Intel® Thread Checker 3.1
for Linux*

Product Brief

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for Linux*

Create Threads Faster

Accelerate the development of threaded applications by detecting hard-to-find threading errors before they happen. Get the performance advantage from Intel® multicore processors with Intel® Thread Checker 3.1 for Linux*.

Features

Patented advanced error detection engine:

- Detects hidden potential errors, mapping them to the source-code line, call stack, and memory reference.

- Identifies six levels of threading issues, from errors and warnings to informative comments.

- Displays all necessary warnings for effective diagnosis, highlighting the most potentially severe errors.

- Lets you track a potential error to a variable in a line of source code on Intel® compiler-built applications that are compiled for source instrumentation.

- Allows you to use standard debug builds, without recompiling the entire source base.

See Where Your Source Code Needs Changes for Correct Threading
Intel Thread Checker for Linux finds all the potential, and likely to occur, threading errors, such as data race and deadlock conditions. It shows where source code changes are required to achieve correct threading.

Support for a variety of industry tools and architecture:

▪ **Native Linux support**. Work in your native Linux environment without a remote Windows*-based system while still using a familiar command-line interface.

▪ **Multicore processor support**. Keep a competitive advantage on multicore processors from Intel by getting effective threaded software to market quickly while also preparing for the large number of execution cores in future processors.

▪ **Intel® 64 architecture support**. Implement instrumentation flexibly at different points in the development life cycle with source and binary instrumentation of 64-bit and 32-bit applications

Performance

Command line interface:

▪ Integrate Intel Thread Checker into your testing environment easily with a scriptable interface.

▪ Automate testing in batch modes, reducing manual implementation and improving efficiency.

▪ Simplify the implementation of daily regressions, improving development efficiency.

Selective instrumentation:

▪ Reduce instrumentation time through selective instrumentation of DLLs.

▪ Users can decide which libraries to instrument so they can choose to decrease the instrumentation time needed before the application is analyzed.

Compatibility

Intel Thread Checker 3.1 for Linux is compatible with today's industry-standard development tools:

▪ POSIX* threads

▪ Support for OpenMP*

▪ Intel® Threading Building Blocks

▪ Intel® Fortran and C++ Compilers

▪ GNU C++ for Linux Compilers

System Requirements

Please refer to www.intel.com/software/products/tclin 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.

About Intel® Software Development Products

Intel Software Development Products can help you easily create the fastest software possible by offering a full suite of tools that include:

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▪ Intel® VTune™ Performance Analyzers

▪ Intel® Performance Libraries

▪ Intel® Threading Analysis Tools

▪ Intel® Cluster Tools

For details about our entire line of products, visit our Web site at: www.intel.com/software/products.

"[Intel] Thread Checker helped us find nonthread safe functions that allowed two threads to modify the same memory without proper synchronization. We couldn't have gotten the networking up and running as quickly and as efficiently without Thread Checker. Thread Checker is simply an awesome tool and we are not going to develop multi-threaded code without it."

Doug Service,
Director of Technology Development

Chris Stark,
Software Engineer

Ritual Entertainment

Download a trial version today.
http://www.intel.com/software/products/tclin