

LCG PEB Working group on baseline-services

Stefano Lacaprara

INFN and University of Padova

CMS WEEK, Computing Session I



Goal and Mandate

- ▶ From Ian Bird's slide
- ▶ The goal of the working group is to forge an agreement between the experiments and the LHC regional centres on the baseline services to be provided to support the computing models for the initial period of LHC running, which must therefore be in operation by September 2006.
- ▶ The agreement is needed as input to the LCG TDR, and so the group should complete its work before the end of April 2005.



Guidelines

- ▶ Which services and software from LCG, which from experiments;
- ▶ Define fall-back solutions;
- ▶ Wherever possible, metrics should be defined for scalability and performance.
- ▶ **Not be a design exercise!** Based on existing software, practice and experience and propose only developments that are achievable within the next 12 months and which have been agreed in principle by the teams that would undertake any such developments;
- ▶ Account must be taken of the resources available for any required development, and also the resources available to ensure long-term maintenance.
- ▶ Full account must be taken of the implications on regional centres, and grid operations infrastructure.



Items to be covered (not limited to)

- ▶ **Storage management services**: SRM interface, Availability of base disk pool manager for sites
- ▶ **Reliable file transfer service**: (PhedEx-like) Low-level service that underlies data placement services
- ▶ **File placement service**: Selects best site as destination of data. Are generalised algorithms realistic? or should this be an experiment specific service?
- ▶ **Grid catalogue services** Global and local functionality. Performance and scaling metrics. Meta-data requirements. Relationship of the grid catalogue to application-specific catalogues
- ▶ **Workload management** Essential improvements required
- ▶ **Grid monitoring tools and services** Job status and tracking. Resource usage. Accounting
- ▶ **VO management services**
- ▶ **Applications software installation service**



Organization

- ▶ 2 experts from each experiment (For CMS me and Pete)
- ▶ one expert from each of the Grid Middleware, ARDA, Grid Deployment and Application areas of the project;
- ▶ a small number (3) experts from regional centres, appointed by the GDB chair.
- ▶ The group should report to the PEB within two months, with an interim report after 4 weeks. The report, once formally agreed by the PEB, will be provided as input to the TDR editorial group.



Status

- ▶ Three meetings (over phone or VRVS) so far;
- ▶ Meet each friday;
 - ▶ General organization and initial discussion about items to be covered;
 - ▶ Presentation by each experiments, so far limited to Data Management;
 - ▶ Start discussing about SRM interface and Reliable File Transfer;
 - ▶ Setup two smaller working groups on these items: Pete will follow SRM and Lassi RFT;
- ▶ **Personal view:** despite initial, explicit statment it is very easy for the discussion to drift toward design, architecture and middleware.



What we can get

- ▶ **Lothar's comment**
- ▶ This board is the next attempt of the LCG - and the last before the LCG-TDR – to get an understanding what we need at our Tier-1 centers, so I believe we should make the charge of that meeting and how it is proceeding pretty open and public.

