THE LOGGER SERVICE

Functionality Description[*]

A.Konstantinov

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1 Introduction

The Logger Service is one of services implemented in HTTP(S,G) and SOAP Framework [1]. It provides simple frontend to underlying MySQL database to store and retrieve an information about jobs processed by ARC middleware [2].

Corresponding client is provided as part of ARC installed on cluster's frontend.

2 Logger Service

It supports 2 SOAP methods for adding and retrieveing records respectively. It also provides simple web interface through HTTP GET and POST methods. Unfortunately this interface is not very usefull because no web browser I know about supports pure SSLv3 which is only SSL protocol globus_io [3] supports.

The Logger service is configured through configuration file of HTTPS/G server. It supports following service-specific commands.

- *acl_read [group [group [...]]]*

- *acl_write [group [group [...]]]*

- *acl_query [group [group [...]]]*

If client belongs to one of groups listed in *acl_read* command it is allowed to retrieve information about job records. Those clients are still restricted to an information about jobs which they are owners of. And those listed in *acl_write* can add new records. Usually those groups match against host credentials of a clusters' frontends. Groups in *acl_query* are allowed to retrieve information about *all* jobs.

Other supported commands are:

- *sqlcontact [user [password]]*

- *sqlcontactsource path*

They provide username and password used to access MySQL database. *sqlcontactsource* points to file which contains username and password in first line.

3 Logger Client

Logger service can be communicated using utility *logger* installed into ${NORDUGRID_LOCATION}/libexec by default. It allows to add new records into database and to retrieve information. First functionality is used by a grid-manager to pass inforamtion about processed jobs.

```
logger [-h] [-d level] [-u url] {control_dir ...|-q [-x] [-e element,element,...] [-o offset] [-s size] [
```

Here possible options are

-h   show reminder,

-d   set debug output to *level*,

-u   URL of central logging server (mandatory if *-q* is given),

-q   retrieve information, otherwise - report job to database,

-x   print obtained information in XML,

-o   from which record to start,

-s   how many records to show,

-e   specify which elements are desired in output.
                Posible values are: *start,end,cluster,user,id,name,failure,lrms,queue,rsl,ui,usedcpu,usedmem*.

query is SQL conditional expression used to select jobs' records.

References

[1] HTTP(S,G) and SOAP Server/Framework.

[2] NorduGrid middleware, the Advanced Resource Connector. `http://www.nordugrid.org/middleware/`

[3] The Globus Alliance. `http://www.globus.org`