



HEPiX-HEPNT

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Agenda

- When, why and where we started
- How we grew and developed
- Merging of HEPiX and HEPNT
- Current structure
- Meetings schedule
- Large System SIG
- Summary



Pre-History

- First, throughout the 80s, there was HEPVM, a very successful collaboration of the major HEP labs which concentrated on the IBM VM operating system then in common use
- In 1988, in a meeting at NIKHEF, there was a first attempt by several European labs to create something similar for UNIX
- At CHEP in Oxford later that year, Willem van Leeuwen (NIKHEF) tried to get some user support for the idea
- Unfortunately, these were without apparent success.



A History of HEPiX

- HEPiX really started at CHEP'91 in Tsukuba, Japan
- Representatives from SLAC (Les Cottrell), FNAL (Judy Nicholls) and CERN (Alan Silverman) recognised the possibilities and advantages of learning and mastering the brave new world of UNIX in partnership
- With HEPVIM as a model, they proposed to set up a series of regular meetings with invitation to all HEP labs to discuss issues of mutual concern
- Started with 2 Chapters, one in North America, one European, plus a common meeting associated with CHEP conferences



History - 2

- At CHEP Annecy, we decided there was more strength in one world-wide organisation with joint meetings
- Meetings to be every 6 months, on opposite sides of the Atlantic plus a meeting associated with CHEP conferences
- The very first meetings were actually scheduled alongside those of HEPVM, for example one in NIKHEF in 1993 was called HEPmix.



HEPiX Working Groups

- Formed working groups to tackle specific problem areas
 - AFS, security (even then), X11, user environment, etc
- Biggest visible achievement was the set of HEPiX login scripts developed jointly by DESY & CERN to define a standard user environment for UNIX (all UNIX).
- But behind the scenes, the other working groups also solved problems (how to work with AFS, better Transarc support for AFS) or produced shared code modules (shared development of AFS mgmt tools, X11 environment scripts, etc)



HEPNT Created

- Meanwhile, in 1997, the HTASC sub-committee of HEP-CCC created HEPNT, chaired by Dave Kelsey of RAL to look into the use of Windows in HEP sites
- Initially, HEPNT was a closed group by invitation only although they held their first open meeting in CERN in December 1998
- Since October 1999, their meetings have been associated with, subsequently merged with, those of HEPiX



HEPiX-HEPNT

- HEPiX started having themed sessions at each meeting, for example sessions on storage issues
- Then we set aside days in the week for Windows users (HEPNT), both for public presentations and working days where the Windows specialists shared experiences; for example successive reports on the experiences of each lab as they migrated to Windows 2000
- Gradually we realised the synergy between the 2 parts (many admins, especially from smaller sites, are charged with managing both, interplay between the two “worlds”) and merged them into HEPiX-HEPNT where the sessions are scheduled jointly



HEPiX-HEPNT Structure

- Most major HEP labs recognise the value of HEPiX and appoint official representatives who form a board –

INFN – Siroli, Gomezel, Fasanelli
CERN – Meinhard, Bird, Silverman
SLAC – Boenheim
Braunschweig – Duempert
DESY – Friebel
FNAL – Giacchetti, Schmidt
RAL – Gordon, Kelsey
LAL – Jouvin
TRIUMF – Kost
GSI – Kreiser
NIKHEF- Kuipers
CASPUR – Maslennikov
Jefferson – Philpott
IN2P3 – Wojcik



HEPiX-HEPNT Structure

- Leadership is normally appointed from within the Board
- Two coordinators (Wojciech Wojcik in Europe, Chuck Boeheim in north America)
- They schedule meetings each Spring (Europe) and Autumn (north America) respectively
- Otherwise, the Board is relatively little called upon except to help select new sites although there is a board mailing list which is used (currently for example to decide if we should permit commercial exhibits at meetings)
- All communication to HEPiX-HEPNT membership is via a public mailing list maintained at FNAL (HEPiX-HEPNT@fnal.gov) . Anyone can subscribe
- The [Web pages](#) are maintained at CERN; recently revised by Lisa Giacchetti (FNAL)



Meeting Format

- We attract 50-60 people in Europe, 30-40 in US/Canada
- Always use facilities of a HEP site so minimal charges, sometimes none (lab sponsorship)
- Audience is almost entirely computing support or computing administration personnel and service managers; rather few users
- Offers are solicited from the membership list but no formal review before acceptance; first-come, first-served
- Meetings start with site reviews – what's new at the different sites; often very interesting (my personal view)
- Usually 1 to 2 days of particular interest to Windows specialists, then 2-3 days of UNIX/Linux talks; then one day on a particular topic
- No parallel sessions (with rare exceptions where a particular interest area schedules a workshop)



HEPiX-HEPNT Oct 2003

- Will be held Oct 20th-24th in TRIUMF, Vancouver
- 3 days “normal” HEPiX-HEPNT
- 1.5 days of security sessions scheduled by the Large System SIG
- Half-day workshop to explore some storage issues and prepare a longer storage session for the next meeting (Edinburgh, May 2004)
- Setting up a small industrial exhibit this time (a firm selling cluster solutions); because of late bookings, it will be off-site, at the HQ hotel downtown
- More details at <http://www.triumf.ca/hepix2003/>



Large System SIG

- A recently-formed working group (Oct 2000) to focus on topics of interest to cluster builders and managers of large systems, which in today's HEP world means mostly large clusters
- Two workshops, both at FNAL: May 2001 (60 people, mostly invited papers and an invited audience) and October 2002 (next to a normal HEPiX; 90 people, open invitation to participate and share experiences)
- Special topics at each HEPiX-HEPNT meeting since then – In October 2003 it will be security, next Spring probably mass storage systems
- We perform and publish [site surveys](#) – recent examples include which computer centres operate “lights-out”, which anti-virus tools are in use, how different sites select PC suppliers, etc



Large System SIG and LCG

- Since its beginning and especially since the start of LCG, the Large System SIG has tried to concentrate on issues of relevance to LCG and other HEP Grid projects
- LCG has considered creating a technical forum for the LCG providers and has decided to encourage the SIG to act as that forum
- Meeting themes are chosen in collaboration with LCG for example
- But to be really effective in such a role, we need more Tier 1 and Tier 2 sites to send representatives
- HEP-CCC can help spread the word and encourage more participation in our activities



HEPiX-HEPNT – is it worth it?

- Judging by the continuing interest shown by the various people attending and their managers in funding their attendance, we must assume yes
- For many of us, HEPiX-HEPNT and CHEP are where we exchange experiences, formal in sessions, informal in personal contacts. But CHEP is every 18 months only, expensive (registration fees) and many of the smaller sites do not send the relevant people
- We also see significant support for specific topics such as large cluster workshops, security discussions, site surveys via the mail list
- Finally, some sites report that the existence of HEPiX-HEPNT has helped them in negotiations with suppliers and currently we hope to use that in negotiations with Redhat over their recent policy changes