



Intel® Software Development Products for Intel Platforms and Technologies

Intel® Trace Analyzer¹

Overview

Intel® Cluster Tools assist developers and managers of distributed systems in getting the best application performance.

Intel® Trace Analyzer provides a convenient way to graphically analyze the runtime event traces of Intel® Trace Collector,¹ allowing developers to quickly focus on the desired level of detail. Intel Trace Analyzer provides several graphical displays for visualizing application runtime behavior. The timeline and parallelism display shows per-process application activities and message passing along a time axis. Source code location is available with the required compiler support.

Statistical displays help developers visualize the analysis of program execution and communication operations. Most displays are available in global and per-process variants. The timeline view can be zoomed and scrolled. Statistics can be restricted to arbitrary portions of the timeline display.

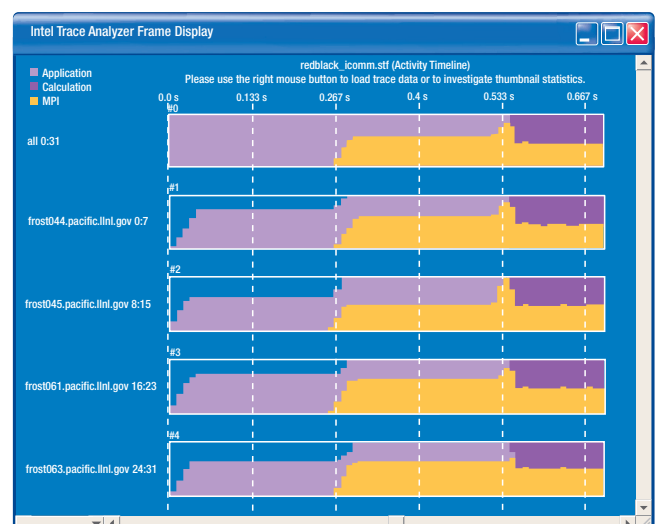
Features and Benefits

- **Display application activities** and message-passing along a time axis to help visualize concurrent behavior of parallel applications
- **Focus on the desired level of detail** to identify performance hotspots and bottlenecks
- **View a hierarchical display** to address display scalability
- **Execution Statistics** help analyze subroutine performance and graphical displays
- **Communication metrics and graphical displays** help identify communication patterns, parameters, performance and communication hotspots

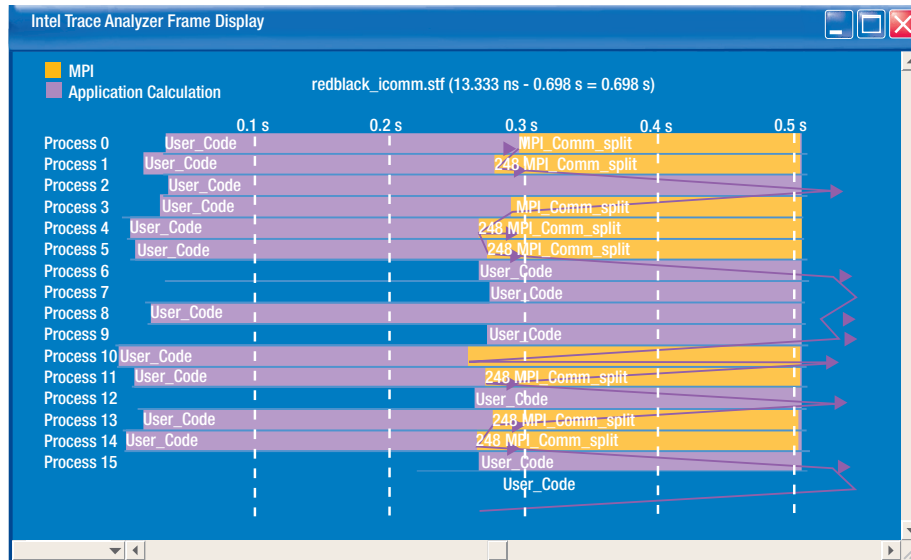
Graphically Analyze Runtime Event Traces

- **Ease of use** — Provides a convenient way to graphically analyze runtime event traces produced by MPI and other applications, enabling developers to quickly focus on the desired level of detail to find performance hotspots and bottlenecks
- **Hierarchical displays** — Addresses display scalability, allowing developers to navigate through the trace data at different levels of abstraction (cluster, node, and process)
- **Variety of graphical displays** — Provides important aspects of the application runtime behavior in detailed and aggregate views
- **Timeline views and parallelism display** — Displays application activities, source code locations of events, and message-passing along a time axis, allowing developers to visualize the concurrent behavior of parallel applications, and to calculate statistics on demand for specific time intervals and processes
- **Communication statistics** — Provides communication metrics for an arbitrary time interval and message-length distribution
- **Execution statistics** — Displays subroutine execution metrics for an arbitrary time interval and shows call-tree comparisons between different program runs

Frame Display of Application Trace File Data



Timeline Display of Application Trace Data



Graphical User Interface Provides Display Variants

Most displays are available in global and per-process variants. Statistics can be restricted to arbitrary parts of the trace. Multiple traces produced by the same application can be compared to assess optimizations. With a fast, graphical user interface, developers can easily control displays and statistics on large data sets by using:

- Object point-and-zoom for enhanced detail
- Context-sensitive sub-menus
- Coupled displays with automatic updates of statistics recomputation

PERFORMANCE

Optimized Analysis and Display

Intel Trace Analyzer provides optimized analysis and display capabilities with fast graphical rendering for complex profiling data.

COMPATIBILITY

Standard X-Windows* Displays

Intel Trace Analyzer uses standard X-Windows* displays, allowing it to work on local Linux* workstations as well as on remote UNIX* or Windows* systems running an X-server.

¹ Intel® Trace Analyzer, formerly marketed as Vampir. Intel® Trace Collector, formerly marketed as Vampirtrace.

SUPPORT

Intel® Premier 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. Install the product, and then register to get support and product update information.

Hardware Requirements

- Intel® Pentium® 4, Intel® Xeon™, or newer processor
- 512 MB RAM
- 1 GB disk space

or

- Intel® Itanium® 2 processor
- 1 GB RAM
- 1 GB disk space

Software Requirements

Supports IA-32 based systems with Linux* and Itanium architecture-based systems with Linux or HP-UX*

Intel provides both the tools and support to enhance the performance, functionality and efficiency of software applications.

Compatible with leading Windows* and Linux* development environments, Intel® Software Development Products are the fastest and easiest way to take advantage of the latest features of Intel processors. Intel Software Development Products are designed for use in the full development cycle, and include Intel® Performance Libraries, Intel Compilers (C++, Fortran for Windows and Linux), Intel® VTune™ analyzers, Intel® Threading Tools and Intel® Cluster Tools.

The Intel® Premier Customer Support Web site provides expert technical support for all Intel software products, product updates and related downloads. **For additional product information visit: www.intel.com/software/products**



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