CASE STUDY: NATIVEX
TrueNAS® Back-up and Replication with CommVault Media Agent

“There’s a night & day difference with TrueNAS over our previous storage solution. We’re seeing back-up times take half, sometimes a quarter of the time they did before.”

- Corey Hemminger
  Systems Engineer

THE STORAGE CHALLENGE

In order to protect their data, NativeX had been backing up production and development files to a centralized storage system from Sun. Unfortunately, the system was reaching its capacity limits and could not be expanded, and was no longer supported by the manufacturer. Consequently, NativeX needed to find a reliable, cost-effective solution that would be easy to scale up and supported the company’s storage requirements. The solution would also need to be compatible with NativeX’s existing backup solution, CommVault.
“We evaluated Data Domain & quite a few others. A lot of the features they offered we already got from CommVault or were way too overpriced. We were also worried about their vendor lock-in and it also looked like they were not very easily scalable to the size we possibly may need to grow to in the near future without a forklift upgrade.”

- Corey Hemminger
  Systems Engineer

ABOUT NATIVEX

NativeX was started in 2000 and has become an industry leader in monetization and user acquisition solutions for mobile and desktop applications. NativeX is the marketing technology platform that is reinventing in-app advertising to create more effective and engaging ad experiences that enable developers to build a successful business around their applications.

The NativeX platform strategically delivers integrated advertising content within an application for a seamless experience. This results in significantly improved performance over standard display advertising and has been shown to double or even triple revenue for partners.

BACKUP & REPLICATION WITH TRUENAS

Systems Engineer Corey Hemminger had heard of iXsystems through its development work on the FreeNAS project, a popular open source storage operating system. He was also familiar with the underlying filesystem, ZFS (Zettabyte File System) and its data protection capabilities, as well as its performance benefits. By researching the extensive online documentation and community resources for FreeNAS, he was able to verify that FreeNAS and its commercial counterpart, TrueNAS, could do everything needed in a storage OS in a fully supported hardware solution.

By looking at a number of storage vendors, including iXsystems, NativeX found that TrueNAS offered comparable performance and features in an Enterprise-Ready and cost effective package. They also found that TrueNAS scales more easily to the size they expected to grow to in the near future than other alternatives.
IMPROVED PERFORMANCE AND EXTRA DATA SECURITY WITH TRUENAS

To meet their needs, NativeX purchased two TrueNAS systems with each system protected by RAID-Z1, a single disk parity protection similar to RAID-5, giving about 85TB of usable storage per system. NativeX then utilized the CommVault media agent application to backup data from their standalone Windows and Linux servers, SQL Servers and VMware vSphere to the local TrueNAS storage system over iSCSI. They then replicated their data to a secondary TrueNAS system located in their main office for additional data protection.

NativeX’s data environment uses Cisco UCS rackmount servers which are connected to a 10 Gigabit Cisco Nexus 7910 switch, in an A and B network setup for redundancy. Each TrueNAS appliance connects to the network fabric with dual 10 Gigabit ports.

With their new TrueNAS storage solutions, NativeX is achieving 8 to 9 GB/s connectivity to and from their UCS servers, and storing about 3 times the data as their previous Sun storage solution. On the previous set up they had used fibre channel to back up 4TB from their SQL, which could take upwards of 24 hours. Using TrueNAS saved them over 75% in backup time, with their SQL backups taking about 5 to 6 hours.
WHITE GLOVE SERVICE FROM THE IXSYSTEMS SUPPORT TEAM

One of the reasons NativeX decided on TrueNAS was due to the white glove service model that the iXsystems support team had to offer for their appliances. After deployment, they experienced some performance issues and were trying to determine whether the issues were on the TrueNAS or CommVault side of things. The iXsystems support team worked with NativeX to assist them in this determination via troubleshooting assistance, WebEx sessions and performance testing. In the end, it turned out that the TrueNAS side was in good shape, which helped them narrow down the issue with CommVault, and they were able to resolve their performance issue. Also, the availability of online documentation allowed their 3 IT staff to perform troubleshooting & administer their TrueNAS system before taking things to the support team.

CONCLUSION

As NativeX continues to grow, they need a solution that is capable of growing with them as well as one that provides the performance and reliability to protect their valuable data infrastructure in a more efficient manner than their previous backup solution. With the ability to simply add expansion shelves to their base systems, TrueNAS fits the bill, providing NativeX with a powerful, cost-effective means to keep up with their development and production data infrastructure for the foreseeable future. By working with their preferred media agent CommVault, TrueNAS allows them to secure their data with secondary & tertiary storage with minimal effort. In addition, the post-purchase, white glove support model gives them the responsive support needed to give them peace of mind that their data is safe.

“When I had a performance issue between CommVault and our TrueNAS systems, they didn’t pass the buck, and did quite a bit of work with me to go through all the possible issues thoroughly. I found working with the iXsystems support team to be a pleasant experience.”

- Corey Hemminger
  Systems Engineer
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.