



Intel® Parallel Studio Now shipping

+ first version of “Parallel Advisor Lite”
available as add-on for Parallel Studio users

**Ease parallelism on-ramp for C/C++
Microsoft Visual Studio developers**

www.intel.com/go/parallel

James Reinders, Director
Intel Software Development Products
Intel Corporation

EMBARGO NOTICE :

Announcement of sale of Intel Parallel Studio and availability of Intel Parallel Advisor Lite are embargoed until May 26, 2009, 7:00 a.m. PDT. No public mention prior to this date.



Today's Announcement

NOW SHIPPING (Starting May 26)

- Intel® Parallel Studio, for purchase, see www.intel.com/go/parallel

INCLUDES

- Intel® Parallel Composer, Intel® Parallel Inspector and Intel® Parallel Amplifier

ENABLES

- Windows developers to create, debug and optimize applications for multicore processors

AND SHIPPING (Starting May 26)

- Intel® Parallel Advisor Lite, a new plug-in for Intel Parallel Studio, no additional charge from Whatif.intel.com

(works with evaluation copies of Parallel Studio too)

ENABLES

- Windows developers to determine where parallelism is most beneficial to existing source code



www.intel.com/go/parallel
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Intel® Parallel Studio

Intuitive Development Tools for Multicore Parallelism



Extends Microsoft Visual Studio* for C/C++ architects, developers, and software innovators creating parallel Windows* applications.



Intel® Parallel Studio includes all three:

- Intel® Parallel Composer
- Intel® Parallel Inspector
- Intel® Parallel Amplifier

- Microsoft Visual Studio* plug-in
- End-to-end product suite for parallelism
- Forward scaling to manycore

Starting May 26:
Parallel Studio users
have a no charge add-on
from Whatif.intel.com:
Intel Parallel Advisor Lite



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The KEY: addressing the *whole* Development Lifecycle to Harness Parallelism



DESIGN

Gain insight on where parallelism will most benefit existing source code

CODE & DEBUG

Develop effective applications with a C/C++ compiler and comprehensive threaded libraries

VERIFY

Ensure application reliability with proactive parallel memory and threading error checking

TUNE

Enhance applications with easy-to-use performance analyzer and tuner



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What Numerous Beta Customers Told Us based on their experience with the beta -

- 75% were able to see understandable useful results within 15 minutes
- 75% would recommend Parallel Studio to a colleague (score of 8 or higher on scale of 1-10)
- 86% felt that the threading implementation methods supported by Parallel Studio were sufficient for their needs
- 71% saw a speedup from the compiler compared to the compiler they were using previously
- 90% felt the product was definitely all production quality



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Shortened Development Time: Envivio

App

4Caster C4 for TV, PC, and mobile device video transcoding

Challenge

Distribute HD content encoded in real-time

Solution

Intel® Parallel Studio

Results

- More efficient development
- Higher performance, more reliable code is less time
- Faster time to market



“Intel® Parallel Studio makes the new Envivio 4Caster Series Transcoder’s development faster and more efficient. The tools included in Parallel Studio, such as Intel® Parallel Inspector, Intel® Parallel Amplifier and Intel® Parallel Composer (which consists of the Intel® C++ Compiler, Intel® IPP and Intel® TBB) shortens our overall software development time by increasing the code’s reliability and it’s performance in a multi-core multi-threaded environment ...Parallel Studio globally speeds up our software products’ Time-to-Market”
Eric Rosier, V.P. Engineering
Envivio.



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Doubles Overall Application Performance: Open CASCADE Technology

App

Open source 3D modeling and numerical simulation software used by large industrial companies and research centers.

