

Status of the APENet project

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Abstract: We present the current status of APENet, our custom 3-dimensional interconnect architecture to be used in a PC clusters environment. Updated benchmarks of bandwidth and latency are shown, according to the latest hardware/software enhancements. The low level device driver has been reworked by following a custom hardware RDMA architecture, and MPICH-VMI, an implementation of the MPI library, has been ported to APENet. Benchmarks of LQCD applications in a fully APENet-based cluster are also presented.