



IN2P3 Computer Center (Lyon) Site Status Report

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The logo features the word "Data" in orange above "GRID" in black, with a blue globe icon behind the letters. To the right of the logo is the word "Outline" in blue.

Data GRID Outline

- ▶ **General status**

- ▶ **Components**

 - ❖ User Interface

 - ❖ Computing Element/Worker Nodes

 - ❖ Storage Element

- ▶ **Applications support**

- ▶ **Current/Future work**



General

- ▶ EDG v1.2 installed and working in the applications testbed
- ▶ Development testbed being configured
- ▶ Full integration with the "normal" production environment
 - ❖ User interface machines are the same than non-EDG users use for interactive work
 - ❖ Worker nodes are the ones being used for normal production
- ▶ Site is currently migrating Linux services from RedHat6.2 to RedHat7.2
 - ❖ Roughly half of the worker nodes are already migrated
 - ❖ 30% of the machines for interactive use are already migrated



Component: User Interface

- ▶ **Installed on all the hosts available for interactive use**
 - ❖ RedHat6.2: 8 dual-processor PIII-1 GHz, 1GB RAM
 - ❖ RedHat7.2: 4 dual-processor PIII-1 GHz , 1GB RAM

- ▶ **Configured to use the Resource Broker (CERN) of the applications testbed**
 - ❖ configuration files for other RBs (CNAF, RAL-Babar, ...) also provided

- ▶ **Script for setting up the EDG environment provided and available with the default PATH**
 - ❖ `edg-ui-setup.[c]sh`
 - ❖ not automatically executed for every user
 - ❖ if a user wants his/her EDG environment automatically configured for each interactive session, he can use `edg-autoconfigure` once and for all



Component: Computing Element/Worker Nodes

▶ EDGv1.2 gatekeeper installed on RedHat6.2

- ❖ jobs submitted through it will be scheduled for execution on a worker node running RedHat6.2
- ❖ Full integration with AFS (home directories are in AFS)
 - AFS credential renewal also available for jobs (this is standard BQS)
- ❖ A local account per VO was created for execution of EDG jobs
 - Proxy-protection mechanisms implemented
- ❖ Mechanisms for traceability implemented in BQS
 - Who (individual) submitted this Atlas job?

▶ Worker node component installed on all the hosts available for batch use

- ❖ RedHat6.2: ~90 dual-processor mixture of PIII-850MHz-1GHz
- ❖ RedHat7.2: ~98 dual-processor mixture of PIII-850MHz-1GHz

▶ ~60 More WNs ordered

- ❖ expected availability: November/December 2002



Component: Storage Element

- ▶ **For applications testbed, 8 GB per VO has been allocated**
 - ❖ currently AFS-managed space, so accessible from every worker node and user interface node

- ▶ **Integration of GDMP-HPSS in place and working**
 - ❖ unfortunately, the data already in HPSS can not be easily accessed through GDMP due to some limitations of the latter
 - ❖ however, these data are directly accessible through RFIO commands (rfcp, ...) for jobs executing in the sites

- ▶ **bbFTP server is also running on this machine**
 - ❖ direct transfer to/from HPSS possible by using grid credentials
 - ❖ this is currently not possible with gsi-ftpd



Applications Support

- ▶ Committed to support physics experiments (Atlas, Alice, CMS, LHCb) and biomedical applications
 - ❖ ITeam and WPSix are also supported
- ▶ Alice, CMS and LHCb software is installed
- ▶ Atlas has problems with relocation of their RPMs
 - ❖ a new set of relocatable RPMs is being tested



Current/Future work

- ▶ **Finish configuration of components for development testbed (CE, SE)**
- ▶ **Use disk storage server (IBM VSS) for Storage Element**
 - ❖ tests are being performed as I'm speaking
 - ❖ benefits: more space, availability and speed
- ▶ **Configure a new gatekeeper for use of RedHat7.2 worker nodes**
 - ❖ expected ready by the end of this week



Additional Information

- ▶ <http://ccgrid.in23.fr>
- ▶ <http://ccweb.in2p3.fr>
- ▶ edg-site-admin@cc.in2p3.fr