

# MMDS: MICROWAY<sup>®</sup> MPI DIAGNOSTIC SUITE<sup>™</sup>

Featuring MPI Link-Checker<sup>™</sup> and MPI Fast-Check<sup>™</sup>

## Ensure Your Applications Run at Full Speed

The performance of an MPI application is often limited by the speed of the slowest node in the cluster. A single slow node or intermittent link can cut MPI application speed by as much as one half! Whether you use GigE, InfiniBand, InfiniPath HTX, Myrinet or Quadrix, there is only one choice for monitoring and debugging your cluster.

The Microway MPI Diagnostic Suite consists of two applications: MPI Link-Checker<sup>™</sup> and MPI Fast-Check<sup>™</sup>. The two applications perform complementary functions. MPI Fast-Check performs a fast one-time test of all nodes in your cluster and reports any nodes that are clearly underperforming. MPI Link-Checker performs a much more extensive set of latency, bandwidth, and data integrity tests between all pairs of nodes. The MPI Diagnostic Suite runs on MPI based clusters made by any manufacturer.

## Find Problems Quickly

MPI Fast-Check takes only a few seconds to run, even on large clusters with hundreds of nodes. The Fast-Check report details which nodes appear to have performance issues and will require further testing. Slow nodes may be tested for even the most subtle performance problems using MPI Link-Checker. A color-coded graphical display marks trouble areas to identify slow nodes, cables or interconnects.

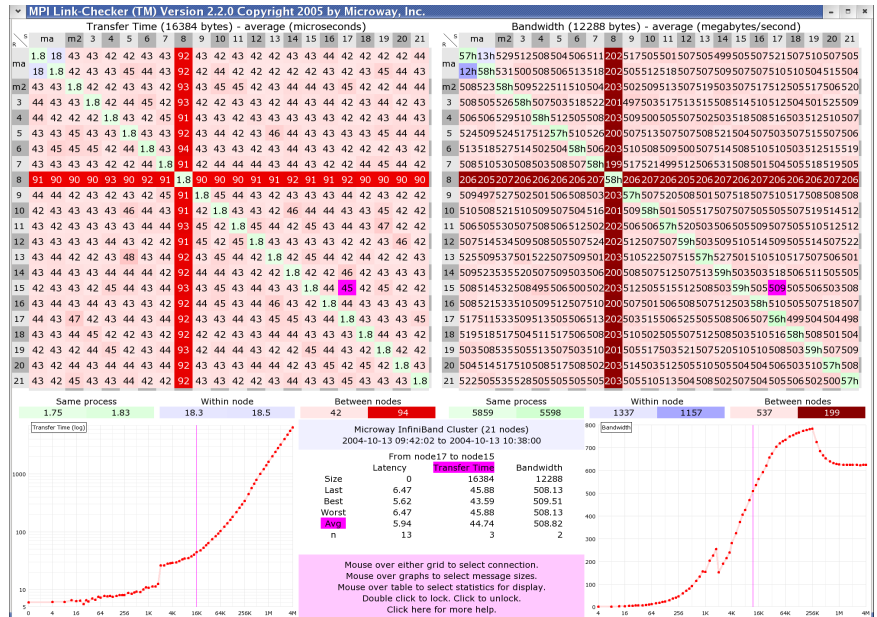
Application performance is affected by problems with processor caching, motherboards, PCI buses, BIOS's, riser cards, PCI interconnects, intermittent cables and cross bar switches. With so many possible failure points, you cannot be certain that your cluster is running full speed unless it's been analyzed by Microway's MPI Diagnostic Suite.

## MPI Link-Checker<sup>™</sup> Features

- Measures bandwidth and latency between all nodes in any MPI cluster
- Identifies nodes/processors that may slow application performance
- Identifies corrupt transmissions
- Displays performance graphs for each individual connection
- Performs tests across a wide range of possible message sizes
- Custom groups of nodes may be identified and individually tested

## MPI Fast-Check<sup>™</sup> Features

- Analyzes clusters with hundreds of nodes in only a few seconds
- Intelligently tests each network portion to identify problem areas
- Identifies underperforming nodes



MMDS is delivered free on every Microway cluster sold in 2006. Please send email to [sales@microway.com](mailto:sales@microway.com) or call our sales team at 508-746-7341.



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GS-35F-0431N

Other Microway cluster management tools include MCMS<sup>™</sup> and NodeWatch<sup>™</sup>.



Sign up for Microway's technical newsletter at [www.microway.com/newsletter](http://www.microway.com/newsletter)

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