Preliminary Program
Workshop on High-Speed Local Networks (HSLN)
November 6, 2002

Schedule Overview:

8:30-9:30	Welcome and keynote
9:30-10:45	Session I – Cluster computing
10:45-11:00	Coffee break
11:00-12:15	Session II – MPI and message passing
12:15-1:30	Lunch
1:30-2:45	Session III – Gigabit Ethernet and SAN performance
2:45-3:15	Coffee and snack break
3:15-4:30	Session IV – Myrinet and middleware
4:30-6:00	Poster Session

Session I: Cluster computing (9:30 to 10:45)

Distributed Computing with the CLAN Network
David Riddoch, Kieran Mansley (University of Cambridge, England), and Steve Pope (AT&T Laboratories, Cambridge, England)

Multicast Performance Analysis for High-Speed Torus Networks
Sarp Oral and Alan George (University of Florida, USA)

Improving Cluster IO Performance with Remote Efficient Access to Distant Devices
Olivier Cozette, Cyril Randriamaro (Université de Picardie Jules Verne, France), and Gil Utard (INRIA, LIP École Normale Supérieure de Lyon, France)

Session II: MPI and message passing (11:00 to 12:15)

Optimizing an MPI Implementation to Increase CPU Availability
Ron Brightwell (Sandia National Laboratories, USA), William Lawry, Arthur Maccabe, and Christopher Wilson (University of New Mexico, USA)

Instrumenting LogP Parameters in GM: Implementation and Validation
Edgar León, Arthur Maccabe (University of New Mexico, USA), and Ron Brightwell (Sandia National Laboratories, USA)

RMPP: The Reliable Message Passing Protocol
Rolf Riesen (Sandia National Laboratories, USA) and Arthur Maccabe (University of New Mexico, USA)

Session III: Gigabit Ethernet and SAN performance (1:30 to 2:45)

Exploiting Gigabit Ethernet Capacity for Cluster Applications
Giuseppe Ciaccio (Università di Genova, Italy), Marco Ehlert, and Bettina Schnor (Universität Potsdam, Germany)

Performance Evaluation of Copper-based Gigabit Ethernet Interfaces
Paul Gray and Anthony Betz (University of Northern Iowa, USA)

A Comparative Throughput Analysis of Scalable Coherent Interface and Myrinet
Sean Millich, Alan George, and Sarp Oral (University of Florida, USA)

Session IV: Myrinet and middleware (3:15-4:30)

Prototype of AM3: Active Mapper and Monitoring Module for Myrinet Environment
Seongbok Baik, Cynthia Hood (Illinois Institute of Technology, USA) and William Gropp (Argonne National Laboratory, USA)

A Fine-Grain Clock Synchronization Mechanism for Myrinet Clusters
Anthony Skjellum, Srigurunath Chakravarthi, Anand Pillai, Jothi Neelamegam, and Manoj Apte (Mississippi State University, USA)

Safety Critical Middleware for Avionics Applications
David Haverkamp (Rockwell Collins Advanced Technology Center, USA)

Poster Session (4:30-6:00)

A Configurable, QoS-aware Ethernet L2+ Switch Optimized for Access Networks
H. Sim, S. Mishra, C. Hu, G. Ardhanari, V. Sabnis, T. Kamiko, T. Zhang, B. Xu, K. Chua, X. Wei, B. Prashant, and P. Pandey (Infineon Technologies Asia Pacific Pte. Ltd, Singapore)

A First Look at Wired Sensor Networks for Video Surveillance Systems
Vijay Chandramohan and Ken Christensen (University of South Florida, USA)

Interference Among Multiple TCP Flows over Congested ATM Links
Ahmed Ishtiaq, Yasuo Okabe, and Masanori Kanazawa (Kyoto University, Japan)

MPI and Embedded TCP/IP Gigabit Ethernet Cluster Computing
Neal Bierbaum (Sandia National Laboratories, USA)

The $MM\sum_{k=1}^{K} CPP_k/GE/c/L$ G-Queue and its Application to the Analysis of the Load Balancing in MPLS Networks
Ram Chakka (Norfolk State University, USA) and Tien Van Do (Budapest University of Technology and Economics, Hungary)

Reliable File Transfer in Grid Environments
Ravi Madduri, Cynthia Hood (Illinois Institute of Technology, USA) and William Allcock (Argonne National Laboratory, USA)

Gigabit COTS Ethernet Switch Evaluation for Avionics
John Meier, Sung Kim (Rockwell Collins Advanced Technology Center, USA), Alan George, and Sarp Oral (University of Florida, USA)