

Research and Evaluation of RoCE in IHEP Data Center

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With more and more large-scale scientific facilities are built, more and more HPC requirements are needed in IHEP. RDMA is a technology that allows servers in a network to exchange data in main memory without involving the processor, cache or operating system of either server, which can provide high bandwidth and low latency. There are two RDMA technologies which were InfiniBand and a relative new comer called RoCE –RDMA over Converged Ethernet. This paper introduces the RoCE technology, we research and compare the performance of both IB and RoCE in IHEP data center, and we also evaluate the application scenarios of RoCE which can support our future technology selection in HEPS. In the end, we present our future plan.

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