Introduction

Kors Bos, NIKHEF, Amsterdam

GDB Meeting, 12 January, 2005

Welcome

Happy New Year ! Exciting Year ahead !

Need to (re-) address some dates/places for future meetings

Would like your input on "themes" for future meetings

- **So far mostly driven by what was 'hot' at the time**
- **Actually Mass Storage was suggested by Jeremy Coles**
- **Initiative could also come from you**
- **Possibilities: software, interoperability, networking, security**

This meeting

This meeting: Mass Storage systems

Remind you:

- **In July half the T1's should CERN copied data write to tape**
- **End 2005 all T1's, CERN data and some T2 data**
- **Using more than just GridFTP (SRM, catalogues, …)**
- **Les will remind us of the detailed schedule**

Software

- **What is expected from T1's – Ian Bird**
- **SRM – Jean Phillipe Baud**

Current systems and plans:

- **CERN, CCIN2P3, FZK, Fermilab, RAL, SARA**

LCG Comprehensive Review

- **LCG Review took place 22+23/11**

- **See: http://agenda.cern.ch/fullAgenda.php?ida=a043872**

- **Report available soon and it states:**

- *Middleware: Progress was reported in the development and use of the middleware but the LHCC noted outstanding issues concerning the LCG-2 low job success rate, inadequacies of the workload management and data management systems, as well as delays in the release of the EGEE gLite services. Continued delays in gLite may hinder future progress in ARDA. LCG-2 has been used as a production batch system, but Grid-based analysis of the simulated data is only just starting. The interoperability of the various types of middleware being produced should be pursued together with common interface tools, and developers of the gLite middleware should remain available for the support phase.*

- *Fabric and Network:* The LHCC has *no major concerns* regarding the Fabric Area and Wide Area Networking. In view of the reported delays, the Committee will continue checking on the availability and performance of the CASTOR disk pool management system.

- *Grid Deployment and Regional Centers:* Good progress was reported on the installation of Grid software in remote sites. A large amount of data has been processed on the LCG-2 Grid as part of the Data Challenges and the LCG-2 Grid has been operated successfully for several months. However, the LHCC noted that the service provided by LCG-2 was *much less than production quality *)* and the experiments and LCG Project expended a large amount of effort to be in a position to use the service.

*) I will come back to this on a later slide

- *Applicationsa area:* **The LHCC noted the good progress in the Applications Area with all projects demonstrating significant steps in the development and production of their respective products and services. The major outstanding issues lie with the insufficient coordination between the Applications Areas and ROOT and with the imminent reduction of manpower due to the transition from the development to the deployment, maintenance and support phases.**

- *Management and Planning:* **The LHCC took note of the upcoming milestones for the LCG and noted that discussions are currently underway to secure the missing manpower to develop, deploy and support the Grid services. The lines of responsibility and authority in the overall organization structure need further clarification.**

D0 MC characteristics

SAM (metatdata) database is central of all D0 work

MC requests from physics groups in SAM

- **D0 VO server at NIKHEF, D0 RLS server in Wuyppertal**
- **Proxy server at SARA**
- **D0 software tar ball on NIKHEF SE, Minbias at SARA SE**
- **Job is script in sandbox that:**
  - **Gets tarball from SE and untars**
  - **Gets minbias from SE**
  - **Excutes job (5 job steps)**
  - **Copies output files to SAM station at NIKHEF**
  - **Clears the node**

MC metadata back into SAM and data to tapestore at Fermi

D0 MC operations

1 dedicated person all the time (Willem.van.Leeuwen@nikhef.nl)

For redundancy would be better done at more than 1 place

Same application all the time

7 well defined sites (D0 collaborators) 3 T2's, 4 T1's

Always submit for 10% more events than requested

Sometimes cancel when enough produced

Produced 14,000,000 events in 2004

Mostly at NIKHEF (51% of capacity) but more and more elsewhere

D0 MC efficiency on LCG2
since Christmas 2004

CE	Success	Failed
bohr0001.tier2.hep.man.ac.uk	237	3
cclcgceli01.in2p3.fr	-	14
grid-ce.physik.uni-wuppertal.de	-	-
gridkap01.fzk.de	2564	19
golias25.farm.particle.cz	198	15
heplnx131.pp.rl.ac.uk	246	4
lcgce02.gridpp.rl.ac.uk	293	10
mu6.matrix.sara.nl	397	7
tbn18.nikhef.nl	154	2
Total	4089	74

Efficiency 98 %

Is this "much less than production quality" ?

D0 MC "errors" on LCG2
since Christmas 2004

Error		
Aborted	35	LCG error: f.e. file not found
Cancelled	21	Done by us for various reasons
Cleared	5	Done by us, enough events
Running	10	D0 softw.error: infinite loop
Scheduled	3	Can be OK, CZ disk crash
Total	74	Really 35 LCG errors

LCG Efficiency 99 %

Is this "much less than production quality" ?

Future Meetings
first 6 months

- *January 20-21 Network meeting in Amsterdam*
- *January 27-28 Service Challenge meeting at RAL*
- February 8 GDB meeting (on Tuesday ! EGEE rev. 9-11)
- *March 15 Service Challenge meeting in Lyon*
- March 16 GDB meeting in Lyon
- April 20 GDB meeting
  - **But EGEE Proj.Conf. 18-22 in Athens**
  - **Taipei LCG Workshop 25-29**
  - **Can we move to April 13?**
- April 26 Service Challenge meeting in Taipei
- May 9-13 Hepix in Karlsruhe
- May 18 GDB at CERN
- June 22 GDB at CERN

Future Meetings
second 6 months

- July 20 GDB at CERN
- August no GDB meeting
- September 7 GDB meeting
  - **Problem for the UK**
- October 12 GDB meeting (at CNAF, Bologna)
- November 9 GDB meeting at CERN
- *November 11 Service Challenge meeting in Vancouver*
- *November 12-18 Super Computing in Seatlle*
- December 21 GDB meeting at CERN