A DATA INTENSIVE COMPUTATION ON A CLUSTER

Parallel Elementwise Processing

Zoltán Horváth, Zoltán Hernyák, Tamás Kozsik, Máté Tejfel, Attila Ulbert
Eötvös Loránd University, Budapest, Hungary

We have investigated the applicability of PC clusters with terabyte disk-servers for data-intensive parallel computing. We used parallel element-wise processing as our testcase. We have searched for the optimal value for parameters of the algorithm running on our hardware environment. The performance of several communication frameworks has been tested, such as C/PVM, C/MPI, Distributed Haskell and socket interface in C. On large inputs with heavy operations our implementations showed considerable speedups.

References

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