Simulation and Modeling Cluster with Intel Xeon Processors Proves Key to Study Success

MINNEAPOLIS, June 25, 2020 -- Nor-Tech, the leading experts on Linux-based high-performance technology solutions integrated with Intel Xeon Scalable Processors, developed a cluster for a sports machinery manufacturer that proved instrumental to study success.

The client has been working with Nor-Tech since 2014. Prior orders have included three simulation and modeling clusters all with Intel processors. “We only use Intel,” the Administrator said. “That’s what the software vendors recommend based on performance.”

The client recently asked for 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.”

In addition to the newest Intel Xeon Scalable processors, the cluster was integrated with applications that included LS Dyna, Abaqus, Converge CFD and Altair OptiStruct.

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, although the results so far are encouraging. The Administrator explained, “While the network connection between facilities was already good, with the new cluster, we can see that the transfer time is only about two times more than the local transfer time and we are happy with those results.”

He added, “Nor-Tech has been very easy to work with; they have a small company feel along with the resources of a much bigger company and that is what appeals to us.”

Building on the momentum of the existing 2nd Gen Intel Xeon Scalable processors (CLX), CLX-R (Refresh) processors offer enhanced power and value for high performance, mainstream and entry level applications. 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.

Nor-Tech is on CRN’s list of the top 40 Data Center Infrastructure Providers along with IBM, Oracle, Dell, and Supermicro and is also a member of Hyperion Research’s prestigious HPC Technical Computing Advisory Panel. The company is a high performance computer builder for 2015 and 2017 Nobel Physics Award-contending/winning projects. Nor-Tech engineers average 20+ years of experience. This strong industry reputation and deep partner relationships also enable the company to be a leading supplier of cost-effective Lenovo desktops, laptops, tablets and Chromebooks to schools and enterprises. All of Nor-Tech’s high performance technology is developed by Nor-Tech in Minnesota and supported by Nor-Tech around the world. The company is headquartered in Burnsville, Minn. just outside of Minneapolis. Nor-Tech holds the following contracts: Minnesota State IT, GSA, University of Wisconsin System, and NASA SEWP V. To contact Nor-Tech call 952-808-1000/toll free: 877-808-1010 or visit https://www.nor-tech.com. Full release at: https://www.nor-tech.com/category/news/. For media inquiries, contact Jeanna Van Rensselar at Smart PR Communications; jeanna@smartprcommunications.com 630-363-8081.