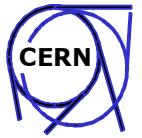

Status of Task Forces

Ian Bird

GDB

8 May 2003

Task Areas

- Security (see Dave Kelsey talk)
  - Security group led by Dave Kelsey
  - Site security coordination group – coordinator Dane Skow
    - LCG sites + representatives of sites/experiments that will have to interoperate at LCG sites
- Grid File Access (see Dave Foster talk)
  - Dave Foster, Don Petravick, Michael Ernst
- Operations Centres (see John Gordon talk)
  - Led by RAL + Lyon
  - Monitoring
- Call Centres (see Klaus-Peter Mickel talk)
  - Led by FZK
- Testing + certification
- Packaging + configuration
  - Including experiment software distribution
- Operations team
- CERN grid deployment
  - Task force to ensure LXbatch can be integrated into LCG

- Breakdown of tasks spreadsheet (certainly incomplete) – http://cern.ch/LCG/PEB/grid_deployment/tasks.htm

Testing & Certification

- Joint project (HICB – JTB)
  - LCG, EDG, VDT, Trillium
  - Agreement on responsibilities for providing tests
    - VDT – Globus test framework – LCG has also contributed tests
    - EDG – basic component tests
    - LCG – grid functionality
    - GAG – HEPCAL test cases (mostly implemented by LCG)
    - Experiments/WP8 – applications testing
  - Joint extended certification testbed
  - Aim to have common frameworks
- Process
  - Defined (http://cern.ch/lcg/peb/grid_deployment/TestCert.htm)
- Testbed available
  - LAN "grid" at CERN
  - Extending to Wisconsin, Moscow, FNAL ?, Oxford ?
- Agreement with members of EDG WP8/Loose Canons
  - They will work with us on evaluating functionality, stress testing

Testing

- LCG testing team
  - Finding effort has been a problem
  - Now have more effort from Russia, this will help significantly
    - 3 FTE – with 1 at CERN
    - Started last week
    - Focus on component testing – R-GMA now
  - LCG (not TSTG) team has already developed
    - RLS tests
    - HEPCAL test cases

Packaging & Configuration

- Joint project – HICB-JTB
  - LCG, EDG-WP4, VDT, Trillium
  - Overall strategy agreed (document available)
  - Implementation plan now being discussed
    - Focus on slightly longer term (3Q03)
    - For July will take pragmatic solution – sites agree to use what is available
- Experiment software distribution
  - Would like to use common set of tools as far as possible
  - Currently gathering experiment requirements and looking for commonalities

Operations team

- CERN group (led by Markus Schulz)
- Grid System administrators from primary regional centres (Tier 1) – join group as we deploy to the site
  - They should then coordinate with Tier 2 sites in their region
- Coordination is by email currently
  - Suggest to use IRC during LCG-1 deployment
- Developing task list (very detailed) for deployment
- Building issues list – to be addressed at each site

Local cluster issues

- Task force at CERN to resolve issues with integrating CERN cluster into LCG;
- Have addressed:
  - Shared file system
    - Globus requires shared home directory – did not work on AFS, EDG was using AFS
    - We have developed workaround that can be used as required by other sites
  - Resolve gass-cache problems (inode leakage)
    - This was major source of loss in Christmas stress tests
    - Globus bug + cleanup mechanism
  - Resolved LCFGng problems
- We are now on track to be able to integrate the full LXbatch system into LCG
  - Still need to test and scalability tests

Other ongoing tasks

- Problem tracking system
  - BARC have delivered a system to us
  - We are testing – updating interface – want to use it very soon to track deployment issues

- Monitoring tools
  - Definition of requirements falls under GOC scope
  - For July will use DataTag latest development – to be tested
  - Longer term expect to use aspects of many developments
  - Nagios, Ganglia, EDG tools, MonaLisa,
  - Effort – BARC, INFN, Hungarian group – need to be coordinated by GOC
    - Proposal that INFN lead the effort on providing monitoring tools
    - Should be driven by requirements defined by users (physics users and grid operators – GOC)

  - In addition, require tools to enable users to track status of their jobs – this is unsatisfactory at the moment – especially when trying to debug problems