Intel® Trace Analyzer and Collector 7.2 Update 2

for Linux* or Windows*

Product Brief

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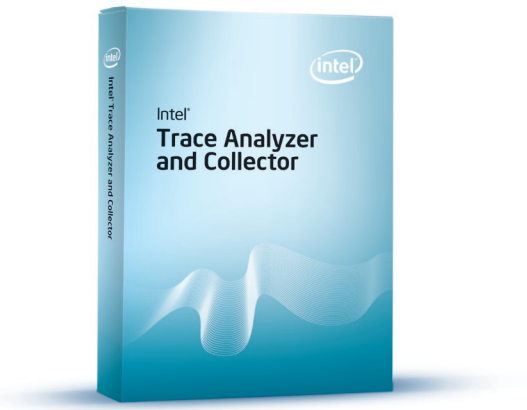


An Indispensable Optimizing Tool

Analyze, optimize, and deploy high-performance applications on Intel® processor-based clusters. Intel® Trace Analyzer and Collector provide information critical to understanding and optimizing application performance on clusters by quickly finding performance bottlenecks in MPI communication. Version 7.2 Update 2 includes trace file comparison, counter data displays, an MPI correctness checking library, and support for Linux* Standard Base (LSB) compliant RPMs on Linux* OS, and the latest Intel® Compiler Pro 11.1 (C/C++, Fortran).

Features

MPI Checking

- A unique MPI Correctness Checker to detect deadlocks, data corruption, or errors with MPI parameters, data types, buffers, communicators, point-to-point messages and collective operations.
- The Correctness Checker allows the user to scale to extremely large systems and the ability to detect errors even among a large number of processes.

Interface and Displays

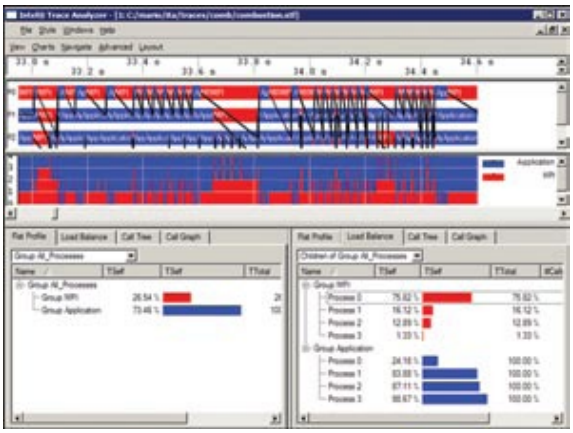
- Full-color customizable GUI with many drill-down view options
- The Analyzer is able to extremely rapidly unwind the call stack and use debug information to map instruction addresses to source code.
- With both command line and GUI interfaces the user can additionally set up batch runs or do interactive debugging.

Scalability

- Low overhead allows random access to portions of a trace, making it suitable for analyzing large amounts of performance data.
- Thread safety allows you to trace multithreaded MPI applications for event-based tracing as well as non-MPI threaded applications.

Instrumentation and Tracing

- Low intrusion instrumentation supports MPI applications with C, C++, or Fortran.
- Intel Trace Analyzer automatically records performance data from parallel threads in C, C++, Fortran, or Java* multithreaded processes.



Example of Intel® Trace Analyzer

New comparison displays for comparing two trace files

Benefits

For parallel application development on cluster systems, Intel Trace Analyzer and Collector is a powerful tool to understand MPI application behavior and achieve high execution performance.

- Visualize and understand parallel application behavior
- Evaluate profiling statistics and load balancing
- Analyze performance of subroutines or code blocks
- Learn about communication patterns, parameters, and performance data
- Identify communication hotspots
- Decrease time to solution and increase application efficiency

Compatibility

Intel Trace Analyzer and Collector supports Intel® architecture-based cluster systems, and this software product features a high degree of compatibility with current standards.

Linux*

Red Hat Enterprise Linux* OS or SUSE Linux Enterprise Server OS* with MPI implementations such as:

- Intel® MPI Library
- MPICH (or compatible)

On IA-32, processors supporting Intel® 64 architecture-based systems, and Intel® Itanium® architecture, as well as SGI Altix* on SUSE Linux Enterprise Server with SGI Message Passing Toolkit on Itanium architecture.

Windows*

- Microsoft Windows XP*, XP Professional x64 Edition*, and Vista*
- Microsoft Windows Server 2003* and Compute Cluster Server 2003*
- Microsoft Windows Server 2008* and HPC Server 2008*

Compilers

- Intel® C++ Compiler for Linux*
- Intel® Fortran Compiler for Linux
- GNU C and GNU C++
- GNU Fortran 77

Intel® Software Development Products

Intel MPI Library

Intel MPI Benchmarks

Intel® Math Kernel Library (Intel® MKL)

Intel® Cluster Toolkit

System Requirements

Refer to www.intel.com/software/products/systemrequirements/ for details on hardware and software requirements.

Support

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)
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- 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.

Download a trial version today.
http://www.intel.com/go/traceanalyzer

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