Contribution ID: **28**   Type: **oral presentation**

Integrating a heterogeneous and shared computer cluster into grids

Tuesday, February 14, 2006 2:20 PM (20 minutes)

Computer clusters at universities are usually shared among many groups. As an example, the Linux cluster at the "Institut fuer Experimentelle Kernphysik" (IEKP), University of Karlsruhe, is shared between working groups of the high energy physics experiments AMS, CDF and CMS, and has successfully been integrated into the SAM grid of CDF and the LHC computing grid LCG for CMS while it still supports local users. This shared usage of the cluster effects heterogeneous software environments, grid middleware and access policies. Within the LCG, the IEKP site realises the concept of a Tier-2/3 prototype center. The installation procedure and setup of the LCG middleware has been modified according to the local conditions. With this dedicated configuration, the IEKP site offers the full grid functionality such as data transfers, CMS software installation and grid based physics analyses. The need for prioritisation of certain user groups has been satisfied by supporting different virtual organisations. The virtualisation of the LCG components, which can improve the utilisation of resources and security aspects, will be implemented in the near future.

Primary authors: VEST, Anja (University of Karlsruhe);   JUNG, Christopher (University of Karlsruhe / FZK); FELZMANN, Ulrich (University of Karlsruhe); BUEGE, Volker (University of Karlsruhe / FZK)

Co-authors: Prof. QUAST, Guenter (University of Karlsruhe); KREPS, Michal (University of Karlsruhe); Mr KERZEL, Ulrich (University of Karlsruhe)

Presenter: VEST, Anja (University of Karlsruhe)

Session Classification: Grid Middleware and e-Infrastructure Operation

Track Classification: Grid middleware and e-Infrastructure operation