Challenge

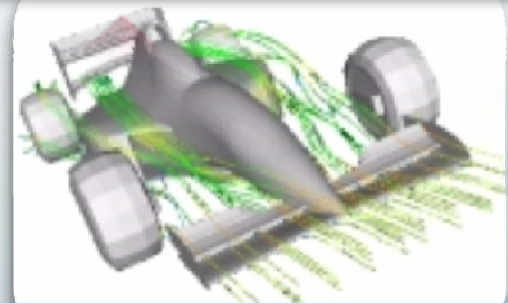
Increasing algorithm performance

Solution

Intel® Parallel Amplifier
Intel® Parallel Inspector

Results

10x for one specific algorithm,
2x overall performance increase, and improved code quality



Intel® Parallel Inspector and Amplifier greatly simplified the task of finding hotspots and memory leaks. We were pleased with the **2x overall performance improvement and the elimination of several previously unidentified memory leaks.**

Vlad Romashko
Software development manager
OpenCascade S.A.S



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10X faster: Image processing Face recognition



Computational Biomedicine Lab

Changing the Way ~~People~~ Look at ~~Computers~~

~~Computers~~

~~People~~

App

GUI for a real-time face recognition algorithm in access-control scenario needs to be responsive

Challenge

Running slow (processing 1 sec per frame of video)

Solution

Intel® Parallel Studio

Results

- Intel® Parallel Amplifier found the source line taking much of the time.
- Runs 10 times faster

“Thanks Intel, you guys rock! I have an image processing GUI app that I developed for a project and it was running quite slow. So I decided to give Parallel Amplifier a run. I was delighted when it pointed me to the right source line that was taking much of the time. I made the change and voila our app is now almost 10 times faster. The GUI is very easy to use in my opinion.”

Dat Chu

**Research Assistant
Computational Biomedicine Lab
University of Houston**



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Performance Boost, Seamless Integration: Financial Trading Application



App

Financial trading application

Challenge

Making the trade quickly!

Solution

Intel® Parallel Studio

Results

App runs 10%-20% faster

"Here at Trading Systems Lab, we got a 10% to 20% performance boost in the multi-mode trading simulator that's used in our TSL Algo Auto-Design Platform by using the C++ compiler in Intel Parallel Studio. The compatibility with Microsoft* Visual C++ is great and we're looking forward to using more parallelism features in Parallel Studio."

Mike Barna
President
Trading Systems Lab



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Was not in beta program: Intel® Parallel Advisor Lite – first time available May 26 – add-on for Parallel Studio users



Helping “Think Parallel”

- There is *no* automatic magic solution
- But there *are* lots of ways to help
- A powerful and practical on-ramp tool to help find opportunities for parallelism
- Model parallel functionality and correctness using your serial application before inserting threads
- First version available at ***Whatif.intel.com*** for use by users of Intel Parallel Studio



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Intel® Parallel Studio – Shipping May 26

Pricing Information

Product Name	Customer Type	MSRP
Parallel Studio	Commercial	\$799
	Academic	\$199
Parallel Composer	Commercial	\$399
Parallel Inspector	Commercial	\$399
Parallel Amplifier	Commercial	\$399

Available for purchase from resellers worldwide - see
www.intel.com/go/parallel
starting May 26, 2009

(volume licensing available through resellers also)



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Intuitive development tools for multicore parallelism – fully integrated Microsoft Visual Studio* Plug-Ins for C++

Included with Intel® Parallel Studio

- **Intel® Parallel Composer – compiler, libraries, debugger plug-in**
 - Intel® C++ Compiler: Most apps run faster with Intel® C++ Compiler
 - More parallelism implementation choices: Intel® TBB, Intel® IPP, OpenMP*
 - Intel® Parallel Debugger Extension: Simplify debugging parallel code
- **Intel® Parallel Inspector – memory & thread checker**
 - Finds difficult parallel programming errors - races and deadlocks
 - Finds memory errors in parallel and serial programs
 - No special compilers or builds necessary
- **Intel® Parallel Amplifier – parallel performance analyzer**
 - Find both serial and parallel performance bottlenecks
 - Scale application performance with more processor cores
 - No special compilers or builds necessary

Beta
tested
since
2008

Available from Whatif.intel.com, requires Parallel Studio

- **Intel® Parallel Advisor Lite**
 - Try out parallel ideas with serial modeling using our proven methodology
 - Analyze your serial program to help decide where to thread
 - Learn how to use performance data to estimate the benefit of threading
 - Find data races using your serial program before transforming to parallel code

NEW
May 26



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