High Performance Interconnects for Distributed Computing

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IMPORTANT DATES
Submission deadline: May 13, 2005
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Workshop: July 24, 2005

FURTHER INFORMATION
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The emergence of 10.0 GigE, InfiniBand, programmable NICs, network processors, and protocols like DDP and RDMA over IP, make it possible to create tightly linked systems across physical distances that exceed those of traditional single cluster or server systems. Further, these technologies can deliver communication capabilities that achieve the performance levels needed by high end applications in enterprise systems and like those produced by the high performance computing community.

The purpose of this workshop is to explore the confluence of WAN technologies with high performance interconnects, as applicable or applied to realistic high end applications. The intent is to create a venue that will act as a bridge between researchers developing tools and platforms for high-performance distributed computing, end user applications seeking high performance solutions, and technology providers aiming to improve interconnect and networking technologies for future systems. The hope is to foster knowledge creation and intellectual interchanges between HPC end users and technology developers in the specific domain of high performance interconnects.

Topics of interest include:

- Hardware/software architectures for communication infrastructures for HPC
- Data and control protocols for interactive and large data volume applications
- Novel devices and technologies to enhance interconnect properties
- Interconnect-level issues when extending high performance beyond single machines, including architecture, protocols, services, QoS, and security
- Remote storage (like iSCSI), remote databases, and datacenters, etc

PAPER SUBMISSIONS
HPI-DC invites authors to submit original and unpublished work. Please submit extended abstracts or full papers, not exceeding 8 single-column pages in 10 point font or larger. Electronic submission is strongly encouraged. Hard copies will be accepted only if electronic submission is not possible. Submission implies the willingness of at least one of the authors to register and present the paper. Any questions concerning hardcopy submissions or any other issues may be directed to the Program Co-Chairs.

PUBLICATION
The workshop proceedings will be distributed at the conference.