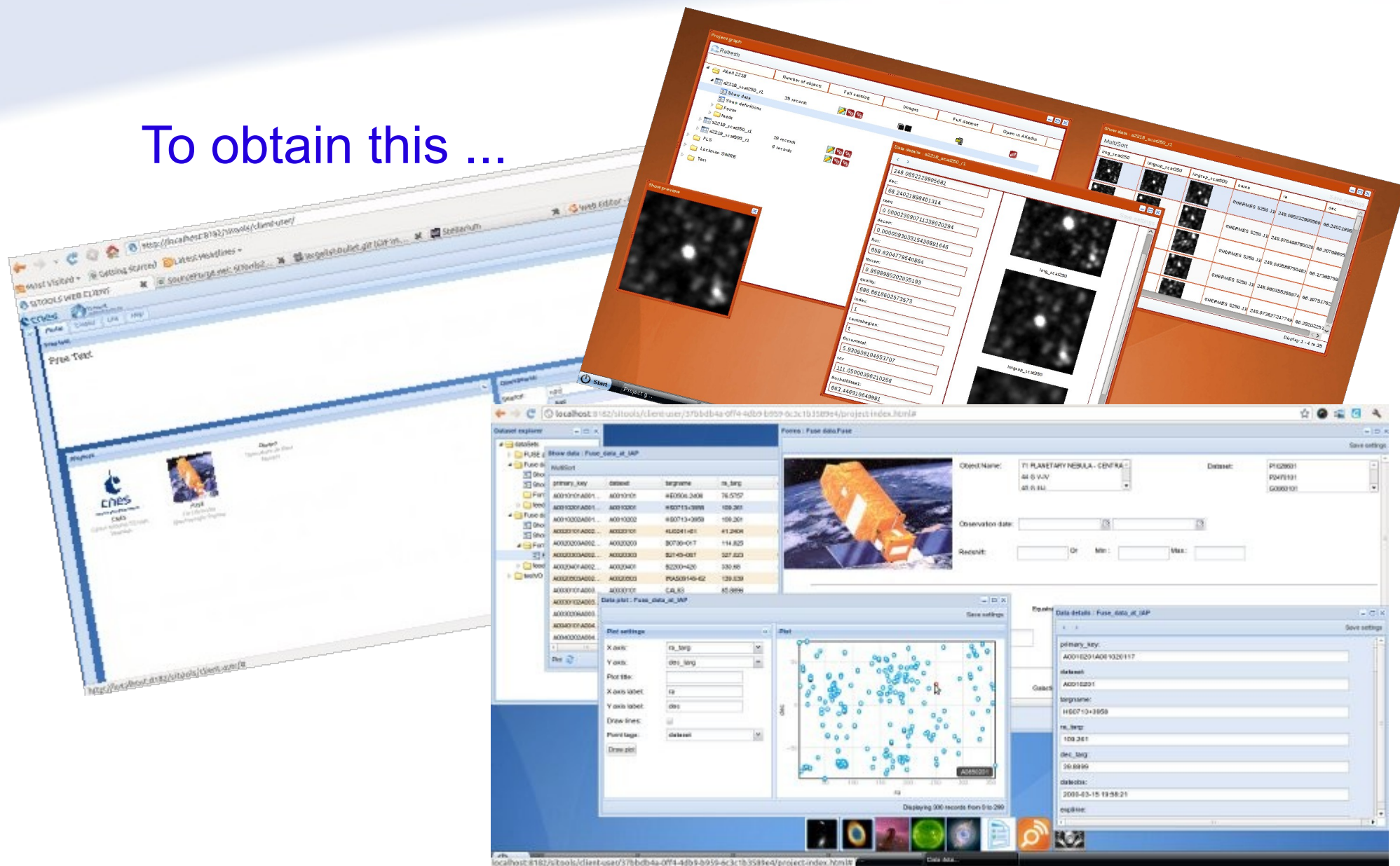


IVOA meeting, Naples, 16-20 May 2011

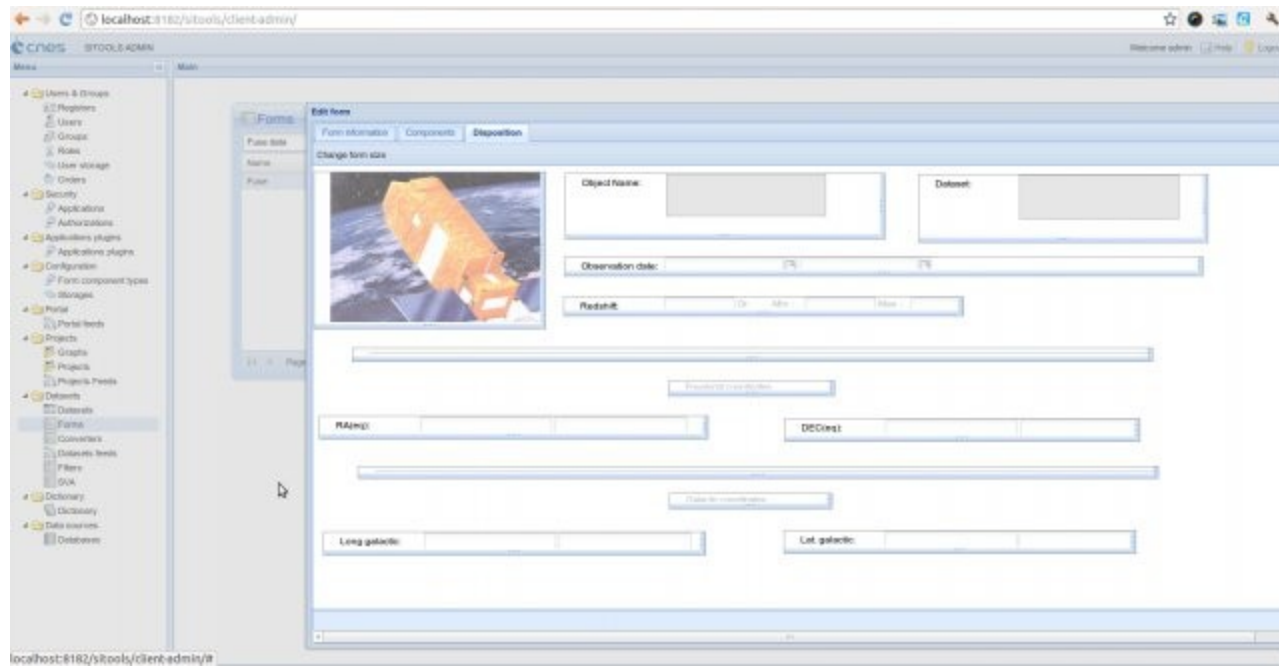
From this ...



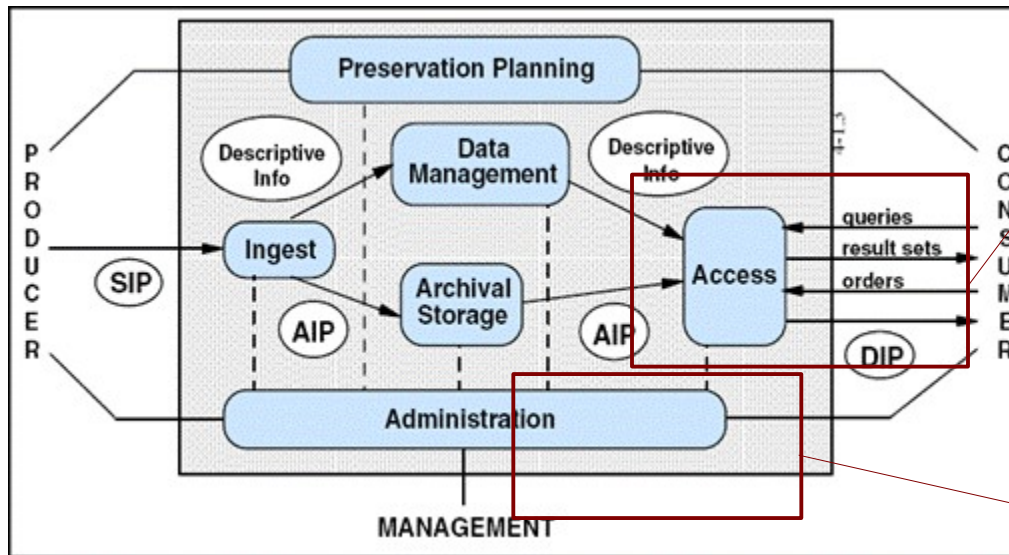
To obtain this ...



By the use of an administration panel



▶ SITools2 place in an archive



- portal view
- project view
- web services
- ...

- portal admin
- project admin
- web services admin
- User management
- ...

