J. Knobloch, 14th March 2003

Minutes of the XXIII HTASC Meeting

13/14 March 2003, CERN

Present:
Tobias Haas (Chair), Rosette Vandenbroucke (Belgium), Jürgen Knobloch (CERN and secretary), Milos Lokajicek (Czech republic), Grzegorz Polok (Poland), Nicanor Colino (Spain), Christophorus Grab (Switzerland)
By videoconference:
Rainer Mankel (Germany), Francesco Forti (Italy) – part time, Jorge Gomes (Portugal), Alan Flavell (UK)

Introduction (Tobias Haas)

Tobias reported on a number of excuses from HTASC members.

Approval of Minutes

The minutes were approved without changes.

Report from HEPCCC (Tobias Haas)

Tobias gave a summary from the HEPCCC meeting of October 2002.
His slides are at: http://cern.ch/api-documents/ReportfromHEPCCC.ppt

The meeting had a rather long agenda:

- Ian Bird: Deployment Aspects of LCG
- Laura Perini: Report from FOCUS
- Marcel Kunze: Definition of Tier 0/1/2 centers
- Jacques Delabrouilles: Future computing needs of non-accelerator-based experiments
- Fabricio Gagliardi: Status of EDG
- Larry Price: Coordinating new Grid proposals
- Harvey Newman: Status and Outlook for future networks
- Denis Linglin: The Lyon Biology Grid project
- iHEPCCC Developments

The minutes of HEPCCC can be found at:
http://tilde-djacobs.home.cern.ch/~Djacobs/Hepcccw3/Minutes/cm021018.html

Discussion on "Travelling Physicist Problem"

The discussion was structured following a questionnaire prepared by Tobias and inspired by a presentation of Manuel Delfino on "Person-centric" environments. Tobias has summarized the discussion here:

> **Summary (Tobias Haas)**
> An increasing number of physicists travel regularly between their home institutions and various other laboratories or institutes. They find it difficult or cumbersome to gain access to information technology (IT) resources while being guests at host institutions or while being on the road. They use different pieces of

methods, tools, software, hardware, tricks and hints to accomplish what they need to do.

On the request of HEPCCC, during its XXIII meeting on 13/14 March at CERN, HTASC held an extended discussion on this subject in order to review the situation. The aim of the discussion was to

- understand the problems people are encountering,
- review policies in place at different sites,
- And collect solutions that are being used.

As a basis for the discussion, presentations were heard from institutions in Japan (KEK), the US (SLAC) and Europe (CERN, KFK, LIP). It was found that the problems encountered in different parts of the world are very similar. However, the solutions pursued and the policies imposed at the different hosting institutions are quite different. In particular, the major problem appears to be the difficulty to obtain information on the particular local situation. For these reasons HEPCCC/HTASC decided to issue a set of recommendations both to institutions regularly hosting traveling scientists and to the home institutes. These recommendations are of a general nature and are intended as guidelines rather than specific suggestions. The problem of gaining access to essential IT resources while traveling would be very much reduced if a large number of institutions followed these recommendations.

Recommendations for institutions hosting traveling scientists:

1. **Wireless Network:** Wireless networking should be available in publicly visited places, in particular in seminar rooms.
2. **DHCP:** IP addresses should be assigned via the DHCP protocol.
3. **Power Outlets:** Seminar rooms should be equipped with a reasonable number of power outlets.
4. **Print Services:** Print services should be available to visitors
5. **Public Workstations:** Even though many people travel with their own personal devices a limited number of public workstations should be provided for those who do not carry a personal device.
6. **Documentation:** Information on what IT services are available to guests and how to use them should be provided on the web in an easily accessible location. HTASC provides a template web page for this purpose.

Recommendations for the home institutions of traveling scientists:

1. **Authenticated SMTP service:** A secure authenticated SMTP service should be provided so that mail can be relayed even if the originator is not at the home institution.
2. **WEBMAIL:** A webmail interface to the mail service should be provided.
3. **VPN:** A VPN service should be provided to tunnel insecure protocols.

General:

1. **Firewall:** Firewalls should be opened for secure protocols to a well defined set of hosts (ssh, VPN, CITRIX, afs)

2. **Redundancy:** Even though more general technical solutions may make other less general solutions obsolete one should keep in mind that simpler solutions can be used when more advanced solutions fail.

Babar Computing: Recent Developments Pete Elmer

BaBar has now taken data for almost 4 years. The offline software consists of about 2 million lines of code (mostly C++) in 800 separate packages. Integration problems have mostly been overcome. They require a limited set of external software: Objectivity, ROOT, Geant4, TCL, Cernlib, cvs, afs, gmake, perl, … RogueWave is being phased out. The electronic communication is done via HyperNews. For bug reporting, they move from Remedy to Bugzilla.
The raw data are stored in flat files ("xtc files") – 100 TB so far. The eventstore was Objectivity initially containing some 700 TB. An alternative based on ROOT I/O has been developed since late 1999.
The simulation has switched from Geant3 to Geant4 with 1440 Million events produced in 10^10 cpu seconds in 25 sites.
For the event reconstruction they have moved from rolling calibrations to a two-pass system overcoming scalability problems.
The distributed computing is done in a Grid-like structure with 5 "Tier-A" and more than 25 "Tier-C" sites.
The collaboration has developed a scenario to migrate away from Objectivity using a unified ROOT-based solution. The conditions and configuration databases will currently stay in Objectivity.

Site Reports

Switzerland

http://htasc.pi.infn.it/meetings/23/protected/delfino_person-centric.pdf

Czech republic

Only new changes mentioned. In Prague operates new computing farm Golias (32 double processor units, 1 GHz, 1 TB disk space, 10 TB LTO library with Legato). Uplink, gatekeeper and storage (1TB) have 1 Gbps, worker nodes connected with 100 Mbps. The farm serves to EDG wp6 and LCG projects, runs ATLAS DC, ALICE and D0 simulations. Possibility to use other EDG farms of CESNET if needed. We plan to upgrade the disk space to 10 TB in April 2003. Common project with CESNET - CzechLight - independent optical connection to NetherLight and from there to CERN and StarLight, starting with 1 Gbps.

New computing room under construction. UPS for 150 kW + cooling + engine generator. Should be available with at least 50 kW UPS at the end of 2003. We will host and use the EDG Cesnet farms.

Poland

Installing EDG software at their Tier-2 centre. The centre is still somewhat understaffed with 0.5 FTE for hardware and 2.5 people for software.

CERN

http://htasc.pi.infn.it/meetings/23/protected/CernSiteReportMarch03.ppt

Spain

http://htasc.pi.infn.it/meetings/23/protected/Rediris2_Colino.ppt

Belgium

Belnet has now a 2.5 Gb/s connection – also to Geant. They establish a small Grid infrastructure finding it difficult to install EDG software and getting support for it.

Germany

http://htasc.pi.infn.it/meetings/23/protected/GermanSiteReport.ppt

France (IN3P3)

UK

http://htasc.pi.infn.it/meetings/23/protected/UK_Flavell.txt

Next Meeting

12-13 June in Pisa