Table of Contents

Grid middleware

LCG Distributions

- Portings to different OS/hardware: http://cagraidsvr06.cs.tcd.ie/porting/
- EGEE liveCD based on LCG-2 (w00t!): http://www.egrid.it/sw/livecd
- EGEE liveCD based on gLite: dunno!

Globus Toolkit

- Current version is 4
- ... "is a collection of solutions to problems that frequently come up when trying to build collaborative distributed applications."
- ... "has focused on simplifying heterogenityfor application developers."
- ... "aspire to include more vertical solutions in future versions."
- GT4 consists of specifications AND reference implementations

gLite

- Current version is 3

On job queuing/scheduling/local resource management

- From here: "Job Management System (JMS) is a system responsible for control over user jobs and cluster nodes. Main objective of JMS is to achieve maximal utilization of cluster resources, while satisfying users needs. JMS is also known as Resource Management System, Workload Manager and Batching System. JMS has three basic functionalities: queuing, scheduling and resource management. Functionalities are implemented in following three JMS modules: Queuing Server, Scheduler and Resource Manager. Server is responsible for job queuing and interaction with users. Scheduler makes decisions where will the jobs be executed. Decision is based on various types of policies. Resource Manager monitors resources and jobs, allocates resources for jobs and prepares environment for job execution. Furthermore, Resource Manager notifies Server of resource and job status."
- Another comparison
- Torque is based on openPBS
- Torque can use external scheduling mechanisms, e.g. "maui"
- Competitive JMSs are Condor, Torque/maui/openPBS, LSF and SGE
- And all of them are implementations of the high-level DRMAA specified by GGF
- For an MPI job to be handled correctly, a JMS needs to explicitly support it
- "Condor GRAM Globus Resource Allocation Manager - Connects to local resource management systems (e.g. openPBS, TORQUE, Condor, Fork)"

On JDL

- JDL is deprecated 🙂
- Refer to JDL Attributes Specification (WMProxy) - EGEE-JRA1-TEC-590869-JDL-Attributes-v0-7
- Refer to WMProxy User s Guide EGEE-JRA1-TEC-674643
- Refer to WMS User s Guide - EGEE-JRA1-TEC-572489

```
Note that the JDL attributes described in this document are the ones supported when the submissio
the WMS is performed through the legacy Network Server interface, i.e. using the python command
line interface or the C++/Java API of the gLite WMS-UI subsystem (see [R15]). It basically repres
a subset of the whole set of attributes (described in [R13]) suthe new web services based interfa
```

-- RichardDeJong - 14 Jun 2006

This topic: LCG > GridMiddleware
Topic revision: r1 - 2006-06-14 - unknown