



Enabling Grids for E-scienceE

Installing the Gilda PnP UI and testing VOMS and MyProxy

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Information Society



1. Log into your machine using the credentials you got this morning at the registration desk.

2. Change your shell type to bash, just typing

– `bash`

3. The UIPnPcomb.tar.bz2 is already downloaded and placed in

– `/afs/ictp/public/d/dimeo/WORLD/UIPnPcomb.tar.bz2`

Untar the previous file into /scratch:

– `cd /scratch`

– `tar xvjf`

`/afs/ictp/public/d/dimeo/WORLD/UIPnPcomb.tar.bz2`

4. Link the UIPnPcomb dir created by the previous tar to your home:

- `ln -s /scratch/UIPnPcomb ~`

5. Change your working dir to \$HOME/UIPnPcomb

- `cd ~/UIPnPcomb`

6. Start the UIPnP installation script

- `source install.sh`

7. Copy a pair of private key and X509 certificate into your \$HOME/.globus directory from

- `/afs/ictp/public/d/dimeo/WORLD/certificati/XX/.globus`

Where XX in [01,60] is the number of your workstation
using

- `cp /afs/ictp/public/d/dimeo/WORLD/certificati/XX/.globus/*.pem $HOME/.globus/`

(please do a copy of your \$HOME/.bashrc in /scratch/UIPnPcomb, because the next hands-on will modify it)

You are now ready to use the GILDA testbed!!

- **Let's try to create a proxy:**
 - `voms-proxy-init --voms gilda`

- **THE PASSPHRASE is TRIESTE**

- **If you get something like the following:**

```

Your identity: /C=IT/O=GILDA/OU=Personal
Certificate/L=TRIESTE/CN=TRIESTE18/Email=roberto.barbera@ct.infn.it
Enter GRID pass phrase:
Creating temporary proxy
.....
..... Done
Contacting voms.ct.infn.it:15001 [/C=IT/O=GILDA/OU=Host/L=INFN
Catania/CN=voms.ct.infn.it/Email=emidio.giorgio@ct.infn.it] "gilda" Done
Creating proxy ..... Done
Your proxy is valid until Sat Feb  4 08:42:15 2006
    
```

You are in the right way!!!

- **Change dir to \$HOME/UIPnPcomb/example_JDL and try the following command**
 - `glite-job-list-match hostname.jdl`
- **You should get something like that:**

```
Selected Virtual Organisation name (from proxy certificate extension): gilda
Connecting to host glite-rb.ct.infn.it, port 7772
```

```
*****
```

```
COMPUTING ELEMENT IDs LIST
```

```
The following CE(s) matching your job requirements have been found:
```

```
*CEId*
```

```
dgt01.ui.savba.sk:2119/jobmanager-lcgpbs-infinite
dgt01.ui.savba.sk:2119/jobmanager-lcgpbs-long
dgt01.ui.savba.sk:2119/jobmanager-lcgpbs-short
egee008.cnaf.infn.it:2119/blah-pbs-infinite
egee008.cnaf.infn.it:2119/blah-pbs-long
egee008.cnaf.infn.it:2119/blah-pbs-short
fenrir.uniandes.edu.co:2119/blah-pbs-infinite
fenrir.uniandes.edu.co:2119/blah-pbs-long
fenrir.uniandes.edu.co:2119/blah-pbs-short
gilda-ce-01.pd.infn.it:2119/jobmanager-lcgpbs-short
gildace.oact.inaf.it:2119/jobmanager-lcgpbs-infinite
gildace.oact.inaf.it:2119/jobmanager-lcgpbs-long
gildace.oact.inaf.it:2119/jobmanager-lcgpbs-short
glite-ce.ct.infn.it:2119/blah-pbs-infinite
glite-ce.ct.infn.it:2119/blah-pbs-long
glite-ce.ct.infn.it:2119/blah-pbs-short
```

```
...
```

```
*****
```

- **Change dir to \$HOME/UIPnPcomb/example_JDL and try the following command**
 - `edg-job-list-match hostname.jdl`
- **You should get something like that:**

```
Selected Virtual Organisation name (from proxy certificate extension): gilda
Connecting to host grid004.ct.infn.it, port 7772
```

```
*****
```

```
COMPUTING ELEMENT IDs LIST
```

```
The following CE(s) matching your job requirements have been found:
```

```
*CEId*
```

```
cn01.be.itu.edu.tr:2119/jobmanager-lcglsf-infinite
cn01.be.itu.edu.tr:2119/jobmanager-lcglsf-long
cn01.be.itu.edu.tr:2119/jobmanager-lcglsf-short
dgt01.ui.savba.sk:2119/jobmanager-lcgpbs-infinite
dgt01.ui.savba.sk:2119/jobmanager-lcgpbs-long
dgt01.ui.savba.sk:2119/jobmanager-lcgpbs-short
gilda-ce-01.pd.infn.it:2119/jobmanager-lcgpbs-short
gildace.oact.inaf.it:2119/jobmanager-lcgpbs-infinite
gildace.oact.inaf.it:2119/jobmanager-lcgpbs-long
gildace.oact.inaf.it:2119/jobmanager-lcgpbs-short
grid004.iucc.ac.il:2119/jobmanager-lcgpbs-infinite
grid004.iucc.ac.il:2119/jobmanager-lcgpbs-long
grid004.iucc.ac.il:2119/jobmanager-lcgpbs-short
grid010.ct.infn.it:2119/jobmanager-lcgpbs-long
grid010.ct.infn.it:2119/jobmanager-lcgpbs-short
grid011f.cnaf.infn.it:2119/jobmanager-lcgpbs-infinite
grid011f.cnaf.infn.it:2119/jobmanager-lcgpbs-long
grid011f.cnaf.infn.it:2119/jobmanager-lcgpbs-short
```

```
...
```

- **Test the gLite File Catalog**
 - `glite-catalog-ls -l /`
- **Test the LCG File Catalog:**
 - `lfc-ls -l /grid/gilda`

...



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Practicals on VOMS and MyProxy

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- **Main options**

-voms <vo-name:[command]>

- **command** syntax is :/<voname>/group for group specify (default none)
- **command** syntax is :/<voname>/Role=<role name> for Role choice (default none)

```
voms-proxy-init --voms gildav:/Role=VO-Admin
voms-proxy-init --voms gildav:/tutors
```

-valid **x:y**, create a proxy valid for **x** hours and **y** minutes

-vomslife **x**, create a proxy with valid for **x** hours (max 24 h)

-cert <certfile> Non-standard location of user certificate

-key <keyfile> Non-standard location of user key

-out <proxyfile> Non-standard location of new proxy cert

-userconf <file> Non-standard location for user-defined voms server addresses

Exercise 1. Create a voms proxy requesting your group membership (all of you belong to generic-users group).

Exercise 2. Verify the obtained credentials.



- **myproxy server:**
 - **myproxy-init**
 - Allows to create and store a long term proxy certificate:
 - **myproxy-info**
 - Get information about stored long living proxy
 - **myproxy-get-delegation**
 - Get a new proxy from the MyProxy server
 - **myproxy-destroy**

 - **Check out them with myproxy-xxx --help option**

Exercise 3. Create a long term proxy containing the voms extension on MyProxy Server (grid001.ct.infn.it).

Exercise 4. Retrieve info about the long living proxy previously stored on the MyProxy Server.



Exercise 5. Retrieve a proxy delegation from the MyProxy Server and verify your credentials.

Exercise 6. Delete the long lived credentials on the specified myproxy server



