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Titolo	Recent advances in parallel virtual machine and message passing interface : 12th European PVM/MPI User's Group Meeting, Sorrento, Italy, September 18-21, 2005 : proceedings // Beniamino Di Martino, Dieter Kranzlmuller, Jack Dongarra (eds.)
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Altri autori (Persone)	Di MartinoBeniamino KranzlmullerDieter <1969-> DongarraJ. J
Disciplina	004/.35
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Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Invited Talks -- New Directions in PVM/Harness Research -- Towards a Productive MPI Environment -- Components of Systems Software for Parallel Systems -- Virtualization in Parallel Distributed Computing -- Tutorials -- Advanced Message Passing and Threading Issues -- Using MPI-2: A Problem-Based Approach -- Algorithms -- Some Improvements to a Parallel Decomposition Technique for Training Support Vector Machines -- Nesting OpenMP in MPI to Implement a Hybrid Communication Method of Parallel Simulated Annealing on a Cluster of SMP Nodes -- Computing Frequent Itemsets in Parallel Using Partial Support Trees -- A Grid-Aware Branch, Cut and Price Implementation -- An Optimal Broadcast Algorithm Adapted to SMP Clusters -- Efficient Implementation of Allreduce on BlueGene/L Collective Network -- Scalable Fault Tolerant MPI: Extending the Recovery Algorithm -- Hash Functions for Datatype Signatures in MPI -- Extensions and Improvements -- Implementing MPI-IO Shared File Pointers Without File System Support -- An Efficient Parallel File System for Cluster Grids -- Cooperative Write-Behind Data Buffering for MPI

I/O -- Hint Controlled Distribution with Parallel File Systems --
Implementing Byte-Range Locks Using MPI One-Sided Communication
-- An Improved Algorithm for (Non-commutative) Reduce-Scatter with
an Application -- Collective Error Detection for MPI Collective
Operations -- Implementing OpenMP for Clusters on Top of MPI --
Designing a Common Communication Subsystem -- Dynamic
Interoperable Message Passing -- Analysis of the Component
Architecture Overhead in Open MPI -- A Case for New MPI Fortran
Bindings -- Design Alternatives and Performance Trade-Offs for
Implementing MPI-2 over InfiniBand -- Designing a Portable MPI-2
over Modern Interconnects Using uDAPL Interface -- Experiences,
Strategies and Challenges in Adapting PVM to VxWorks TM Hard Real-
Time Operating System, for Safety-Critical Software -- MPJ/Ibis: A
Flexible and Efficient Message Passing Platform for Java -- Cluster and
Grid -- The Open Run-Time Environment (OpenRTE): A Transparent
Multi-cluster Environment for High-Performance Computing -- PVM-
3.4.4 + IPv6: Full Grid Connectivity -- Utilizing PVM in a Multidomain
Clusters Environment -- Enhancements to PVM's BEOLIN Architecture
-- Migol: A Fault-Tolerant Service Framework for MPI Applications in
the Grid -- Applicability of Generic Naming Services and Fault-Tolerant
Metacomputing with FT-MPI -- A Peer-to-Peer Framework for Robust
Execution of Message Passing Parallel Programs on Grids -- MGF: A
Grid-Enabled MPI Library with a Delegation Mechanism to Improve
Collective Operations -- Tools and Environments -- Automatic
Performance Analysis of Message Passing Applications Using the
KappaPI 2 Tool -- Benchmarking One-Sided Communication with
SKaMPI 5 -- A Scalable Approach to MPI Application Performance
Analysis -- High-Level Application Specific Performance Analysis Using
the G-PM Tool -- ClusterGrind: Valgrinding LAM/MPI Applications --
MPISH2: Unix Integration for MPI Programs -- Ensemble-2: Dynamic
Composition of MPMD Programs -- New User-Guided and ckpt-Based
Checkpointing Libraries for Parallel MPI Applications, -- Performance
-- Performance Profiling Overhead Compensation for MPI Programs --
Network Bandwidth Measurements and Ratio Analysis with the HPC
Challenge Benchmark Suite (HPCC) -- A Space and Time Sharing
Scheduling Approach for PVM Non-dedicated Clusters -- Efficient
Hardware Multicast Group Management for Multiple MPI
Communicators over InfiniBand -- Assessing MPI Performance on
QsNet II -- Optimised Gather Collectives on QsNet II -- An Evaluation
of Implementation Options for MPI One-Sided Communication -- A
Comparison of Three MPI Implementations for Red Storm --
Applications -- Probing the Applicability of Polarizable Force-Field
Molecular Dynamics for Parallel Architectures: A Comparison of Digital
MPI with LAM-MPI and MPICH2 -- Symmetrical Data Sieving for
Noncontiguous I/O Accesses in Molecular Dynamics Simulations --
Simulation of Ecologic Systems Using MPI -- Load Balancing and
Computing Strategies in Pipeline Optimization for Parallel Visualization
of 3D Irregular Meshes -- An Improved Mechanism for Controlling
Portable Computers in Limited Coverage Areas -- An MPI
Implementation for Distributed Signal Processing -- A Parallel
Exponential Integrator for Large-Scale Discretizations of Advection-
Diffusion Models -- Parallel Grid Adaptation and Dynamic Load
Balancing for a CFD Solver -- Special Session: ParSim 2005 -- 4th
International Special Session on: Current Trends in Numerical
Simulation for Parallel Engineering Environments ParSim 2005 --
Applying Grid Techniques to an Octree-Based CSCW Framework --
Parallel Modeling of Transient States Analysis in Electrical Circuits --
The COOLFluid Parallel Architecture -- Calculation of Single-File

Diffusion Using Grid-Enabled Parallel Generic Cellular Automata
Simulation -- Harnessing High-Performance Computers for
Computational Steering.
