



Case Study

Client Profile: Quantcast

Industry Leader in New Media Measurement Service that enables advertisers to view audience reports for millions of websites and services with accurate statistics information.

Challenges:

To perform all the mathematical computations required for business-to-business analytics, Quantcast required a powerful High-Performance Cluster with vast storage capacity and ultra-fast 10G Ethernet backbone capable of handling heavy web traffic with 99.9% uptime.

The World's Only Open Internet Ratings Service with 99.9% Uptime

Solutions

AMAX engineered 1U servers with Multi-core Xeon technology, Enterprise-class HDD's, and lightning fast 10Gig Ethernet to meet stringent processing demands. With 2,816 cores, 5,632GB of RAM, and 2,816 Terabytes, this AMAX built cluster is now ranked one of the top 200 fastest supercomputers in the world.

Benefits

- AMAX's high-performance platforms based on industry standard 1U server and fast 10G Ethernet backbone has improved operating experience to handle extremely heavy web traffic with high throughput and ultralow-latency.
- AMAX's stringent 5 stage Quality Control manufacturing process ensures hardware compatibility testing with Quantcast's application and produced a high reliability platform to deliver 99.9% uptime. By selecting the best in breed components AMAX offered a highly flexible and reliable solution based on open architecture, industry standard server architecture.
- Fully utilizing Quantcast's unique mathematical application for business-to-business analytics, AMAX HPC Cluster offers robust computational technology to allow end customers to view audience reports on millions of websites and services simultaneously.



“AMAX helped us every step of the way to design and deploy the newest, fastest, and most cost-effective server technology available today. Their flexible manufacturing process let us offload many aspects of the server and cabinet designs so we could concentrate on developing software to take advantage of their massive CPU power and network bandwidth of our new cluster supercomputer.”

Andrew Bibble, VP of Engineering of Quantcast

To handle all the mathematical computations required for their business-to-business analytics, Quantcast realized the need for a large scale cluster deployment with massive CPU power and fast network bandwidth. Hence, Quantcast evaluated several companies and chose AMAX to develop a proof of concept platform. As the proof of design was a complete success, Quantcast proceeded to move forward quickly with the SuperComputer deployment.

Quantcast had very strict timelines for this project and had Datacenter location deployment challenges. The Supercomputer needed to be ready and functional in 6 weeks. With AMAX's rapid deployment, manufacturing, and logistics capabilities, AMAX was able to deploy to the DataCenter location in 3 separate shipments within the 6 week timeframe.

Quantcast needed a high performance platform capable of performing complex mathematical computations and required vast storage with fast network bandwidth. AMAX coupled Intel® Xeon® Processor technology, enterprise class disk drives, and large quantities of high performance RAM.

AMAX built a Linux-based Cluster, featuring 2,816 latest Intel® Xeon® Processors, 5,623GB of RAM, and 2,816 Terabytes redundant storage capacity utilizing the latest Enterprise HDD's. Based on its demanding

requirement of zero downtime, AMAX built into the design redundant cooling fans and efficient “Power Factor Corrected” redundant power supplies. At the heart of this system lies a 10Gig Ethernet backbone that manages large amounts of traffic at very high speeds. Every node deployed in this platform is supported by full out of band management system featuring complete virtual/media over LAN. This AMAX supercomputer represented a new generation of high-performance computing (HPC) platforms based on the energy efficient Intel® Xeon® Processor technology.

“AMAX is proud to be working closely with technology partners such as Intel to deliver best-in-class, Linux clustered supercomputing solutions that address Quantcast's most demanding HPC application and I/O requirements,” said Jean Shih, President of AMAX.

“Introducing one of the world's top 200 fastest supercomputers is a testament of our HPC technological advances. It helps us accelerate the introduction of clusters to more commercial government, and academic users with less cluster expertise, who will now be able to leverage the superior price/performance ratio of Intel-based energy efficient HPC clusters for their research and simulations.”

In addition, AMAX post sales support ensured that Quantcast was able to operate at peak efficiency and 99.9 % uptime.

“Their post-sales support has also enabled us to keep the cluster running at peak efficiency and remain confident that our investment is protected because their vendor relationships allow them to ensure that we can get replacement parts for years to come.”
- Andrew Bibble, VP of Engineering of Quantcast.

About AMAX

Founded in 1979 in Silicon Valley, AMAX is the leader in Custom Servers and Storage solutions in North America, and is comprised of three key divisions that deliver customized solutions to a wide array of industries. AMAX's Contract Manufacturing Division provides comprehensive custom manufacturing and logistics services to OEM customers. AMAX's Corporate Solutions Division leads the custom server and storage manufacturing industries in North America, with products ranging from high-performance computing clusters, enterprise servers, and blades to graphic workstations. Finally, AMAX's Distribution Division furnishes resellers with quality component pricing, streamlined inventory, and unequalled service as a leading national IT distributor. AMAX has expanded its products, services, and offices globally. Our manufacturing facilities hold ISO 9001 certification to ensure the highest quality. For more information on AMAX's new products and solutions, visit www.amax.com.