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# OpenMP Shared Memory Parallel Programming

International Workshops, IWOMP 2005 and IWOMP 2006  
Eugene, OR, USA, June 1-4, 2005  
Reims, France, June 12-15, 2006  
Proceedings

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# Preface

OpenMP is an application programming interface (API) that is widely accepted as a standard for high-level shared-memory parallel programming. It is a portable, scalable programming model that provides a simple and flexible interface for developing shared-memory parallel applications in Fortran, C, and C++. Since its introduction in 1997, OpenMP has gained support from the majority of high-performance compiler and hardware vendors. Under the direction of the OpenMP Architecture Review Board (ARB), the OpenMP standard is being further improved. Active research in OpenMP compilers, runtime systems, tools, and environments continues to drive its evolution. To provide a forum for the dissemination and exchange of information about and experiences with OpenMP, the community of OpenMP researchers and developers in academia and industry is organized under cOMPunity ([www.compunity.org](http://www.compunity.org)).

Workshops on OpenMP have taken place at a variety of venues around the world since 1999: the European Workshop on OpenMP (EWOMP), the North American Workshop on OpenMP Applications and Tools (WOMPAT), and the Asian Workshop on OpenMP Experiences and Implementation (WOMPEI) were each held annually and attracted an audience from both academia and industry. The intended purpose of the new International Workshop on OpenMP (IWOMP) was to consolidate these three OpenMP workshops into a single, yearly international conference. The first IWOMP meeting was held during June 1–4, 2005, in Eugene, Oregon, USA. The second meeting took place during June 12–15, in Reims, France. Each event drew over 60 participants from research and industry throughout the world. In keeping with the objectives and format of the prior workshops, IWOMP includes technical papers and panels, tutorials, and a hands-on laboratory (OMPlab), where OpenMP users and developers worked together to test compilers, tune applications, and experiment with OpenMP tools. The first of these workshops was organized under the auspices of cOMPunity. In the meantime, a Steering Committee has been established to oversee the organization of these events and to guide the further development of the workshop series.

The first two IWOMP meetings were successful in every respect. To a large extent, this success was due to the generous support received from the IWOMP sponsors. Intel Corporation, Sun Microsystems, Hewlett Packard, STMicroelectronics, PathScale, Microsoft, the University and City of Reims, the Region Champagne-Ardenne, and the ARB all gave financial support to these conferences. Fujitsu Systems Europe LTD, Microway, the Technical University of Denmark, the Centre Informatique National de l'Enseignement Supérieur, Reims Universtiy, RWTH Aachen University, and Technische Universität Dresden provided access to system platforms for the OMPlab. The level of support given demonstrates a strong interest in the success of OpenMP in both industry and research.

The cOMPunity webpage (see <http://www.compunity.org>) provides access to the talks given at the meetings and to photos of the activities. The IWOMP webpage (see <http://www.iwomp.org>) provides information on the latest event. This book contains the proceedings of the first two IWOMP workshops. In total, 35 papers were accepted for the technical program sections.

It was a pleasure to help ignite the IWOMP workshop series. We look forward to a bright future for both OpenMP and this workshop.

February 2008

Matthias S. Müller  
Barbara Chapman  
Bronis R. de Supinski  
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# Table of Contents

---

## First International Workshop on OpenMP IWOMP 2005

---

---

### Performance Tools

---

Performance Analysis of Large-Scale OpenMP and Hybrid MPI/OpenMP Applications with Vampir NG .....	5
<i>Holger Brunst and Bernd Mohr</i>	
ompP: A Profiling Tool for OpenMP .....	15
<i>Karl F�rlinger and Michael Gerndt</i>	
On the Interaction of Tiling and Automatic Parallelization .....	24
<i>Zhelong Pan, Brian Armstrong, Hansang Bae, and Rudolf Eigenmann</i>	
Static Nonconcurrency Analysis of OpenMP Programs .....	36
<i>Yuan Lin</i>	
CCRG OpenMP Compiler: Experiments and Improvements .....	51
<i>Huang Chun and Yang Xuejun</i>	

---

### Compiler Technology

---

Implementing an OpenMP Execution Environment on InfiniBand Clusters .....	65
<i>Jie Tao, Wolfgang Karl, and Carsten Trinitis</i>	
An Introduction to Balder—An OpenMP Run-time Library for Clusters of SMPs .....	78
<i>Sven Karlsson</i>	

---

### Run-Time Environment

---

Experiences with the OpenMP Parallelization of DROPS, a Navier-Stokes Solver Written in C++ .....	95
<i>Christian Terboven, Alexander Spiegel, Dieter an Mey, Sven Gross, and Volker Reichelt</i>	



A Parallel Structured Ecological Model for High End Shared Memory Computers .....	107
<i>Dali Wang, Michael W. Berry, and Louis J. Gross</i>	
Multi-cluster, Mixed-Mode Computational Modeling of Human Head Conductivity .....	119
<i>Adnan Salman, Sergei Turovets, Allen D. Malony, and Vasily Volkov</i>	

