Intel® C++ Compiler Professional Edition 11.1
for Mac OS* X

Product Brief

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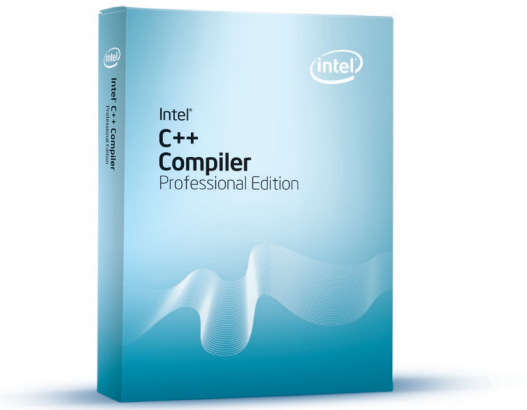
for Mac OS* X



"Our customers were looking for lower-cost solutions for delivery of video streams. The Intel® C++ Compiler and Intel® IPP tools allowed ImageCom to meet the customer's expectations for cost and timescales."§

Thomas Dove, CEO
Imagecom, Inc

Get High Performance with Intel® C++ Compiler Professional Edition 11.1 for Mac OS* X

The Intel® C++ Compiler Professional Edition 11.1 for Mac OS* X delivers advanced capabilities for development of application parallelism and winning performance for the full range of Intel® processor-based platforms. It includes the compiler's breadth of advanced optimization, multithreading, and processor support, as well as highly optimized C++ templates for parallelism, math processing, and multimedia libraries. Try it and see for yourself. Download an eval copy right now: www.intel.com/software/products/compilers/cmac

Professional Edition Components

Intel® C++ Compiler Professional Edition 11.1 for Mac OS X creates a solid foundation for building robust, high performance parallel code. It combines a high performance Intel® C++ compiler with the following:

Intel® Threading Building Blocks (Intel® TBB)

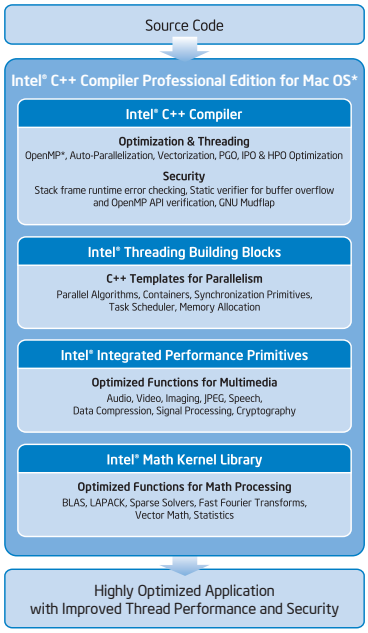
This award winning C++ template library abstracts threads to tasks creating reliable, portable and scalable parallel applications. Intel® TBB is the most efficient way to implement parallel applications and unleash multicore platform performance.

Intel® Integrated Performance Primitives (Intel® IPP)

This is an extensive library of multicore-ready, highly optimized software functions for multimedia data processing and communications applications.

Intel® Math Kernel Library (Intel® MKL)

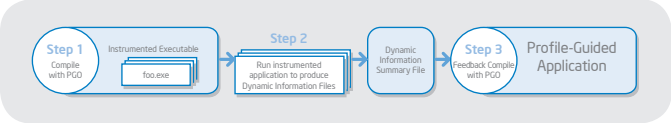
This library includes optimized and scalable math routines for maximizing performance and seamlessly providing forward scaling from current multicore platforms to future multicore and manycore platforms.



Advanced Optimization Features

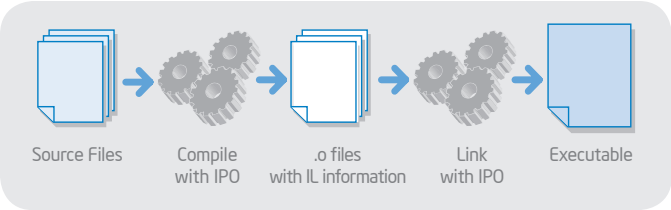
Software compiled using the Intel® C++ Compiler for Mac OS X benefits from advanced optimization features, including:

- **High Performance Parallel Optimizer (HPO)** offers an improved ability to analyze, optimize, and parallelize more loop nests. This revolutionary capability combines vectorization, parallelization, and loop transformations into a single pass which is faster, more effective, and more reliable than prior discrete phases.
- **Automatic Vectorizer** analyzes loops and determines when it is safe and effective to execute several iterations of the loop in parallel.
- **Profile-Guided Optimization (PGO)** improves application performance by reducing instruction-cache thrashing, reorganizing code layout, shrinking code size, and reducing branch mispredictions.



The profile-guided optimization process

- **Interprocedural Optimization (IPO)** dramatically improves performance of small- or medium-sized functions that are used frequently, especially programs that contain calls within loops. The analysis capabilities of this optimizer can also give feedback on vulnerabilities and coding errors that cannot be as effectively detected by compilers that rely on front-end analysis.



The interprocedural optimization process

Other Features

Multithreaded Application Support

OpenMP 3.0* and auto-parallelization allow you to take full advantage of multicore technology.

Support for Apple Frameworks*

Put this powerful Apple programming model to work on the latest Intel® multicore processors.

Native 64-bit Compiler

The Professional Edition includes native 32-bit and 64-bit compilers so you can compile for the latest IA 32-bit processors and the latest Intel® Xeon® processors featuring Intel® 64 architecture.

Relocatable Compiler

As you move it around, the Intel compiler can relocate with the Mac Xcode* IDE to keep your development tools available to you through the IDE.

Compatibility

Xcode* Integration

Generate C/C++ universal binaries from the Xcode environment using the Intel C++ Compilers for Mac OS X and GCC for PowerPC*, retaining compatibility with GCC 4.0. Universal binaries are designed to ease the transition between PowerPC and Intel® architecture by combining native code for both architectures in a single compiled package.

GCC 4.0 Interoperability

Gain source- and object-code compatibility with GNU C/C++. Alternatively, rather than switching compilers completely, build applications by compiling specific modules with the Intel C++ Compilers for Mac OS X and link them with modules compiled with GNU C.

Standards Compliance

The Intel C++ Compiler for Mac OS X is substantially standards compliant, including support for the ANSI C/C++ standard, ISO C/C++ standard, GNU inline assembly, and C++ ABI object model..

System Requirements

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

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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