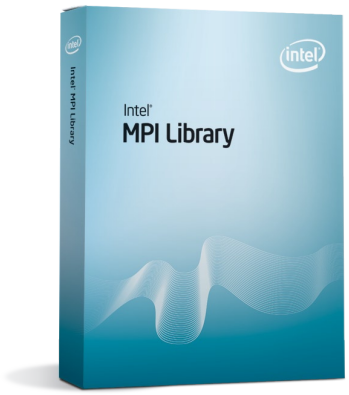
Intel® MPI Library 3.2
for Linux* or Windows*

Product Brief

Intel® MPI Library 3.2
for Linux* or Windows*



Deliver Flexible, Efficient Cluster Messaging

Implementing the high performance MPI-2 specification on multiple fabrics, Intel® MPI Library 3.2 focuses on making applications perform better on IA based clusters. The Intel® MPI Library enables you to quickly deliver maximum end user performance even if you change or upgrade to new interconnects, without requiring major changes to the software or to the operating environment.

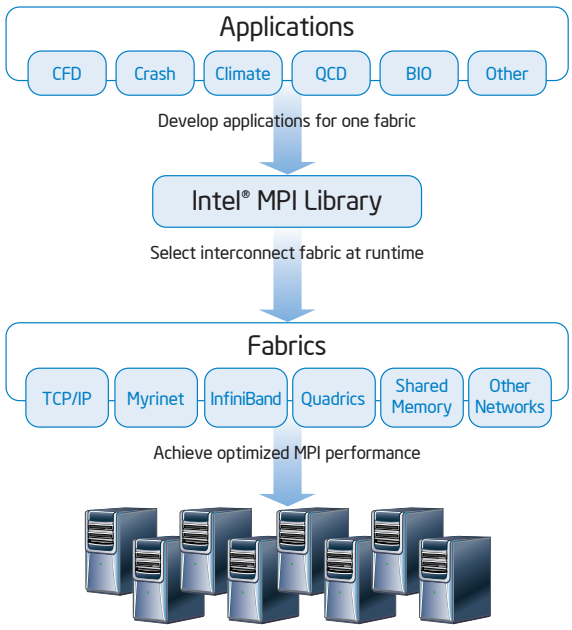
Features

Intel® MPI Library 3.2 is a multi-fabric message passing library that:

- Is available for Windows Compute Cluster Server 2003* or Linux*
- Focuses on making applications perform best on IA based clusters
- Enables adoption of the MPI-2 functions as the customer needs dictate
- Delivers best in class performance for enterprise, divisional, departmental and workgroup high performance computing

Intel® MPI Library 3.2 is available in all of the following packages:

- Intel MPI Library 3.2 Free Runtime Environment for pre-installation or redistribution
- Intel MPI Library 3.2 Software Development Kit including compilation tools, interface (static) libraries, debug libraries, trace libraries, include files and modules, and test codes
- Intel® Cluster Toolkit 3.2
- Intel® Cluster Toolkit Compiler Edition 3.2



Intel® MPI Library eliminates the need to develop, maintain, and test applications running on multiple fabrics.

Performance

Multiple hardware fabrics

- Get high-performance interconnects, including InfiniBand*, Myrinet*, QsNet*, as well as TCP, shared memory, and others.
- Efficiently work through the Direct Access Programming Library (DAPL), making it easy for you to test and run applications on a variety of network fabrics.

Streamlined product setup

- Get users up and running faster with the ability to install under root or through an ordinary user ID.
- Implement mpivars.sh and mpivars.csh scripts for easy environment setup.

Simplified process management

- Reduce hand-coding work by using the mpirun script, which automates multiprocessing daemon (MPD) startup and cleanup.
- Take advantage of flexible system-, user-, and session-specific configuration files.
- Give the end user a reliable runtime with transparent support for fallback Internet Protocol (IP) interfaces.

Environment variables for runtime control

- Increase performance with the ability to use device-specific and collective-protocol thresholds.
- Boost performance with memory registration cache.
- Get more accurate measurements with platform-specific fine-grain timers.

Compatibility

Deliver high-performance applications to market sooner by using Intel® MPI Library, which provides a high degree of interoperability with Intel tools and architecture:

- Based on Argonne National Laboratory's MPICH-2 implementation
- Simplified Integration with leading Linux Job Schedulers
- MPI-2 standard compliance and portability
- Support for ROMIO* (a high-performance, portable MPI-IO implementation)
- Support for leading Linux* Parallel Debuggers
- Support for GNU compilers (version 3.0 or higher)

System Requirements

For details on hardware and software requirements, refer to: www.intel.com/software/products/cluster/mpi/sysreq.htm.

Why Intel MPI Library?

- High performance MPI-2 implementation
- Linux and Windows support
- Interconnect independence
- Smart fabric selection
- Easy installation
- Free Runtime Environment
- Close integration with the Intel and 3rd party development tools
- Internet based licensing and technical support

Support

A free Runtime Environment Kit is available to run applications that were developed using Intel MPI Library.

Every purchase of an Intel® Software Development Product includes a year of support services, which provides access to Intel® Premier Support and all product updates during that time. Intel Premier Support gives you online access to technical notes, application notes, and documentation.

Intel® Software Development Products

Intel Software Development Products help you create the fastest software possible by offering a full suite of tools:

- Intel® Compilers
- Intel® VTune™ Performance Analyzers
- Intel® Performance Libraries
- Intel® Threading Analysis Tools
- Intel® Cluster Tools

Visit our Web site at www.intel.com/software/products for details about our entire line of products.

Download a trial version today.
www.intel.com/software/products/cluster/mpi

0209/BLA/CMD/PDF 321489-001