The Grid Market Directory Installation Manual



The Grid Market Directory (GMD) programs are organized into two parts:

- 1. Programs responsible for managing the portal
- 2. Programs responsible for providing Web service for accessing GMD data.

1. GMD Portal Manager

- 1.1 Basic files
 - All jsp pages and html pages are in GMDPortalManager\jsp.
 - The classes supporting jsp pages are in GMDPortalManager\classes.
 - Property file GMDDB.prop is used for Database location configuration.

1.2 Example for install manager

TOMCAT 3.2.4

- Step1. Make a new directory (new_dir) in TOMCAT_HOME\webapps.
- Step 2. Put all jsp and html files into TOMCAT_HOME\webapps\new_dir.
- Step 3. Put all classes into TOMCAT_HOME\webapps\new_dir\WEB_INF\classes.
- Step 4. Configure the database location information in the GMDDB.prop, e.g. jdbc driver name and password of accessing database.
- Step 5. Put GMDDB.prop into TOMCAT_HOME\bin.

1.3 Database tables

Database can be MySQL or other database supporting JDBC.

There are three tables in the GMD database:

GSPS (Grid Service Provides), GSPR (Grid Service Provider Registration), STS (Service Types);

GSPS:

Service_Name varchar(20)

Service_Type varchar(40)
Provider_Name varchar(25)
Contact varchar(60)
Description varchar(40)

Hardware_Price float Software_Price float

GSPR:

Provider_Name varchar(25) Login_Name varchar(20) Password varchar(20)

STS:

Service_Code mediumint(9) Service_Type varchar(40)

2. GMD Web-service

2.1 GMD web services

2.1.1 Basic files

- gmd.jar contains all classes for Gridbus GMD web services, which is located in GMDWebServices\server\lib.
- Property file GMDDB.prop is for Database location configuration, it is the same file of the GMD Portal Manager.

2.1.2 Example for installing GMD web services

TOMCAT 3.2.4

Step 1. Put gmd.jar into TOMCAT_HOME\lib

Step 2. Config and put GMDDB.prop into TOMCAT_HOME\bin (if GMD Portal manager is not installed).

2.2 Client

2.2.1 Basic files

- Client api program is encapsulated in the gmdclient.jar, which can be found in GMDWebServices\client\lib
- Other jar files supporting client api can be found in the same directory of GMD api jar file.

- Property file GMDQuery.prop is for GMD location configuration, e.g. GMD host name and port name.
- The command-line client program (gridgmd.java) is a example for using GMD client API and in GMDWebServices\client\test.

2.2.2 How to run the command line program

Windows:

```
Step 1. Set CLASSPATH=.;xerces.jar;soap.jar;activation.jar;mail.jar;
jdom.jar;gmdclient.jar
Step 2. java gridgmd –h jarrett.cs.mu.oz.au –st globus
The usage of the command-line program is shown below:
Usage: gridgmd [-h]||[-sh] [-sn] [-st] [-sp]
Options:
-a:
            Display all services in the Grid Market Directory
-h GMD Host Name
            The host address of the Grid Market Directory
-sh Service Host Name
            Query a service by its service host name
-sn Service Name
            Query a service by its service name
-st Service Type Name
            Query services by the service type
-sp
            Query services by the service provider name
```