Testbed 1 Demonstration

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Certificates

A certificate is your identity when using the EDG testbed. It is used to both authenticate you and to authorize access to various resources.

- Registering (http://marianne.in2p3.fr/ "User Registration")
  - Obtain certificate and "sign" EDG Usage Guidelines.
  - Install certificate in browser and in home area.
- Comments
  - Keep the private key private! (Otherwise people can impersonate you.)
  - For your use only.

Using Certificates

- To use your certificate, you must generate a proxy.
  - Essentially a time-limited copy of your private key.
  - Used to allow your jobs to act on your behalf. (Single-login)
- Commands
  - Initialize proxy → grid-proxy-init
  - Find info about proxy → grid-proxy-info -all
  - Destroy proxy → grid-proxy-destroy

Submitting & Querying Jobs

- Using the Workload management tools.
  - Submit job → dg-job-submit *job.jdl*
  - Query status → dg-job-status *jobId*
  - Retrieve output → dg-job-get-output *jobId*
- More complete information available from Workload management documentation. Can be found via WP6 website (http://marianne.in2p3.fr/datagrid/documentation/).

Hello World Example

- Input JDL for Hello World:

```
Executable = "/bin/echo";
Arguments = "Hello World";
StdOutput = "hello.out";
StdError = "hello.err";
OutputSandbox = {"hello.out","hello.err"};
Requirements = other.LRMSType == "PBS" && other.OpSys ==
  "RH 6.2"
Rank = other.MaxCpuTime;
```

- To submit → dg-job-submit hello.jdl

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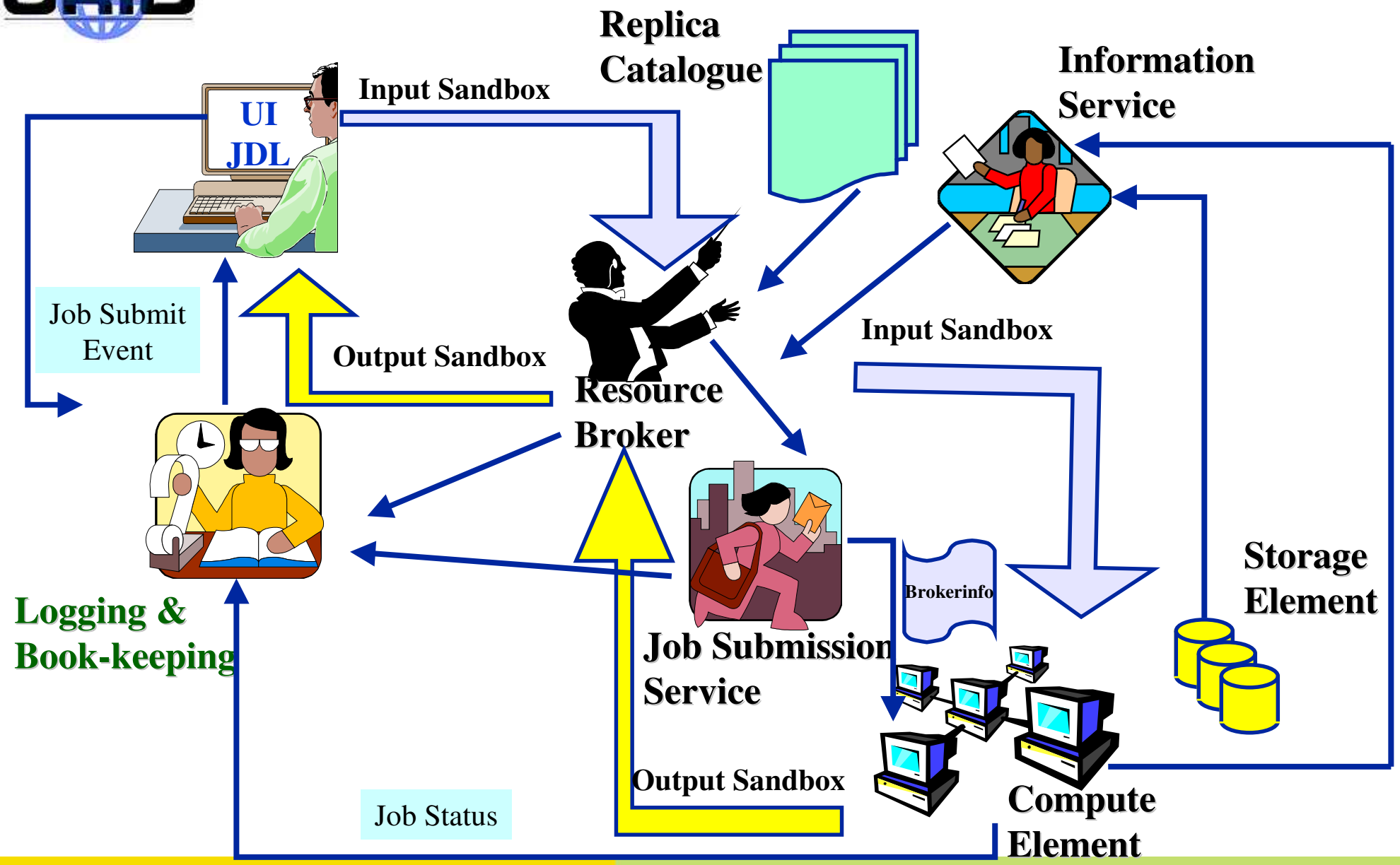
Lifecycle of a Job



Information Systems

- Job submission uses Information Index to find resources.
  - testbed011.cern.ch:2170
  - Mds-Vo-name=datagrid,o=grid
  - Directly via ldapsearch commands.
  - Via grid-info-search command.
  - Via several available LDAP Browsers.
- MDS hierarchy resides on another node and can also be queried.
  - lxshare0225.cern.ch:2135
  - Mds-Vo-name=datagrid,o=grid

More Information

- Best place to start looking for information is WP6 website (http://marianne.in2p3.fr/).
  - Documentation (http://marianne.in2p3.fr/datagrid/documentation/)
  - Contacts (http://marianne.in2p3.fr/datagrid/testbed1/contacts/)
  - Bug reports (http://marianne.in2p3.fr/datagrid/bugzilla/)
- Documentation is rather sparse at the moment, but should improve quickly.