CHEP 2001

Highlights

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* Electronic Logbook for the HEP Control Room (Philippe Canal/FNAL)
  - multimedia, remotely-viewable, configurable, platform independent

* GDML (Radovan Chytrácek/CERN)
  - Geometry description of detectors
  - Geant4 prototype in C++

* To Compress or Not to Compress
  (Andrew Hanushevsky/SLAC)
  - Objectivity compression database support
  - Compared ootidy, zlib, zz-comp
  - 2x capacity vs. 9x servers

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* ## The Linux Farm at the RCF

  (Antonio Chan/BNL)

  - CRS – Reconstruction - 187 CPUs
    * Batch only, own batch software written in Perl
  - CAS – Analysis - 151 CPUs
    * Batch and interactive access, LSF
  - VACM, web based monitoring, NFS, AFS

* ## Linux @ DESY (Knut Woller/DESY)

  - 750 in Hamburg, 160 in Zeuthen
  - SuSE (YaST) – 200 pkgs locally – rest in AFS
  - server/personal workstation configurations
  - www.netsaint.org

* **D0 Reconstruction Farm** (Lee Lueking/FNAL)
  - 40 dual-CPU PC's – testing, 50 in production
  - 4 CPU SGI Origin 2000 for $HOME
  - SAM/Enstore - data delivery, FBS - job control
* **The CDF Run 2 Offline Computer Farms** (Pasha Murat/FNAL)
  - 2 I/O SGI nodes (staging, NFS, control)
  - 154 dual-CPU PCs, 1 GB I/O files, 20 MB/sec
* **Experiences Constructing and Running Large Shared Clusters at CERN** (Vladimír Bahyl/CERN)

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* **Security for Grid** (Robert Cowles/SLAC)
  - Authorization and authentication based on PKI
  - Possible authentication solutions:
    * Accounts everywhere, Central DB of userid/passwords, Central DB combined with distributed DB, Decentralize
    * Variations: Proxy/Delegation, Community Authorization Service, MyProxy

* **Object features of Oracle 9*i*** (Marcin Nowak/CERN)
  - Object modeling (SQL 1999), OTT, C++ binding via OCCI
  - VLDB features for HEP (tablespaces, partitioning)

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