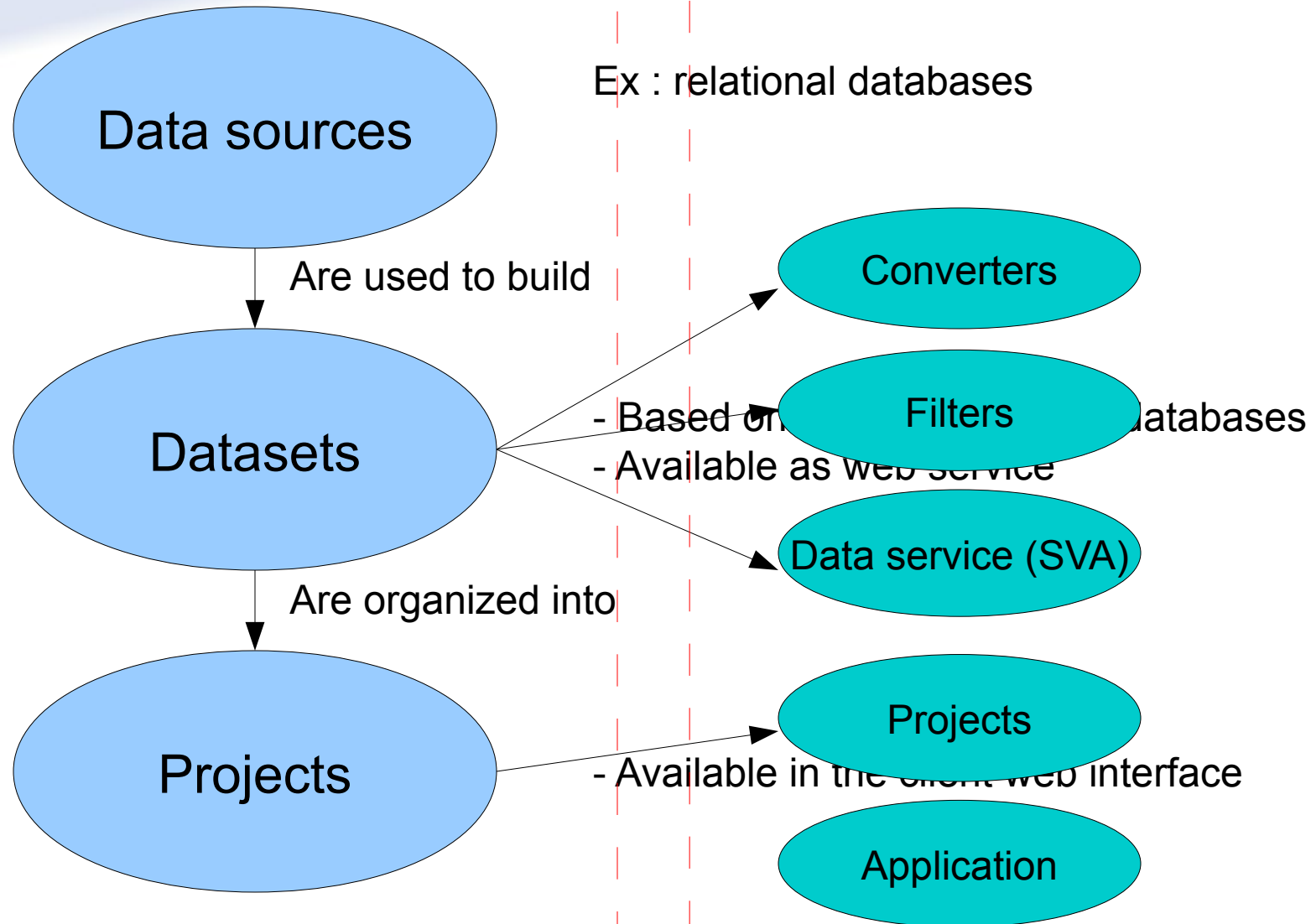
▶ Thematic extensions

- VO
- Earth Observation

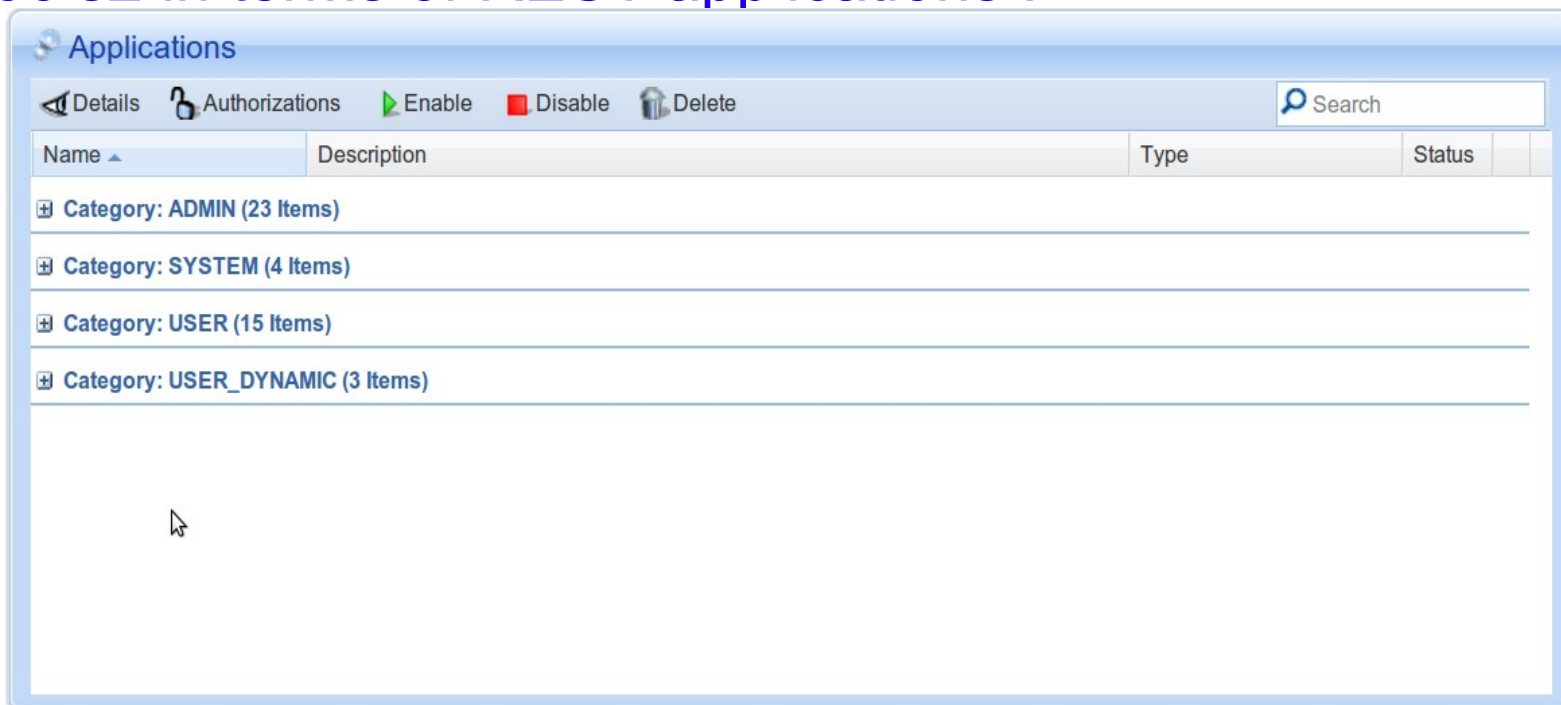
- ◆ Client side : Rich Internet Application (based on AJAX)
- ◆ Server side : REST architecture (JAVA)
- ◆ Plugin capability at the server side
- ◆ Module capability at the client side
- ◆ Client/Server exchange format : JSON
- ◆ i18n (internationalization)
- ◆ Works with MySQL, PostgreSQL (could be extended if needed)
- ◆ Task manager (allows synchronous or asynchronous jobs)
- ◆ Resource notification (observer pattern)
- ◆ Embedded Jetty
- ◆ Designed to be OSGI compliant (not totally implemented)
- ◆ Java packager for installation : IZPack

Core

Extensions



- ◆ SITools2 in terms of REST applications :



- ◆ SITools2 in terms of REST resources :
~ 150 resources

As administrator, I have 42 REST applications to administrate. The security strategy is done against HTTP verb and Role (a role can contain both groups and users).

=> WADL can describe the API

=> Example with the dictionary application

- ◆ WADL is fine when the input and/or output representation is XML => use of grammars

```
<grammars>
  <include href="http://ivoa.net/xml/UWS/UWS-v1.0.xsd"/>
</grammars>
```

...

```
<response status="200">
  <representation mediaType="text/xml" element="uws:JobSummary">
    <doc title="JobSummary">The complete representation of the job state</doc>
  </representation>
</response>
```

- ◆ This is more complex for another representation (such as JSON, ...) => no standard defining the json structure => json schema as draft