---

## Application I

---

An Evaluation of OpenMP on Current and Emerging Multithreaded/Multicore Processors .....	133
<i>Matthew Curtis-Maury, Xiaoning Ding, Christos D. Antonopoulos, and Dimitrios S. Nikolopoulos</i>	
SPEC OpenMP Benchmarks on Four Generations of NEC SX Parallel Vector Systems .....	145
<i>Matthias S. Müller</i>	
Performance Evaluation of Parallel Sparse Matrix–Vector Products on SGI Altix3700 .....	153
<i>Hisashi Kotakemori, Hidehiko Hasegawa, Tamito Kajiyama, Akira Nukada, Reiji Suda, and Akira Nishida</i>	

---

## The OpenMP Language and Its Evaluation

---

The OpenMP Memory Model .....	167
<i>Jay P. Hoeflinger and Bronis R. de Supinski</i>	
Evaluating OpenMP on Chip MultiThreading Platforms .....	178
<i>Chunhua Liao, Zhenying Liu, Lei Huang, and Barbara Chapman</i>	
Experiences Parallelizing a Web Server with OpenMP .....	191
<i>Jairo Balart, Alejandro Duran, Marc González, Xavier Martorell, Eduard Ayguadé, and Jesús Labarta</i>	

---

## Second International Workshop on OpenMP IWOMP 2006

---

---

## Advanced Performance Tuning

---

Automatic Granularity Selection and OpenMP Directive Generation Via Extended Machine Descriptors in the PROMIS Parallelizing Compiler .....	207
<i>Walden Ko and Constantine D. Polychronopoulos</i>	

Nested Parallelization of the Flow Solver TFS Using the ParaWise Parallelization Environment .....	217
<i>Steve Johnson, Peter Leggett, Constantinos Ierotheou, Alexander Spiegel, Dieter an Mey, and Ingolf Hörschler</i>	
Performance Characteristics of OpenMP Language Constructs on a Many-core-on-a-chip Architecture .....	230
<i>Weirong Zhu, Juan del Cuillo, and Guang R. Gao</i>	
Improving Performance of OpenMP for SMP Clusters Through Overlapped Page Migrations.....	242
<i>Woo-Chul Jeun, Yang-Suk Kee, and Soonhoi Ha</i>	

---

## Aspects of Code Development

---

Adding New Dimensions to Performance Analysis Through User-Defined Objects .....	255
<i>Gabriele Jost, Oleg Mazurov, and Dieter an Mey</i>	
Performance Instrumentation and Compiler Optimizations for MPI/OpenMP Applications .....	267
<i>Oscar Hernandez, Fengguang Song, Barbara Chapman, Jack Dongarra, Bernd Mohr, Shirley Moore, and Felix Wolf</i>	
Supporting Nested OpenMP Parallelism in the TAU Performance System .....	279
<i>Alan Morris, Allen D. Malony, and Sameer S. Shende</i>	
Parallelization of a Hierarchical Data Clustering Algorithm Using OpenMP.....	289
<i>Panagiotis E. Hadjidoukas and Laurent Amsaleg</i>	
OpenMP and C++ .....	300
<i>Christian Terboven and Dieter an Mey</i>	
Common Mistakes in OpenMP and How to Avoid Them: A Collection of Best Practices .....	312
<i>Michael Süß and Claudia Leopold</i>	
Formal Specification of the OpenMP Memory Model .....	324
<i>Greg Bronevetsky and Bronis R. de Supinski</i>	

---

## Applications II

---

Performance and Programmability Comparison Between OpenMP and MPI Implementations of a Molecular Modeling Application .....	349
<i>Russell Brown and Ilya Sharapov</i>	

OpenMP Implementation of SPICE3 Circuit Simulator . . . . .	361
<i>Tien-Hsiung Weng, Ruey-Kuen Perng, and Barbara Chapman</i>	
Automatic Generation of Parallel Code for Hessian Computations . . . . .	372
<i>H. Martin Bückner, Arno Rasch, and Andre Vehreschild</i>	
Geographical Locality and Dynamic Data Migration for OpenMP Implementations of Adaptive PDE Solvers . . . . .	382
<i>Markus Nordén, Henrik Löf, Jarmo Rantakokko, and Sverker Holmgren</i>	

---

## Proposed Extensions to OpenMP

---

A Comparison of Task Pool Variants in OpenMP and a Proposal for a Solution to the Busy Waiting Problem . . . . .	397
<i>Alexander Wirz, Michael Süß, and Claudia Leopold</i>	
A Proposal for OpenMP for Java . . . . .	409
<i>Michael Klemm, Ronald Veldema, Matthias Bezold, and Michael Philippsen</i>	
A Proposal for Error Handling in OpenMP . . . . .	422
<i>Alejandro Duran, Roger Ferrer, Juan José Costa, Marc González, Xavier Martorell, Eduard Ayguadé, and Jesús Labarta</i>	
Extending the OpenMP Standard for Thread Mapping and Grouping . . .	435
<i>Guansong Zhang</i>	
<b>Author Index . . . . .</b>	<b>447</b>