International Workshop on Runtime and Operating Systems for Supercomputers
Munich, Germany

International Workshop on

Runtime and Operating Systems for Supercomputers ROSS'14

Held in conjunction with ICS 2014, Munich, Germany, June 10, 2014

The complexity of node architectures in supercomputers increases as we cross petaflop milestones on the way towards Exascale. Increasing levels of parallelism in multi- and many-core chips and emerging heterogeneity of computational resources coupled with energy and memory constraints force a reevaluation of our approaches towards operating systems and runtime environments.

Call for Papers

The ROSS workshop, to be held as a full-day meeting at the ICS 2014 conference in Munich, Germany, focuses on principles and techniques to design, implement, optimize, or operate runtime and operating systems for supercomputers and massively parallel machines.

Topics of interest:

- OS and runtime system scalability on many-node and multi/many-core systems
- specialized OSs for Supercomputing
- distributed/hybrid/partitioned OSs and runtime systems for Supercomputing
- fault tolerance
- system noise analysis and prevention
- interaction between middleware, runtime system, and the OS
- modeling and performance analysis of runtime systems
- OS and runtime considerations for large-volume, high-performance I/O
- parallel job startup
- memory management and emerging memory technologies
- the role of OS and runtime system in minimizing power usage
- real-time considerations for Supercomputing

Schedule and Submission Procedure

Submission deadline:	March 14, 2014
Author notification:	April 21, 2014
Final papers due:	May 9, 2014
Workshop date:	June 10, 2014

The ROSS workshop proceedings will be published electronically along with the ICS conference proceedings via the ACM Digital Library. Submitted manuscripts should be formatted using the ACM SIG proceedings alternate format. Extensive documentation can be found at the ACM site (http://www.acm.org/sigs/publications/proceedings-templates).The maximum length is 8 pages. All papers must be in English. Please visit the workshop website (http://www.mcs.anl.gov/events/ workshops/ross/2014/) for further instructions and the submission link.

The best papers of the workshop may be considered for inclusion in a special issue of International Journal of High Performance Computing Applications (IJHPCA). The decision will be made after the workshop.

Workshop Chairs

Kamil Iskra	ANL
Torsten Hoefler	ETH Zurich

Program Committee

Patrick Bridges	UNM
Ron Brightwell	SNL
Franck Cappello	ANL
Bronis R. de Supinski	LLNL
Christian Engelmann	ORNL
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