

CASE STUDY: CREATIVE INTEGRATIONS

Workflow Improvements with FreeNAS and TrueNAS



“We’ve deployed FreeNAS and TrueNAS at several client locations and all the visual effects people are loving the TrueNAS system and how easy it is to manage.”

- **Tim Nagle**

Owner of Creative Integrations

THE STORAGE CHALLENGE

Creative Integrations is always on the lookout for new solutions that can help their customers improve operational efficiency. While at the National Association of Broadcasters (NAB) conference in April of 2012, Tim Nagle discovered FreeNAS as an open source unified storage operating system. Tim had a client with an existing NAS, but the client didn’t have anyone to administer it. Although Tim could do it himself, the time investment needed to learn his customer’s storage platform would cause delays and keep him from other critical duties. It would also mean constant additional oversight.

“I heard about FreeNAS at a conference and realized it was an immediate necessity for one of my clients. They had an existing NAS system that was not being used to its full potential. After I rebuilt their backup system using FreeNAS, their workflow improved by probably 5 times what they were able to do previously. This was largely due to the increases in throughput and the ease of management of the FreeNAS platform.”

“The support was really it. I can handle a lot of this, but as soon as I get in over my head, I need to have someone I can call. I love forums, but the problem is I usually get more than one answer. When a system is in production, it becomes critical to get a prompt, unambiguous response.”

- Tim Nagle

FREENAS PROVIDES IMPROVED WORKFLOW ON OPEN STANDARDS

The solution was clear for Creative Integrations. They completely rebuilt their client’s backup server with FreeNAS as a fresh start. As a result, workflow improved greatly, throughput increased significantly and workers found the intuitiveness of the FreeNAS interface easy to use. After the success of the initial deployment, Creative Integrations installed a second FreeNAS server and set it to run nightly replication over rsync, a utility software and network protocol for the synchronization of files and directories over a network. This preserves critical data automatically and provides the client with greater peace of mind.

TRUENAS IN THE MEDIA PRODUCTION ENVIRONMENT

One of Creative Integrations’ clients, a children’s hospital in Ft. Worth, TX, started a hospital TV station for the patients to watch and participate in. They wanted to build a FreeNAS system for their multimedia storage, so Creative Integrations helped consult them on which hardware would be the most compatible with their operating system and use case. During this process, they contacted iXsystems and were impressed with the hardware they were using. TrueNAS also came with commercial level support, which was something that any enterprise can ill afford to do without. Having expert level assistance during deployment and in the production environment can mean the difference between minutes or hours of downtime. It’s also an extra line of security for a business’s critical data. The professionals at iXsystems provide Creative Integrations with timely support throughout the lifetime of their TrueNAS appliances.

“There was one point where we were getting really low on storage space and it was getting a bit uncomfortable. Adding on an expansion shelf was a very quick transition, and I know I can just get another the next time we are running low on space. It’s nice to know that I won’t have a huge headache on my hands every time we need to scale up.”

