IHEPCCC activities

ICFA workshop on digital divide

Guy Wormser
IHEPCCC chair
LAL Orsay

What is IHEPCCC

- **HEPCCC committee created in Europe in ~1980 to coordinate HEP computing. Mainly centered around CERN at the time. Membership: Directors of the main European computing centers**

- **Important role as a discussion forum and coordinating body throughout the years. Creation of HTASC, a permanent technical advisory body. HEPCCC father of the DATAGRID initiative.**

- **In 2001, it was realized that it was mandatory to include membership from all over the world to the increased worldwide nature of HEP computing**

- **IHEPCCC was created in 2003 as a ICFA subcommittee, « sister » to SCIC, organizer of this workshop**

IHEPCCC mandate

Preamble

• …an efficient information exchange on computing issues between the major HEP centers in the world.

Missions

• …forum between the main persons in charge of HEP computing, by gathering and distributing information about all relevant issues in HEP computing, and especially those with a global nature.

– Typical examples : new technology trends, computing centers strategic policies, security issues, recommendation of standard practices, presentation of R&D results, comparison of various equipments performances.

• **The other missions include:**

– **Issuing statements and recommendations concerning computing in the HEP community.**

– **Serving as an interface to other scientific domains on matters of computing.**

– **Working in close connection with the ICFA SCIC, the physics regional organizations, and the HICB coordinating the grid projects in HEP.**

– **Reporting to ICFA (ie grabbing the attention of all the HEP major lab directors)**

– **http://www.fnal.gov/directorate/icfa/Int'l_HEPCCC.html**

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IHEPCCC membership

Asia

- Setsuya Kawabata (KEK-Japan) , Hesheng Chen (Beijing-China), Dongchul Son (Daegu- South Korea), S. Banerjee(Tata-India) , Geoff Taylor (Melbourne-Australia)

North America

- Paul Avery (Gainesville-US), Bruce Gibbard (BNL-US) , Richard Mount (SLAC-US) , Randall Sobie (Victoria-Canada), Vicky White(FNAL-US), Frank Wuerthwein (San Diego-US)

Europe

- Manuel Delfino (Barcelona-Spain) , Matthias Kasemann (DESY-Germany) , Mirco Mazzucato (Padova-Italy) , Wolfgang von Rueden (CERN) , Michal Turala (Crakow-Poland), Peter Watkins (Birmingham, UK), **Guy Wormser (Orsay-France), Chair**

Rest of the world

- Viacheslav Ilyin (Moscow-Russia), Abdeslam Houmadda (Casablanca-Morocco), Alberto Santoro (Rio, Brazil)

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Consensus on objectives

A/ Guarantee the best possible conditions for the advent on a Grid-based HEP world wide computing

A.1/ Make sure that all conditions are met to foster the development of viable HEP grid(s)

A.2/ Make sure that they are interoperable and secure

A.3/ Make sure that all regions of the HEP world have an easy access to them

B/ Foster collaboration and training in HEP computing

B.1/ Make sure that the best possible conditions are met to foster the common development of software tools and standards

B.2/ Make sure that the best possible conditiond are met for best practice exchange and training

IHEPCCC meetings

- **Inaugural meeting May 2004 in Barcelona**
  - http://agenda.cern.ch/fullAgenda.php?ida=a041864
- **CERN Oct 2004, just after CHEP04**
  - http://agenda.cern.ch/fullAgenda.php?ida=a044205
- **South Korea, May 28 2005**
- **Seattle Nov 12-18 2005. Colocated with SC2005**
- **Feb 2006 Mombai, colocated with CHEP2006**
- **Nov 2006 Europe**
- **Spring 2007 US**

- **Informal information: Report during Grid Deployment Board meeting at CERN June 22, (CERN) in Europe to let the european community aware of the developments**

IHEPCCC internal organisation

- **Bureau : D. Son, B. Gibbard, GW**
- **Working group on Technical Advisory body: W. Von Rudden, R. Mount, P. Watkins, H. Chen**
- **Working group on creating a HEP Virtual Organization : M. Delfino, R. Santoro, Y. Watase**
- **Working group on Training in HEP Computing: V. Ilyin (chair)**

Technical Advisory Body

- **IHEPCCC chose to use HEPiX as the main provider of ad hoc task forces experts**

- **Contact taken with HEPiX chairpersons**

- **First cases to study :**
  - HEP VO issues
  - Linux Operating systems

- **Future potential topics:**
  - Better coordination of HEP sofware development
  - Videoconference and other collaborating tools
  - Data storage management
  - All suggestions welcome

HEPiX and IHEPCCC

- **IHEPCCC would like to use HEPiX as a Technical Advisory body**
- **Membership of ad-hoc task forces that IHEPCCC decides to launch suggested by HEPiX to IHEPCCC. Based on volunteering (no financial support available)**
- **IHEPCCC is happy to discuss on any points that HEPiX would like to raise**
- **HEPiX report in IHEPCCC meetings**
- **IHEPCCC report in HEPiX**
- **Important HEPiX issues can be brought through IHEPCCC to the attention of the main world lab directors during ICFA meetings.**

Digital divide issues

- **HEP is playing an important role in promoting science of many devopping countries**
- **Digital divide workshop in Korea in May**
  - Next IHEPCCC meeting colocated there
- **CHEP06 in India**
- **Sharing the knowledge around the Mediterranea conf in Casablanca Sept 05**
- **Creation of a training task force within IHEPCCC (V. Ilyin chair)**
- **Can we do more?   preparation of World Summit on IST : Tunis, Durban,…**

Towards a HEP VO

- **Main idea: take advantage on the new technologies to offer minimum computing services to any bona fide HEP member in any HEP lab.**

- **Solve the travelling physicist problem**

- **Create new services for the community**

- **Based on Certificate technology**

- **Requires to maintain an accurate list of HEP VO members. Has to rely on the institutions. Requires a list of institutions**

- **Technical implementation to be discussed with experts**

Towards a HEP VO. Proposal to ICFA

- **Recommendation 1: ICFA should agree and disseminate a definition of what constitutes an individual who can be rightfully considered a member of the HEP community.**

- **Recommendation 2: Encourage the creation and maintenance of a unique list of Institutions which have people working in HEP ("HEP Institutions").**

- **Recommendation 3: Encourage one or more Institutions which have the necessary capabilities, to make available to trusted parties in the HEP community in a secure electronic form the list of HEP Institutions and verification contacts.**

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Software duplication

- **The degree of duplication of the various software efforts was really striking**
  - For instance, one Mass storage software per big lab
  - Many different grid flavors
- **From the most tiny technical piece to the large frameworks**
- **Could be partly be reduced by more information (no enthusiasm from the committee to go in that direction)**
- **How to promote the co development of HEP software (there are some success stories like GEANT4)**
- **Present trend to go away fom commercial software**

Conclusion

- **IHEPCCC recently created and off for a good start as a discussion forum and information exchange at the worldwide scale in HEP**

- **HEPiX has been picked up as the natural companion for technical advices, on a voluntary basis**

- **IHEPCCC provides a good way to attract attention of world lab directors on computing issues. Le's take avantage of it. Tell us your messages!**

- **How can we help SCIC to fight digital divide?**

- **Future potential working groups have been identified.**

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