Case Study: Biomedical/Life Sciences

Responsive Client Service, Follow Through, Expertise

"We deliver what we promise. We do what we say.
That is really what differentiates us."
Bob Dreis, Nor-Tech's Senior HPC Account Manager

With a focus on accuracy, reliability, fine-tuned customization, and superior performance over the long development cycle, Nor-Tech is a leader in HPC clusters for the biomedical/life sciences sectors including pharmaceutics, medical research, bioengineering, and bioinformatics.

While life science (LS) research has always been data-intensive, processing requirements for areas such as molecular dynamics, DNA sequencing, computational chemistry, and cell imaging have moved well beyond desktops and workstations. Because each biomed/LS client application is different, Nor-Tech builds clusters for specific use to maximize performance. Nor-Tech knows that biomedical clients, in particular, need to accurately process data and analyze results faster than the competition.

Their Challenge

A global leader in patient-focused medical innovation, not happy with their current vendor, initially contacted Nor-Tech for an upgrade to their existing cluster. Then, because the cluster was over three years old, the client opted for an entirely new cluster that was bigger and faster.

In addition to a high rate of employee turnover, there were customer service issues with the vendor the client had been working with. Nor-Tech's Senior HPC Account Manager Bob Dreis said, "It's tough to find talent in this industry and hold onto that talent. The issue of employee turnover is something we see a lot with competitors, but not at Nor-Tech. Almost everyone has been here for 10 or more years."

Our Solution

Nor-Tech built a 384-core cluster customized for the client's work involving heavy usage of the Abaqus Finite Element Analysis (FEA) and STAR/CCM+ Computational Fluid Dynamics (CFD) solvers. This cluster would eventually reside in an offsite datacenter chosen by corporate IT. "We can offer a high level of customization because our engineers have so much expertise and also because we work closely with many software partners," Bob explained. "Everything is optimized for the models the client is running."

Their Success

In addition to building an easy-to-deploy cluster designed explicitly for the client application, Nor-Tech went the extra mile to create thorough custom documentation, including a Quick Start Guide. The images in each guide are actual images of that client's cluster components. Creating that documentation takes significant time and energy, which is why most of Nor-Tech's competitors do not offer it.

"We document the installation and make it as painless as possible for our clients to setup and deploy," Bob said. "Having that documentation creates a level of comfort. With Nor-Tech there is

never a one size fits all. Many clients want to see our facility before they agree to work with us. Once they do, they can see the professionalism, expertise, and attention to detail that are part of our culture."

The client was so impressed with the cluster and Nor-Tech that they have since recommended Nor-Tech's clusters to other organizations.

About Nor-Tech

This is one of the many clusters that Nor-Tech has built for biomedical/life science-related organizations. The company built its reputation on the industry's easiest-to-deploy cluster solutions and guaranteed no wait time support. In addition to HPC clusters, Nor-Tech's custom technology includes workstations, desktops, and servers for a range of applications. 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. To contact Nor-Tech call 952-808-1000/toll free: 877-808-1010 or visit http://www.nor-tech.com. Full release at: http://www.nor-tech.com/category/news/