MPJava: High-Performance Message Passing in Java using Java.nio Bill Pugh Jaime Spacco

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Abstract

We explore advances in Java Virtual Machine (JVM) technology along with new high performance I/O libraries in Java 1.4, and find that Java is increasingly an attractive platform for scientific cluster-based message passing codes.

We report that these new technologies allow pure Java implementations of cluster communication libraries that perform competitively with standard C-based MPI implementation.