

Call for Papers: The 2nd International Workshop on Network-aware Data Management to be held in conjunction with SC 2012



Sun Nov 11th, 2012 – Salt Lake City, Utah, USA.

<http://sdm.lbl.gov/ndm/2012>



The Network-aware Data Management Workshop (NDM 2012) will be held in conjunction with the IEEE/ACM International Conference for High Performance Computing, Networking, Storage and Analysis (SC 2012), in Salt Lake City, Utah.

Scope: Scientific applications and experimental facilities generate large amounts of data. In addition to increasing data volumes and computational requirements, today's major science requires cooperative work in globally distributed multidisciplinary teams. In the age of extraordinary advances in communication technologies, there is a need for efficient use of the network infrastructure to address increasing data and compute requirements of large-scale applications. Since the amount of data and the size of scientific projects are continuously growing, traditional data management techniques are unlikely to support future collaboration systems at the extreme scale. Network-aware data management services for dynamic resource provisioning, end-to-end processing of data, intelligent data-flow and resource coordination are highly desirable. This workshop will seek contribution from academia, government, and industry to discuss emerging trends in use of networking for data management, novel techniques for data representation, simplification of end-to-end data flow, resource coordination, and network-aware tools for the scientific applications.

Topics of interest include but are not limited to:

- High-bandwidth networks/protocols and middleware
- Network support for data-intensive computing
- Scalable services for network-aware applications
- Network-aware data scheduling and resource brokering
- Dynamic resource provisioning mechanisms
- Performance evaluation of network-aware data management
- Cloud/Grid management systems
- Tools and systems to support future collaborative science
- Practical experiences and prototypes for large-scale data streaming
- Performance modeling/ Quality of Service (QoS) issues
- Application pipelines and workflow management
- Network-aware toolkits for data distribution
- Data replication and metadata management
- Heterogeneous resource management
- Recovery from network failures

Important Dates:

Paper Registration due: September 7, 2012

Paper Submission due: September 14, 2012

General Chairs:

Mehmet Balman, Lawrence Berkeley National Laboratory
Surendra Byna, Lawrence Berkeley National Laboratory

Program Committee:

Ismail Akturk, Bilkent University, Turkey
Gabrielle Allen, Louisiana State University
Pavan Balaji, Argonne National Laboratory
Ali R. Butt, Virginia Tech.
Tasneem Brutch, Samsung R&D
Promita Chakraborty, Molecular Foundry
Constantine Dovrolis, Georgia Tech
Zhihui Du, Tsinghua University, China
Alexandru Iosup, Delft University of Technology, the Netherlands
Daniel S. Katz, Computation Institute, University of Chicago
Dhableswar Panda, Ohio State University
Manish Parashar, Rutgers, The State University of New Jersey
Ian Taylor, Cardiff University, United Kingdom
Sudharshan Vazhkudai, Oak Ridge National Laboratory
Venkatram Vishwanath, Argonne National Laboratory
Jason Zurawski, Internet2
Fatos Xhafa, University of Catalonia, Spain

Submission Guidelines

Please submit your paper(s) in PDF format via the EasyChair submission site: <https://www.easychair.org/conferences/?conf=ndm2012>

Your paper must be formatted according to the double-column format used for IEEE Conference Proceedings. Please use the templates provided at http://www.ieee.org/conferences_events/conferences/publishing/templates.html to ensure that formatting will meet IEEE specifications.

Reviewing of the papers will be done by the program committee, assisted by external referees. The decision of the program committee is final. Papers should be self-contained. All submissions will be peer-reviewed based on correctness, technical strength, originality, quality of presentation, relevance to the workshop's scope and topics of interest.

Submitted papers must be original work, have not appeared in and is not under consideration for another workshop, conference or a journal. Accepted papers will be published in ACM/IEEE digital proceedings through SC 2012.

Papers should be no longer than ten (10) pages, including figures, tables, and references. Submissions that violate any of these restrictions will not be reviewed. The page limit will be enforced strictly.

If you have any further questions, please email Mehmet Balman and Surendra Byna {mbalman,sbyna} at lbl.gov