

Dell, University of Texas Benchmark Performance of Standards-Based Supercomputing Clusters

April 11 2005

Dell and the Texas Advanced Computing Center at The University of Texas at Austin have teamed to benchmark high-performance computing (HPC) applications on standards-based computer hardware. The organizations' goal is to develop a better understanding of the performance and to enhance the scalability of applications run on these cost-effective [supercomputers](#).

"Our relationship with Dell has enabled us to offer tremendous computing capabilities to TACC users in Texas and across the US," said Jay Boisseau, director of TACC. "Our new, cooperative benchmarking project will further enhance the systems we offer to researchers nationwide while assisting Dell in providing the best HPC solutions to the community."

TACC will work with Dell's internal HPC group to enhance TACC's testing of the performance and scalability of various processors and interconnects on HPC applications.

"The knowledge, information, and resource sharing between Dell and the TACC will help us to even more effectively and optimally satisfy the supercomputing needs of the researchers and engineers across higher education, the federal government and the private sector by standard-based computing platforms," said Reza Rooholamini, PhD., director, Enterprise Solutions Engineering, Dell.

While the partnership is initially focused on benchmarking and performance analysis of various hardware technologies, it will eventually expand to include evaluation of HPC software technologies; testing of grid-computing technologies; and options for clusters devoted to visualization and data analysis applications.

"Industry standard-based cluster computing has grown significantly over the past few years because clusters have proven to be very cost-effective solutions for the performance they provide," said Tommy Minyard, Research Associate and Manager of TACC's HPC group. "Researchers can now run their applications at a much larger scale and higher resolution while decreasing total time to solution. With Dell's support, we will continue to investigate and improve the performance of applications run in these clustered computing environments and explore new techniques and algorithms for improving performance."

Last year, TACC deployed Lonestar, one of the world's most powerful computing systems. Lonestar is built with a Dell HPC cluster based on the Intel Xeon processor. TACC recently upgraded the technology powering Lonestar and installed a second Dell cluster, Wrangler, with 64-bit Intel Xeon processors, Myrinet and InfiniBand switches.

Citation: Dell, University of Texas Benchmark Performance of Standards-Based Supercomputing Clusters (2005, April 11) retrieved 27 April 2024 from <https://phys.org/news/2005-04-dell-university-texas-benchmark-standards-based.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.