CASE STUDY: HORNET INC.
STORAGE FOR ANIMATION AND MEDIA POST PRODUCTION

THE STORAGE CHALLENGE

Hornet Inc. had two dedicated storage servers managing their hand-crafted stop motion animation, traditional 2D character animation, and experimental to full CG animation. After Hornet used their two-server SAN solution for some time, they realized that having two servers based on different platforms didn't provide the scalability, speed, and simplicity required of their storage solution. Hornet needed a high-performance and unified NAS solution, able to handle storing and distributing various types of digital assets across different client workstations at a fast speed. In addition, their media product required that they have file recoverability and high availability failover. The existing storage servers were not meeting their needs, so they looked elsewhere.

After extensively researching different storage solutions and talking with many different vendors, they found that getting straightforward answers on usage in the media and entertainment industry (M&E), as well as getting technical specifications, was proving to be rather difficult. Furthermore, many vendors could not answer whether their storage solutions could handle CPU-intensive video streams or the large volumes of sequential reads and writes required by various image pre-production and post-production applications. While researching a new storage solution, they learned about TrueNAS® from iXsystems and discovered that TrueNAS was heavily used in the film industry. Because of their experience in the M&E industry, it was easy for iXsystems to craft a solution with TrueNAS that met Hornet's unique needs. After speaking with a sales representative, Hornet found that TrueNAS storage arrays had a solid reputation for data stability, fast read/write speeds, and high availability failover options, all at a competitive price that would fit their company's budget.

“iXsystems has experience in the entertainment industry which made it easier for them to understand our needs and tailor an appropriate storage solution. There was a high level of customer service and getting answers from the iXsystems team was very swift.”

- Sang-Jin Bae,
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“Nobody else could answer the questions we had. You guys are like going to a custom tailor for a suit and were very competitive to the hardware typically used in the M&E industry. I can’t emphasize enough the customer service aspect.”

- Sang-Jin Bae, Head of Production & Chief Technology Officer

WHY HORNET INC. CHOSE IXSYSTEMS AND TRUENAS

Hornet Inc. divided their original two-server storage SAN between various parts of the organization. An Apple storage server distributed content to team members using Apple clients, while the Windows storage server distributed content to team members working on 3D, CG, and visual effects. Their existing dual-platform SAN was functional, but left a lot of room for improvement and resulted in storage sprawl. Backups were lengthy and sometimes weren’t completing at all. SMB was difficult to work with on the Apple systems, and managing two different operating systems without hiring additional IT staff would be challenging.

Hornet considered the TrueNAS line of storage arrays, and other storage products that are popular with major Hollywood firms. After reviewing their different options, Hornet realized that the hardware used in the TrueNAS provides speed and resiliency while being priced competitively with other storage solutions currently being used in the M&E industry. After purchasing a TrueNAS storage array to hornet replaced their existing dual-storage server setup. TrueNAS enabled Hornet to edit, produce, and render digital assets from one unified storage solution at much faster speeds while reducing their bottom line expenses. Furthermore, the improved NAS and SMB support, built-in file recovery, high availability failover options, and acquisition cost resulted in a significant improvement over their previous SAN. Hornet also purchased a FreeNAS® Certified 4U Server as a replication target for their TrueNAS storage array.

For Hornet, it wasn’t only the hardware that led them to purchase the OpenZFS-based TrueNAS storage array. During and after the sales process, iXsystems stepped in to pinch hit where Hornet needed help the most and provided the expertise to assist in making important IT decisions. In addition to the consultative approach iXsystems brings to their customers, Hornet received 30 days of deployment assistance to help ensure their solution worked properly in their environment. Post-deployment, iXsystems continues to provide Hornet with white-glove support. In the event of a support incident, iXsystems assigns a support engineer with specialized knowledge of TrueNAS and storage platforms who can leverage an in-house development team as conditions warrant.

“Talking to our iXsystems sales representative was like talking to a friend. They asked the right questions and if our representative didn’t know the answer, they wouldn’t just hand documents over. They would actually get you the answer.”

- Sang-Jin Bae, Head of Production & Chief Technology Officer
TRUENAS PRODUCES RESULTS

After deploying TrueNAS and a FreeNAS Certified 4U Server, replication went from overnight backups to fast snapshots that complete within minutes and don't slow down the network.

Hornet Inc. has up to sixty employees accessing their TrueNAS at any given time with no noticeable drop in performance. Hornet allocates a small number of resources from their TrueNAS storage array to their Administrative Department while an additional forty percent of designers and animators are using PhotoShop, AfterEffects, and ToonBoom on Apple clients. Instead of a full migration, Hornet opted to start new projects on their TrueNAS and archive old ones as they were finished.

“Before we moved to TrueNAS we used two different SAN solutions. Workflow performance between those two solutions and our single TrueNAS is like night & day; we found that protecting our data became something we could do in four times each hour, instead of once each night. Implementing TrueNAS allowed me to sleep well at night knowing my data is safe.”

- Sang-Jin Bae,
  Head of Production & Chief Technology Officer
CONCLUSION

Hornet Inc. needed a solution to improve their storage beyond their original two-platform SAN. TrueNAS provides a solution that scales with Hornet’s growth, providing power, stability, and speed, all in one competitively priced package. Replication and snapshots are incredibly quick and easy, leveraging the power behind TrueNAS and the OpenZFS self-healing file system. The team at iXsystems brings an additional level of assurance when deploying and administering Hornet’s new TrueNAS unit. This helps Hornet keep their costs low by avoiding the need to hire additional IT support staff.

ABOUT HORNET INC.

Hornet is a production studio based in New York City and winner of some of the industry's most prestigious awards, including multiple Cannes Lions, AICP, One Show, and D&AD Awards. Established in New York City in 2001, Hornet quickly attracted and developed a strong and diverse roster of talent. The studio expanded in 2005 with the addition of Hornet Films, an original content film and television branch with both short and long form offerings.

ABOUT IXSYSTEMS

By leveraging decades of expertise in hardware design, its contributions to many Open Source software communities, and corporate stewardship of leading Open Source projects (FreeNAS and TrueOS), iXsystems has become an industry leader in building innovative storage solutions and superior enterprise servers for a global marketplace that relies on open technology.

Thousands of companies, universities, and government organizations have come to rely on iXsystems’ storage, servers, and consultative approach to doing business. Headquartered in the heart of Silicon Valley since its founding in 1996, the dedication to white-glove customer service, industry-leading support, and transparent technological contributions has never wavered and continues to help lay the foundation for a new era powered by open technology.

“Investing in new hardware can be difficult, but the support we got from iXsystems made us feel really confident in our decision.”

- Sang-Jin Bae, Head of Production & Chief Technology Officer