



International HEP Computing Coordination Committee

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Introduction

- IHEPCCC
 - International HEP Computing Coordination Committee
 - ICFA sub-committee that provides a forum of the exchange of information on computing issues of a global nature
 - Established in 2004 (Chair G.Wormser 2004-2006)
 - Meet 3-4 times per year (2006: CHEP/Mumbai, June, Sept)
- Web site: <http://www.ihepccc.org>
 - Membership and mandate
 - Reports to ICFA
 - Meeting agendas and minutes
 - Presentations

IHEPCCC Activities

Exchanging information on local activities and issues

- Visitor support
- Software licensing
- Grid
 - Non-HEP use of the Grids
 - Grid interoperability
- Site reports
 - CERN, IN2P3 and TRIUMF
- Technical projects
 - Liaising with HEPiX

Visitor support

- General support for visitor computing is good
 - Wireless available after local registration
 - Access to printing is generally available
- Teleconference and video conference facilities
 - Most meetings use teleconference and web
 - Demand for (costly) high quality rooms
- VOIP
 - Growing demand for VOIP
 - Skype restrictions at CERN

Software

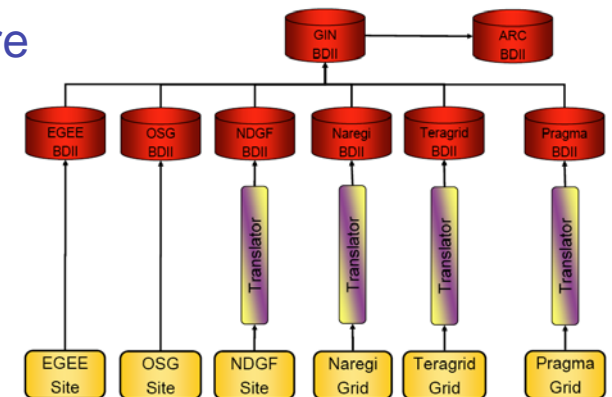
- Commercial licensing
 - Project-based licenses
 - Objectivity for BaBar
 - ORACLE for the LHC Tier 1 sites
 - Academic versus laboratories
 - Software is sometimes free for academic institutions but not labs (for example, GPFS)
- Open-source HEP software
 - Variety of policies
 - Open-source but also encouraged to commercialize SW

Grid

- Reports from the major Grid Projects (EGEE, OSG, NG)
 - Focus on non-HEP use of the grid and interoperability
- Non-HEP use of the grid
 - Funding of grid projects was subject to utilization beyond HEP
 - Large projects report increasing non-HEP use but HEP dominates
- Grid interoperability
 - Significant efforts are underway to make to link the major grids
 - Difficult problem as middleware continues to evolve (requires constant attention by many people)

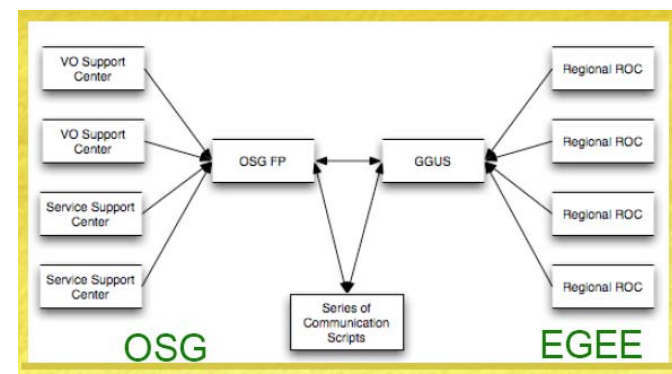
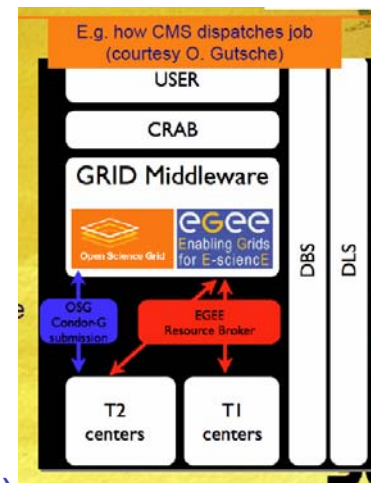
EGEE

- Report by M.Schultz on Grid Interoperability
 - OSG, ARC (NDGF), NAREGI, UNICORE (DEISA), OGF-DIN
- EGEE-OSG (started Nov 2004)
 - Required modification of EGEE/OSG software
 - Geant4 jobs in Nov 2005
 - Common VO, operational aspects, ...
 - Used for CMS in summer 2006
- Work with other grid projects underway
- Challenges
 - Information systems (common definitions)
 - Need to work on “interoperation” (two grids working together)
 - Interoperability: middleware enables grids to work together



