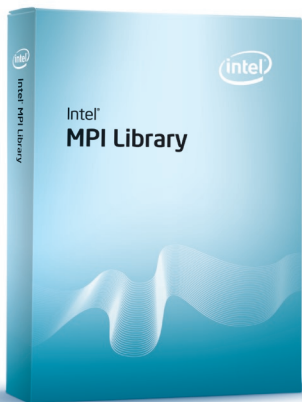




Intel® MPI Library 3.2 Update 1 for Linux* or Windows*

Product Brief

Intel® MPI Library 3.2 Update 1
for Linux* or Windows*



Deliver Flexible, Efficient Cluster Messaging

Implementing the high performance MPI-2 specification on multiple fabrics, Intel® MPI Library 3.2 Update 1 focuses on making applications perform better on IA-based clusters. Intel MPI Library enables you to quickly deliver maximum end-user performance without requiring major changes to the software or to the operating environment if you change or upgrade to new interconnects.

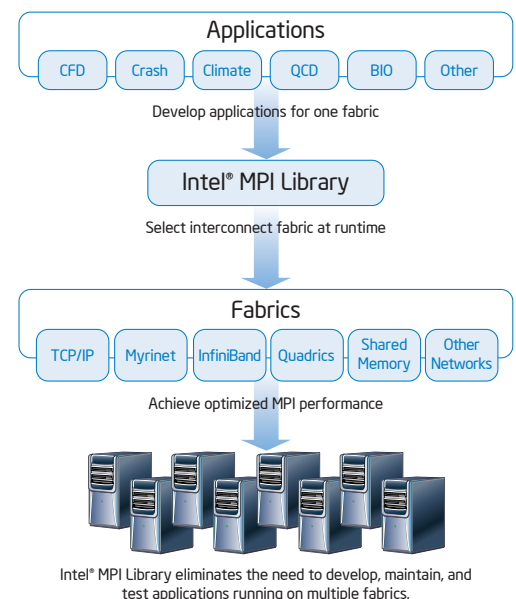
Features

Intel MPI Library 3.2 Update 1 is a multifabric message-passing library that:

- Is available for Microsoft Windows* CCS OS, Microsoft Windows HPC Server 2008* OS, or Linux* OS
- 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 Update 1 is available in the following packages:

- Intel MPI Library 3.2 Update 1 Free Runtime Environment for pre-installation or redistribution
- Intel MPI Library 3.2 Update 1 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 Update 1
- Intel® Cluster Toolkit Compiler Edition 3.2 Update 1



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
- Use the provided mpivars.sh and mpivars.csh shell 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/systemrequirements/.

Why Intel MPI Library?

- High performance MPI-2 implementation
- Linux OS and Windows OS support
- Interconnect independence
- Smart fabric selection
- Easy installation
- Free runtime environment
- Close integration with the Intel and third-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 (C/C++, Fortran)
- Intel® VTune™ Performance Analyzers
- Intel® Performance Libraries
- Intel® Threading Analysis Tools
- Intel® Cluster Tools

Visit our website at <http://software.intel.com/en-us/intel-sdp-home/> for details about our entire line of products.

More information :

www.scientific-solutions.ch/download/pdf/intel/mpi_indepth.pdf



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