
Subject: CfP Workshops on Virtualization/XEN in HPC Cluster and Grid Computing Environments (XHPC'07, VHPC'07)

Posted by [Michael Alexander](#) on Wed, 13 Dec 2006 12:22:28 GMT

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CALL FOR PAPERS

Workshop on Virtualization/Xen in High-Performance Cluster and Grid Computing (XHPC'07)

as part of The 16th IEEE International Symposium on High Performance Distributed Computing (HPDC-16), June 27-29, 2007, Monterey, California.

and

Workshop on Virtualization in High-Performance Cluster and Grid Computing (VHPC'07)

as part of The 13th International European Conference on Parallel and Distributed Computing (Euro-Par 2007), August 28-31, 2007, IRISA, Rennes, France.

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Date: June 27-29, 2007 and August 28-31, 2007

HPDC-16: <http://www.isi.edu/hpdc2007/>

Euro-Par 2007: <http://europar2007.irisa.fr/>

Workshop URL: <http://xhpc.wu-wien.ac.at/>

(due date for both: January 26, Abstracts Jan 12)

Scope:

Virtual machine monitors are reaching wide-spread adoption in a variety of operating systems as well as scientific educational and operational usage areas. With their low overhead, hypervisors allows for concurrently running large numbers of virtual machines,

providing each encapsulation, isolation and in the case of Xen, network-wide CPU migratability. VMMs offer a network-wide abstraction layer of individual machine resources to OS environments, thereby opening whole new cluster-and grid high-performance computing (HPC) architectures and HPC services options. With VMMs finding applications in HPC environments, these workshops aim to bring together researchers and practitioners active on virtualization in distributed and high-performance cluster and grid computing environments.

The workshops will be one day in length, composed of 20 min paper presentations, each followed by 10 min discussion sections. Presentations may be accompanied with interactive demonstrations. The workshop will end with a 30 min panel discussion by presenters.

TOPICS

Topics include, but are not limited to, the following subject matters:

- Virtualization/Xen in cluster and grid environments
- Workload characterizations for VM-based clusters
- VM cluster and grid architectures
- Linux Hypervisors
- Cluster reliability, fault-tolerance, and security
- Compute job entry and scheduling
- Compute workload load leveling
- Cluster and grid filesystems for VMs
- VMMs, VMs and QoS guarantees
- Research and education use cases
- VM cluster distribution algorithms
- MPI, PVM on virtual machines
- System sizing
- Hardware support for virtualization
- High-speed interconnects in Xen/hypervisors
- Hypervisor extensions and utilities for cluster and grid computing
- Network architectures for VM-based clusters
- VMMs/Hypervisors on large SMP machines
- Performance models
- Performance management and tuning hosts and guest VMs
- VMM performance tuning on various load types
- Xen/other VMM cluster/grid tools
- Device access from VMs
- Management, deployment of clusters and grid environments with VMs

PAPER SUBMISSION

Papers submitted to each workshop will be reviewed by at least two members of the program committee and external reviewers. Submissions should include abstract, key words, the e-mail address of the corresponding author, and must not exceed 10 pages, including tables and figures. Submission of a paper should be regarded as a commitment that, should the paper be accepted, at least one of the authors will register and attend the conference to present the work. An award for best student paper will be given. Papers can only be submitted for one workshop, but not both at the same time.

XHPC'07:

Accepted papers will be included in proceedings published by the IEEE Computer Society Press.

The IEEE 8 1/2 x 11 CS format must be used. Submission can be in either PDF or Postscript.

<ftp://pubftp.computer.org/Press/Outgoing/proceedings/>

VHPC'07:

Accepted papers will be included in proceedings published in the Springer LNCS series.

The format must be according to the Springer LNCS Style and preferably be in LaTeX or FrameMaker, although submissions using the LNCS Word template are also possible. Initial submissions are in PDF, accepted papers will be requested to provide source files.

<http://www.springer.de/comp/lncs/authors.html>

Submission Link:

<https://edas.info/newPaper.php?c=5189&submit=0&>;

(add either XHPC: or VHPC: in the title of the paper to designate the target workshop)

IMPORTANT DATES

January 12, 2007 - Abstract submissions due
Paper submission due: January 28, 2007
Acceptance notification: March 26, 2007
Camera-ready due: April 27, 2007 (XHPC), May 26, 2007 (VHPC)
Conference: June 27-29, 2007 (XHPC) and August 28-31, 2007 (VHPC)

CHAIR

Michael Alexander (chair), WU Vienna, Austria
Stephen Childs (co-chair), Trinity College, Dublin, Ireland

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GENERAL INFORMATION

The workshops will be held as part of HPDC-16 in Monterey, California
and Euro-Par 2007 in Rennes, France.

HPDC-16: <http://www.isi.edu/hpdc2007/>
Euro-Par 2007: <http://europar2007.irisa.fr/>

Best Regards,

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