- Tim Nagle

SCALABLE STORAGE IN A POST-PRODUCTION ENVIRONMENT

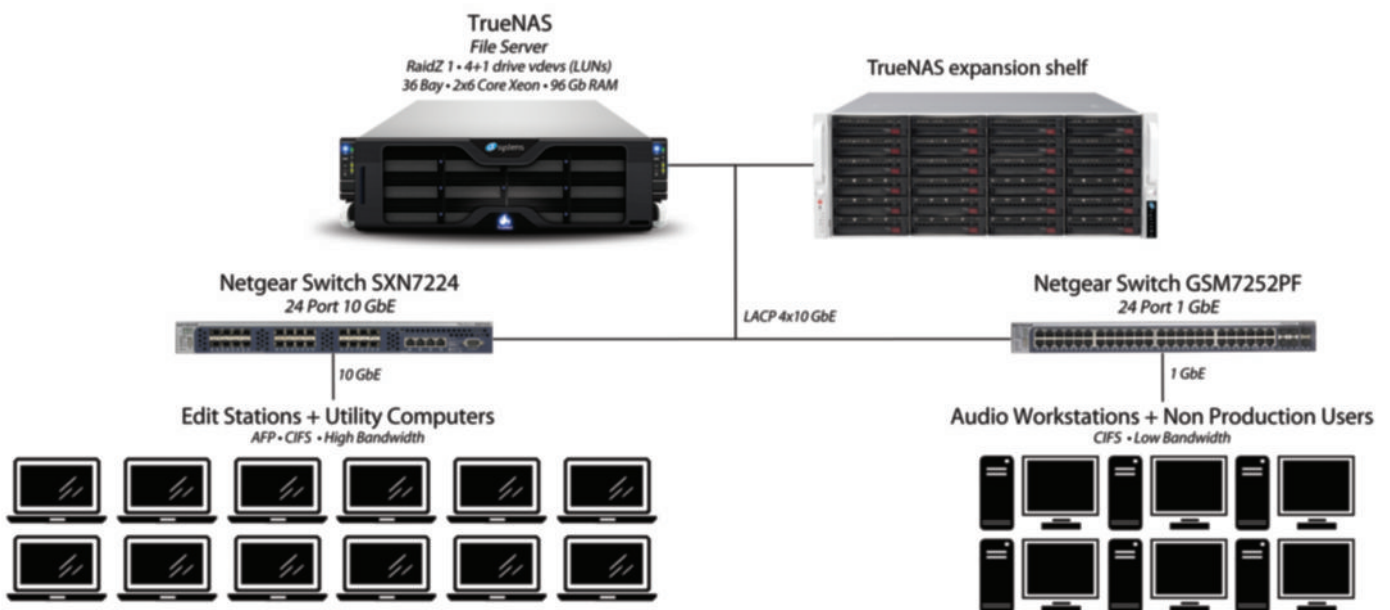
Another of Creative Integrations’ customers, a full-service post-production studio in Dallas, needed centralized storage to house all their media, so they too found a TrueNAS model that was a perfect fit. iXsystems recommended a TrueNAS Write Caching device, and four ports of 10GbE. These ports were aggregated, using LACP, and connected to a 24-port 10 Gigabit ethernet switch, which serves all of the main client editing stations and utility computers. Non-production employees and the audio system are connected through a 24-port 1 Gigabit ethernet switch due to lower traffic needs.

This system serves eighteen users—twelve of them requiring high bandwidth. It shares primarily over AFP, with CIFS used as a separate login system for inter-office access. The client uses their TrueNAS appliance to send projects, store media, and even render media out to the storage servers. The TrueNAS appliance eliminated the bottlenecks associated with using spinning disks to locally store data. With separate login systems, access to their critical media storage is limited to authorized production users only, adding an additional level of data security.

The client’s storage needs grew more rapidly than initially anticipated and the system’s storage capacity needed expanding. Creative Integrations ordered a storage expansion shelf, which let them seamlessly grow their pool from 70TB to 158TB of usable storage running RAID-Z (single disk parity), with disks grouped into 5 drive vdevs (LUNs). They were able to deploy the additional 88TB of usable capacity — from order to deployment — in a matter of days.

FLEXIBLE SOLUTIONS FOR ANY MEDIA ENVIRONMENT

Both FreeNAS and TrueNAS have been critical in improving the operations for a growing number of clients for Creative Integrations. FreeNAS provides an open source storage platform for its customers to use in their media environment. TrueNAS has additional features that provide extra data security with commercial grade support from the developers that bring the world FreeNAS. Both platforms provide the functionality, performance, and stability any organization needs to improve operational efficiency, and Creative Integrations looks forward to implementing both in the future, whenever possible.



ABOUT CREATIVE INTEGRATIONS

Creative Integrations is a full service engineering/integration firm that specializes in post-production, recording, animation, and broadcast facilities. With over a decade of experience, Creative integrations helps their clients design, improve, and streamline workflows.

The company is owned and operated by Tim Nagle, with experience on many sides of the industry from engineering, production, post-production, music and broadcast all over North America and Europe. Creative Integrations offers a proactive, technical view of the landscape their customers are faced with and works with clients to find the most effective, economical solutions available in the current market place. With offices in Dallas, TX and New York City, NY, Creative Integrations is positioned to fulfill the needs of any project on schedule and on budget.

ABOUT IXSYSTEMS

iXsystems builds rock solid enterprise-class server and storage solutions. All of our products are assembled, tested, and shipped from our company headquarters in Silicon Valley. Technical support is provided in-house by the same engineers that build the systems. Thousands of companies, universities, and U.S. Government departments have come to rely on iXsystems' customer-first commitment to excellence. iXsystems champions the cause of Open Source technology by dedicating extensive resources to several FreeBSD community projects: FreeNAS, PC-BSD, FreeBSD, and TrueOS.