

7th Workshop on Virtualization in High-Performance Cloud Computing – VHPC2012

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Virtualization has become a common abstraction layer in modern data centers, enabling resource owners to manage complex infrastructure independently of their applications. Conjointly, virtualization is becoming a driving technology for a manifold of industry grade IT services. The cloud concept includes the notion of a separation between resource owners and users, adding services such as hosted application frameworks and queueing. Utilizing the same infrastructure, clouds carry significant potential for use in high-performance scientific computing. The ability of clouds to provide for requests and releases of vast computing resources dynamically and close to the marginal cost of providing the services is unprecedented in the history of scientific and commercial computing.

Distributed computing concepts that leverage federated resource access are popular within the grid community, but have not seen previously desired deployed levels so far. Also, many of the scientific data centers are only beginning to apply virtualization and cloud concepts.

This year's workshop featured 5 submitted papers on diverse topics in HPC virtualization and 2 invited talks. Jakob Blomer from CERN presented CernVM, a distributed approach to high-throughput computing for the LHC using VMs. Vangelis Koukis from GRNET, presented and demonstrated Okeanos, the public cloud service for the Greek research and academic community.

The chairs would like to thank the Euro-Par and local organizers and the members of the program committee, along with the speakers and attendees, whose interaction contributed to a stimulating environment. VHPC is planning to continue the successful co-location with Euro-Par in 2013.