Case Study

Putting the \textit{People Friendly} in People Friendly Technology

“They have a small company feel along with the resources of a much bigger company and that is what appeals to us.”

Engineering Systems Administrator for Sports Machinery Manufacturer

Their Challenge and Our Solution
A Sports Machinery Manufacturer has been working with Nor-Tech since 2014. Prior orders have included three simulation and modeling HPC clusters all with Intel processors. During that time Nor-Tech Senior HPC Account Executive Bob Dreis had been working with the client’s same Engineering Systems Administrator for a number of reasons, including the fact that he keeps recommending Nor-Tech.

This time, the client wanted a fourth cluster to use as a test in order to see how long it would take to transfer data back and forth from remote locations. If the data transferred fast enough, the client planned to eventually consolidate most of the clusters to a single datacenter.

“The direction we wanted to go was toward centralized systems,” the Administrator explained. “Management wanted to reduce datacenter expense/management and the biggest concern in doing this was network connectivity between remote sites and the central location.”

“Simulation and modeling generate huge input and output files,” Bob added. “So file transfer time is always an issue.”

In addition to several applications that included LS Dyna, Abaqus, Converge CFD and Altair OptiStruct, the new cluster was integrated with Intel’s newest Xeon Scalable Processors. “We only use Intel,” the Administrator said. “That’s what the software vendors recommend based on performance.”

Although Nor-Tech is known internationally for its engineering expertise, the Administrator had expertise himself and ended up performing most of the implementation.

Their Success
The new cluster has been up and running for 3 months, which would have been enough time to complete the study, except that it happened to be right in the middle of the COVID-19 situation. Given this, the remote performance study is still ongoing.

The Administrator said, “While the network connection between facilities was already good, with the new cluster, we can already see that the transfer time is only about two times more than the local transfer time and we are happy with those results. If all goes as planned, we will transfer some of the clusters to our primary facility.”

Bob very much enjoys working with this client and the feeling is mutual—in particular they like the customer service and Nor-Tech’s expertise.

“I like working with Bob because he is not high pressure; he’s upfront and honest,” the Administrator said. “He is very easy to talk to and relates well to our needs and how Nor-Tech can accommodate them. The customer service has always been very responsive.”

He continued, “I’ve been very happy with Nor-Tech’s customer service—their tagline ‘People Friendly Technology’ really encapsulates what they do. They are very easy to work with, very understanding. They have a small company feel along with the resources of a much bigger company and that is what appeals to us.”

Bob concurred. “There is no substitute for a personal connection.”
About Intel® 2nd Gen Xeon® Scalable-Refresh Processors

Building on the momentum of the existing 2nd Gen Intel® Xeon® Scalable processors (CLX), these CLX-R processors offer enhanced power and value for high performance, mainstream and entry level applications at a similar or lower price than CLX. They feature:

- **Peak Frequencies for High Performance Use:** Two new Intel® Xeon® Gold 6200 processors deliver up to 4.5 GHz Intel Turbo Boost Technology, along with up to 3.9 GHz base frequency, with up to 33% more processor cache.
- **Enhanced Performance for Mainstream Use:** New Intel® Xeon® Gold 6200R processors deliver built-in value through a combination of higher base and Intel® Turbo Boost Technology frequencies (in addition to increased processor cache), at a similar or lower price than original 2nd generation processors.
- **Increased Value and Capability for Entry Use:** New Intel® Xeon® Gold 6200U, Silver 4200R and Bronze 3200R processors deliver increased value for single-socket, entry, edge, networking and IoT applications.

Nor-Tech is an Intel® HPC Data Center Specialist and Platinum Partner with the depth of engineering experience to develop HPC technology that allows clients to solve problems, complete research, develop prototypes and bring products to market faster than competitors. For more information, visit: [https://www.nor-tech.com/solutions/hpc/intel_clx-r/](https://www.nor-tech.com/solutions/hpc/intel_clx-r/)

About Nor-Tech

Nor-Tech built its reputation on the industry’s easiest-to-deploy cluster solutions and guaranteed no wait time support. The company designed and built the HPC cluster that enabled the first detection of a gravitational wave—a discovery destined to change history. In addition to HPC clusters, Nor-Tech’s custom technology includes workstations, desktops, and servers for a range of applications including CAE, CFD, and FEA. Clients include some of the most respected organizations in the world. Nor-Tech engineers average 20+ years of experience and are responsible for significant high performance computing innovations. The company has been in business since 1998 and is headquartered in Burnsville, Minn. just outside of Minneapolis.

Contact Nor-Tech
Email: info@nor-tech.com
Call 952-808-1000; toll free: 877-808-1010.