Intel® Cluster Toolkit Compiler Edition 3.2

for Linux* and Windows*

Product Brief

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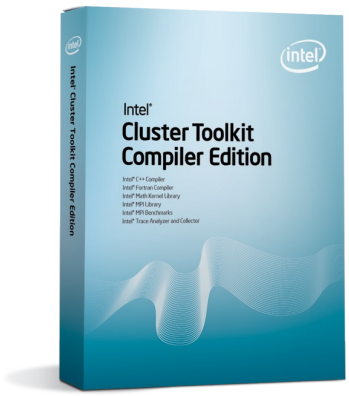
for Linux* and Windows*



The Best Tools at a Low Package Price

Intel® Cluster Toolkit Compiler Edition 3.2 provides an extensive software package containing Intel® C++ and Intel® Fortran Compilers for all Intel® architectures, PLUS all the Intel® Cluster Tools that help you develop, analyze and optimize performance of parallel applications on Linux or Windows Compute Cluster Server (CCS) clusters. By combining all the compilers and tools into one license package, Intel can provide single installation, interoperability, and support for the best in class tools at an incredibly low package price.

Features

Extensive Toolkit

The Intel Cluster Toolkit Compiler Edition 3.2 license provides access and support for the following programs on either Windows CCS OR Linux:

- Intel® C++ Compiler 11.0
- Intel® Fortran Compiler 11.0
- Intel® MPI Library 3.2
- Intel® Trace Analyzer and Collector 7.2
- Intel® Math Kernel Library 10.1
- Intel® MPI Benchmarks 3.2
- Intel® Debugger 11.0 (except with Windows Intel® MPI Library applications)

Easy Installation and Updates.

With a valid product serial number for the Intel Cluster Toolkit Compiler Edition, you can register and/or login to the Intel® Software Development Products Registration Center (https://registrationcenter.intel.com/regcenter/register.aspx) and download the package and updates for one year from the date of purchase.

Featured Products

All the software tools included with Intel Cluster Toolkit Compiler Edition have undergone a major revision to give you the best parallel performance analysis tools for cluster software development. The following list contains just a few of the many new features included in this latest version:

Intel® Compilers

Multicore. Intel® Compilers have built-in optimization technologies and multi-threading support that help create code that runs best on the latest multicore processors.

Optimize Applications. Intel Compilers offer the breadth of advanced optimization, multi-threading, and processor support that includes automatic processor dispatch, vectorization, auto-parallelization, data prefetching, and loop unrolling.

New Features. Additional information on the new features of each of the Intel Compilers can be found at the following link: http://www.intel. com/cd/software/products/asmo-na/eng/compilers/284132.htm.

Intel® MPI Library 3.2

The Intel® MPI Library features automatic application-specific performance tuning, faster startup and improved collective operation algorithms for even more performance, and greater scalability over sockets and shared memory.

It also offers enhanced flexibility and control over shared memory segment size for ease-of-use and OS, compiler, Python, and DAPL check for higher scalability.

The Intel MPI Library has added support for Intel® Compiler 11.0, Microsoft Windows* HPC 2008 and Vista, and DAPL 2.0.

In addition, it provides loadable 3rd party process manager (PMI) libraries for tighter integration with leading resource schedulers.

Intel® Trace Analyzer and Collector 7.2

The Intel ® Trace Analyzer and Collector has more reports, more graphics, more analysis, more filtering, and is more powerful!

Correctness Checking reports are now available in the Intel Trace Analyzer GUI. It also allows for migration to Trolltech* Qt 4.x for a refreshed look-and-feel.

It also provides added support for Intel® Compilers 11.0 and Microsoft* Windows Vista and HPC Server 2008.

Intel® Math Kernel Library 10.1

Intel® Math Kernel Library (MKL) offers performance optimizations for Intel's next-generation microarchitecture family. It includes improved integration with Integrated Development Environments such as Microsoft Visual Studio*, Eclipse*, and XCode*.

MKL provides Direct Sparse Solver enhancements such as Matrix conversion and forward/backward substitutions. Fourier Transforms offer support for half-complex arrays as well.

Vector Math Library extensions allow for inverse error functions and cumulative normal distribution functions.

MKL is allows for full integration of the Intel® Compatibility OpenMP* run-time library for greater Windows/Linux* cross-platform compatibility.

Intel® MPI Benchmarks 3.2

Intel® MPI Benchmarks provides extended support for Microsoft* Windows HPC Server 2008* and Microsoft* Visual Studio 2008*.

Support

Every purchase of an Intel® Software Development Product includes a year of support services, which provide 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

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