

A comparison between xen and kvm

Thursday 26 March 2009 14:20 (20 minutes)

Virtualization is a proven software technology that is rapidly transforming the IT landscape and fundamentally changing the way that people compute. Recently all major software producers (e.g. Microsoft and RedHat) developed or acquired virtualization technologies.

Our institute is a Tier1 for LHC experiments and is experiencing lots of benefits from virtualization technologies, like improving fault tolerance, providing efficient hardware resource usage and increasing security. Currently the virtualization solution adopted is xen, which is well supported by the Scientific Linux distribution, widely adopted by the HEP community.

Since the HEP linux distribution is based on RedHat ES, we feel the need to investigate performances and usability differences with the new kvm technology recently acquired by RedHat.

The case study of this work will be the LHCb experiment Tier2 site hosted at our institute, where all major grid elements run on xen virtual machines smoothly. We will investigate the impact on performance and stability that a migration to kvm would entail on the Tier2 site, as well as the effort required by a system administrator to deploy the migration.

Author: Dr CHIERICI, Andrea (INFN-CNAF)

Presenter: Dr CHIERICI, Andrea (INFN-CNAF)

Session Classification: Software Components, Tools and Databases

Track Classification: Software Components, Tools and Databases