

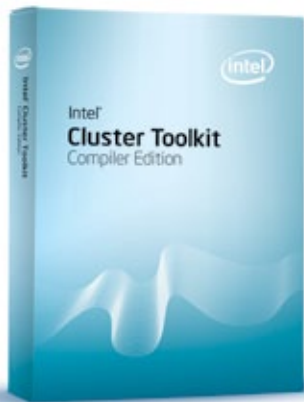


Intel® Cluster Toolkit Compiler Edition 4.0

for Linux* and Windows*

Product Brief

Intel® Cluster Toolkit Compiler Edition 4.0
for Linux* and Windows*



Increase performance and scalability of cluster computing

Intel® Cluster Toolkit Compiler Edition 4.0 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* OS or Windows* OS. By combining all the compilers and tools into one license package, Intel can provide single installation, interoperability, and support for the best-in-class cluster software tools at an incredibly low package price.

Features

Extensive Toolkit

The Intel Cluster Toolkit Compiler Edition 4.0 license provides access and support for the following programs on either Microsoft Windows*, or Linux:

- Intel® C++ Compiler 11.1 Update 6
- Intel® Fortran Compiler 11.1 Update 6
- Intel® MPI Library 4.0
- Intel® Trace Analyzer and Collector 8.0
- Intel® Math Kernel Library 10.2 Update 5
- Intel® MPI Benchmarks 3.2.1
- Intel® Debugger 11.1 Update 6 (except with Intel® MPI Library for Windows applications)

Easy Installation and Updates

With a valid product serial number for the Intel Cluster Toolkit Compiler Edition 4.0, you can register and/or login to the Intel® Software Development Products Registration Center (<https://registrationcenter.intel.com/>) 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 4.0 have undergone a minor 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 11.1 Update 6

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

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

New Features. Additional information on the new features for each of the Intel compilers can be found at the following link:

<http://software.intel.com/en-us/intel-compilers/>

Intel® MPI Library 4.0

Intel® MPI Library 4.0 provides new levels of performance and flexibility for applications that execute on clusters of Intel platforms. The library achieves these advantages by improved interconnect support, faster on-node messaging and an application tuning capability that adjusts to the cluster architecture and application structure. In addition, the library maintains compatibility with previous Intel MPI 3.x versions while providing an enhanced architecture that will enable interconnect vendors and Intel processors to better expose their future maximum performance and functionality.

Intel® Trace Analyzer and Collector 8.0

Intel® Trace Analyzer and Collector 8.0 is enhanced with new features that accelerate the analysis and tuning cycle of MPI based cluster applications and provides a capability for analyzing the effect of advanced interconnects on application performance. The Intel Trace Analyzer and Collector 8.0 load imbalance diagram and the ideal interconnect simulator help MPI programmers to identify further optimization opportunities.

Download a trial version today.

<http://software.intel.com/en-us/intel-cluster-toolkit-compiler>

Intel® Math Kernel Library 10.2 Update 5

Intel® Math Kernel Library 10.2 (Intel® MKL 10.2) is a library of highly optimized, extensively threaded math routines for science, engineering, and financial applications that require maximum performance. Core math functions include BLAS, LAPACK, ScaLAPACK, Sparse Solvers, Fast Fourier Transforms, Vector Math, and more. Intel Math Kernel Library (Intel MKL) version 10.2 Update 5 is a revision and offers LAPACK 3.2.1 updates, performance improvements to FFT and VSL, usability and interface improvements to solvers, and cluster FFTs.

Intel® MPI Benchmarks 3.2.1

Intel® MPI Benchmarks 3.2.1 provides several fixes for memory corruption and integer overflow issues, as well as extended support for Microsoft* Visual Studio* 2005 and 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 (C/C++, Fortran)
- Intel® VTune™ Performance Analyzers
- Intel® Performance Libraries
- Intel® Threading Analysis Tools
- Intel® Cluster Tools

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

