

4th Workshop on System-level Virtualization for High Performance Computing (HPCVirt 2010)

held in conjunction with EuroSys 2010.
April-13, 2010, Paris, France



**Association for
Computing Machinery**

Advancing Computing as a Science & Profession

Web page: <http://www.csm.ornl.gov/srt/conferences/hpcvirt2010/>

The emergence of virtualization enabled hardware, such as the latest generation AMD and Intel processors, has raised significant interest in High Performance Computing (HPC) community. In particular, system-level virtualization provides an opportunity to advance the design and development of operating systems, programming environments, administration practices, and resource management tools. This leads to some potential research topics for HPC, such as failure tolerance, system resilience, system management, energy saving and solution for application porting to new HPC platforms.

The workshop on System-level Virtualization for HPC (HPCVirt 2009) is intended to be a forum for the exchange of ideas and experiences on the use of virtualization technologies for HPC, the challenges and opportunities offered by the development of system-level virtualization solutions themselves, as well as case studies in the application of system-level virtualization in HPC.

The workshop program will include presentations of peer-reviewed papers as well as a panel with participants from research/academia and industry. HPCVirt topics of interest include, but are not limited to:

- system-level virtualization solutions for HPC,
- high-availability based on system-level virtualization mechanisms for HPC,
- fault tolerance mechanisms based on system-level virtualization mechanisms for HPC,
- system resilience based on system-level virtualization technics for HPC,
- energy saving,
- system administration and management for virtualized environments for HPC,
- resource management for HPC in virtualized environments,
- performance and evaluation of virtualization in HPC,
- case studies of virtualization enabled hardware,
- virtualized I/O and storage.

Download the call for paper: <http://www.csm.ornl.gov/srt/conferences/hpcvirt2010/cfp-hpcvirt2010.pdf>

Important Dates

- Paper submission deadline: February-22, 2010
- Acceptance notification: March-22, 2010
- Final camera ready version: April-5, 2010
- Early registration deadline: TBD

Paper Submission

Papers can be submitted at the following URL: <http://www.easychair.org/conferences/?conf=hpcvirt2010>.

Workshop Chairs

General Chair: Dr. Stephen L. Scott, Oak Ridge National Laboratory

Program Chair: Dr. Geoffroy Vallee, Oak Ridge National Laboratory

Program Committee

- Mark Baker; The University of Reading, UK
- Patrick Bridges; UNM, USA
- Ron Brightwell; SNL, USA
- Thierry Delaitre; The University of Westminster, UK
- Christian Engelmann; ORNL, USA
- Douglas Fuller; ORNL, USA
- Ada Gavrilovska; Georgia Tech, USA
- Dieter Kranzlmüller; Ludwig-Maximilian University Munich - Leibniz Supercomputing Centre
- Adrien Lebre; Ecole des Mines de Nantes, France
- Laurent Lefevre; INRIA, Université of Lyon, France
- Jean-Marc Menaud; Ecole des Mines de Nantes, France
- Raymond Namyst; Université de Bordeaux 1, France
- Thomas Naughton; ORNL, USA
- Dimitrios Nikolopoulos; Virginia Tech, USA
- D.K. Panda; OSU, USA
- Louis Rilling; Kerlabs, France
- Samuel Thibault; LaBRI, France

Submission Guidelines

Authors are invited to submit original and unpublished work that exposes a new problem, advocates a specific solution, or reports on actual experience. Papers should be submitted as full-length 8 pages double column including figures and tables in standard ACM format. Papers that exceed this length will be rejected without consideration of their merit.

A single CD with the accepted papers for all workshops, and give a copy of that CD to each registered attendee. ACM must hold copyright, and the papers will appear in the ACM DL; the papers will NOT be part of the EuroSys proceedings.

The SIGPLAN-approved LaTeX format and templates can be found at <http://www.acm.org/sigs/sigplan/authorInformation.htm>

Presentations will be invited based on the originality, technical merit, and topical relevance of their submissions.

Please contact hpcvirt2010@ornl.gov with questions.

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