Deduplication-aware Architecture and System for Edge Computing

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Abstract

Edge computing requires cost-efficient storage infrastructure to deliver high performance. Deduplication-based schemes are able to meet these needs due to salient features of space and bandwidth efficiency, as well as high throughput. In this talk, I will present our recent work to improve the performance of deduplication-aware storage systems from the bottom-up views of devices, systems and applications, which construct the deduplication ecosystem for edge computing.

Biography

Dr. Yu Hua is a professor in Huazhong University of Science and Technology. He was Postdoc Research Associate in McGill University in 2009, and Postdoc Research Fellow in University of Nebraska-Lincoln in 2010-2011. His research interests include storage systems and cloud computing. He publishes more than 100 papers in major journals and conferences, including IEEE Transactions on Computers (TC), IEEE Transactions on Parallel and Distributed Systems (TPDS), IEEE Transactions on Industrial Informatics (TII), ACM Transactions on Architecture and Code Optimization (TACO), Proceedings of the IEEE (PIEEE), IEEE/ACM Transactions on Networking (ToN), USENIX ATC, USENIX FAST, INFOCOM, SoCC, SC, ICDCS and MSST. He serves for multiple international conferences, such as ASPLOS, SOSP, USENIX ATC, EuroSys, RTSS, DAC, INFOCOM, ICDCS, IPDPS, MSST and ICNP. He is the senior member of ACM, IEEE and CCF, and the member of USENIX. He has been appointed as the Distinguished Speaker of ACM and CCF.

Homepage: http://cs.hust.edu.cn/stlab/csyhua/