Keynote

SCore: An Integrated Cluster System Software Package for High Performance Cluster Computing

Atsushi Hori
Senior Researcher
Parallel and Distributed System Software Laboratory
Real World Computing Partnership
Japan

Abstract

SCore Cluster System is an integrated software package for high performance clusters, and is used by worldwide users. SCore and the PM high performance communication library, which supports various networks available today, was designed simultaneously. As a result, SCore can provide not only high performance cluster computing environment, but also a number of cluster programming facilities in an integrated way.

The unique idea and features implemented in SCore will be addressed, including network trunking, network interleaving, gang-scheduling, checkpoint and restart, real-time monitoring of user programs, deadlock detection, debugging support, etc.