OSG

- Report by R.Pordes on OSG
 - Overview of the OSG
- Non-HEP use
 - Bioportal, nanotechnology, chemistry
 - Licensing issues for Gaussian (computational chemistry)
- EGEE-OSG interoperability
 - OSG publishes information via the web
 - Data management under discussion
 - Grid operations
 - Concerns how to manage evolution



NorduGrid

- Report by F.Ould-Saada on NorduGrid
 - Overview of NG
- ARC middleware project
- Non-HEP applications
 - Climate simulation, medical imaging



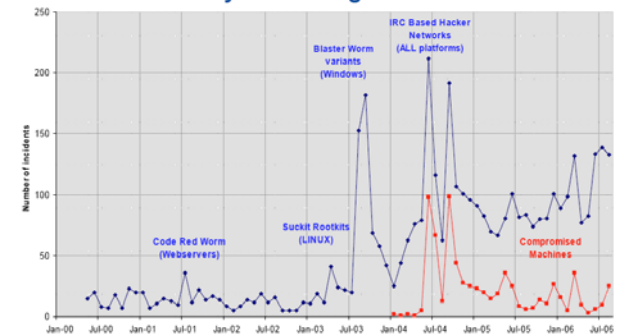
Site reports

- A number of sites report each meeting
 - CERN (W.von Ruden), IN2P3 (D.Boutigny), TRIUMF (R.Tafirout) recently reported (Sep 2006)
 - Identifying areas of common concern
 - Filesystems
 - Security and identify management
 - Other areas
 - HEP benchmarks

CERN report

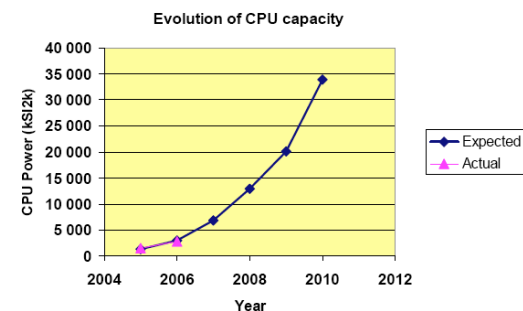
- Security issues (14 compromised PCs per month)
 - More accountability and logging of usage
 - Intrusion detection
 - Isolation of control systems
- Scientific Linux
 - SL3 support ends Oct 2007
- Areas of common HEP interest
 - E-mail coordination for anti-spam, attachments, digital signatures, secure E-mail and common policies for visitors
 - Single sign on and integration with Grid certificates
 - Managing Vulnerabilities in Desktop Operating systems and applications. Policies concerning “root” and “Administrator” rights on Desktop computers. Antivirus and anti-spyware policies
 - Common Policies for Web hosting, role of CERN as a “catch-all” web hosting service for small HEP labs, conferences and activities distributed across multiple organizations.
 - Desktop Instant messaging and IP telephony? Protocols, integration with email, presence information?

Timeline for Security Incidents
May 2000 – August 2006

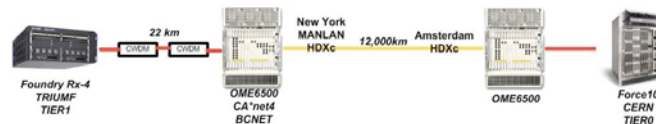


IN2P3 and TRIUMF

- IN2P3 (D.Boutigny)
 - Facility growing rapidly and facing power/AC challenges
 - Asked for advice on filesystems as their current NFS system is not scalable
 - GPFS very expensive (pay per socket)
 - Lustre
- TRIUMF (R.Tafirout)
 - Recently received funding for ATLAS T1 for next 5 years
 - Procurement of hardware expected to take 6-9 months
 - Elements of a T1 in place and active in service challenges
 - 10G link to CERN should be active by end-2006 (CERN-Amsterdam link current limit)



Oct/Nov 2005



Working groups

- Proposal to establish working groups with HEPiX
 - HEP benchmarks (raised by HEPiX)
 - Review of disk filesystems
- Follow the LCG/RTAG model
 - Form a small group of experts for a limited period (1-2 months)
 - Goals and questions
 - Recommend solutions or future actions
 - Eg GDB/HEPix recently form a storage task force (June 2006)
- HEPiX meeting currently underway in Jlab

Summary

- IHEPCCC provides an opportunity to highlight computing issues to ICFA (A.Wagner, Chair of ICFA)
 - Presentation to ICFA in Feb 2007 Beijing meeting
- Focusing on issues that are not being addressed by other computing groups or organizations
- Next meeting in January
 - Working groups, report on network activities
- CHEP2007 (Victoria)