

Database Project Milestones (+ few status slides)

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Test Status: 3D testbed

- Replication test progressing well
 - Offline->T1:
 - COOL ATLAS: Stefan Stonjek (CERN, RAL, Oxford)
 - · COOL LHCb : Marco Clemencic (CERN, RAL, GridKA?)
 - FroNtier CMS: Lee Lueking (CERN and several t1/t2 sites)
 - ARDA AMGA: Birger Koblitz (CERN->CERN)
 - AMI: Solveig Albrandt (IN2P3->CERN setting up)
 - Online->offline:
 - CMS Conditions: Saima Iqbal (functional testing)
 - ATLAS: h/w allocated, preparing test plan
 - · LHCb: planning with LHCb online
- Coordination during weekly 3D meetings



Proposed Tier 1 Hardware Setup

- Propose to setup for first 6 month
 - 2/3 dual-cpu database nodes with 2GB or more
 - Setup as RAC cluster (preferably) per experiment
 - ATLAS: 3 nodes with 300GB storage (after mirroring)
 - · LHCb: 2 nodes with 100GB storage (after mirroring)
 - · Shared storage (eg FibreChannel) proposed to allow for clustering
 - 2-3 dual-cpu Squid nodes with 1GB or more
 - Squid s/w packaged by CMS will be provided by 3D
 - 100GB storage per node
 - · Need to clarify service responsibility (DB or admin team?)
- Target s/w release: Oracle 10gR2
 - RedHat Enterprise Server to insure Oracle support



Proposed 2006 Setup Schedule (please also see Spreadsheet)

- November: h/w setup defined and plan approved by GDB
- January: h/w acceptance tests, RAC setup, experiment s/w integrates main sub-dectors
- Begin February: DB readiness workshop
- February: Apps and streams setup at Tier 0
- March: Tier 1 service starts
- End May: Service review -> h/w defined for full production
- September: Full LCG database service in place



- Database server h/w ordered / already allocated at most sites
 - CERN, CNAF, BNL, GridKA, RAL, IN2P3
 - Not always the full requested service size
 - Follow up during weekly 3D meetings
- Squid installation/monitoring coordinated by CMS and progressing well
 - FNAL, CERN, Bari, UCSD, Purdue, RAL, PIC, CIEMAT, DESY, IN2P3

LCG 3D Production Phase



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Production Software Status

- CORAL public release done
 - Contains DB, monitoring, connection retry and service lookup
- POOL and COOL release on CORAL expected early January (validation builds soon)
 - Includes POOL/FroNtier production plug-in
 - Target for SC4 production
- Experiment condition models now integrating major sub-detectors
 - CMS POOL/FroNtier proof-of-concept test successful



Open Issues

- Squid support at tier 1
 - Tier 1 dba team or sysadmin team?
- Application server support at tier 0
 - FroNtier and ATLAS AMI
 - IT-DES provides J2EE hosting service
 - Is SLA: "medium-sized, non-critical apps" suitable?
- Oracle streams production setup for Tier 0
 - Goal: decoupling of production DB from tier 1/network problems
 - Test of alternative configs being prepared with Oracle
- Oracle licenses & support for Tier 1