egee

gLite Metadata implementation status

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Retreat between GILDA and ESR VO on gLite

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Information Society

- **Entry/Item**
  - has a <u>unique</u> **key** and a list of **attributes**
- **Attribute**
  - has **name** (string)
  - has **type** (depends on backend, support for basic type)
  - belongs to a **schema**
- **Schema** is a group of different attributes
  - has a **name**
  - has an **attributeList**, which contains all the attributes that belong to the schema
  - Each catalog entry belongs to one or more schemas
- **Permission**
  - a **BasicPermission**, which stores a username, groupname and permission numbers for the user, group members and others
  - a list of **ACLs**

Enabling Grids for E-sciencE

- **MetadataBase** Two sets of operations are offered through this interface:
  - Querying and setting values of attributes for individual entries/items in the catalog.
  - Generic queries returning entry/item identifiers.

- **MetadataCatalog** The necessary operations for managing entries in the catalog are available through this interface. This includes functionality for creating and deleting items.

- **MetadataSchema** The necessary operations for handling schemas inside the catalog.

- **FASBase** The set and get permission methods are inherited in MetadataBase from this interface.

Enabling Grids for E-sciencE

- **Fireman catalog implements MetadataBase and MetadataSchema, but in the actual release of gLite (1.1) it's not working. It should be present in the next release.**

- **Metadata Catalog as a standalone service is included in the actual release:**
  - it exposes a WebServices based interface (http://egee-jra1-data.web.cern.ch/egee-jra1-data/glite-data_branch_1_1_1_RC1/stage/share/doc/glite-data-catalog-interface/html/org/glite/data/catalog/service/meta/package-summary.html)
  - **but NO CLIs are available AT THE MOMENT**

Enabling Grids for E-sciencE

- Schema creation using JAVA API
- Install CLI for MetaData from gLite 1.2 Night builds
  - **glite-meta-schema-list**
  - **glite-meta-schema-describe**
  - **glite-meta-create**
  - **glite-meta-setattr**
  - **glite-meta-getattr**
  - **glite-meta-remove**

```java
String urlStr = "http://glite-mdc.ct.infn.it:8080/gilda/glite-data-catalog-service-meta/services/MetadataCatalog";
    try {
        URL url = new URL(urlStr);

        MetadataCatalogServiceLocator metaLoc = new MetadataCatalogServiceLocator();
        MetadataCatalog meta = metaLoc.getMetadataCatalog(url);


        Attribute[] attrs = new Attribute[2];

        Attribute newAttr = new Attribute();
        Attribute newAttr2 = new Attribute();
        attrs[0] = newAttr;
        attrs[1] = newAttr2;


        attrs[0].setName("Name");
        attrs[0].setType("VARCHAR(100)");
        attrs[0].setValue("NoNameAtTheMomement");

        attrs[1].setName("Age");
        attrs[1].setType("Integer");
        attrs[1].setValue("0");

        meta.createSchema("AgeMeta",  attrs);

    } catch (Exception e) {
        e.printStackTrace();
        System.out.println("oh oh..something is going wrong!\n" + e.getMessage());
    }
```

- **DEMO**