

**The 3rd International Workshop of Software-Defined Data Communications and Storage (SDDCS) 2017, in conjunction with ACM ASPLOS 2017, on April 8, 2017, in Xi'an, China.**

<http://stlab.wnlo.hust.edu.cn/csyhua/sddcs2017.htm>

**Overview**

The future infrastructures of the data centers and cloud computing are becoming increasingly software-defined. Although the infrastructures consist of communications and storage resources, they are generally studied separately. Hence, applications and platforms have to precisely define the virtual environment in which they wish to run. The communication performance decreases due to overlooking the properties of storage devices, and vice versa. Software-defined methodologies offer an opportunity to bridge their gap and deliver high performance.

The SDDCS workshop provides the forum for multi-disciplinary research spanning data communications, networking, storage systems and devices, as well as the applications. SDDCS aims to bring together industry and academia to jointly explore recent progresses related to the potential performance bottleneck and the gap between communications and storage in the software-defined context. We particularly encourage contributions containing highly novel ideas, new approaches, and/or groundbreaking results.

**Topics:**

Topics of interests in SDDCS include but are not limited to:

- Software-defined memory system for cloud computing
- Software-defined non-volatile devices
- Convergent design for communications and storage
- Non-volatile storage support for network transmission
- Storage deduplication for remote cloud backups
- Data collection and analytics for system optimization
- Dynamic workload redistribution and scheduling
- Non-volatile devices in network switches
- Cross-layer coordination in data centers
- Storage virtualization in data centers
- Security for SDDCS schemes
- Programmable interfaces for convergent design
- User studies and experiences of real-world applications

**Submission Instructions**

Submitted papers must be no longer than 6 single-spaced 8.5" x 11" pages, including figures, tables, and references; two-column format, using 10-point type on 12-point (single-spaced) leading; and a text block 6.5" wide x 9" deep. Author names and affiliations should appear on the title page. The submitted papers should present original theoretical and/or experimental research in any of the areas listed above that has not been previously published, accepted for publication, or is not currently under review by another conference or journal. Selected and extended papers will be recommended to ACM Transactions on Storage (TOS) for fast-track processing (no guarantee of acceptance).

**Important Dates**

Paper submission due: February 7, 2017 (11:59pm EDT)

Notification to authors: March 7, 2017

Final papers due: March 20, 2017

**Workshop Organizer:****General Co-chairs:**

Yu Hua, Huazhong University of Science and Technology

Xue Liu, McGill University

**Program Co-chairs:**

Pin Zhou, Datos IO, Inc

Vaneet Aggarwal, Purdue University

Wei Xu, Tsinghua University

**Publicity Co-chairs:**

Jishen Zhao, University of California, Santa Cruz

Shaolei Ren, University of California, Riverside

Edith Ngai, Uppsala University

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Hyojun Kim, Google

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Vasily Tarasov, IBM Research

Peter J. Varman, Rice University

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