

## CASE STUDY: IOSTUDIO

### HIGH THROUGHPUT STORAGE FOR MEDIA PRODUCTION



*“As a user of FreeNAS I was already aware of how well FreeNAS worked for SoHo storage. When I saw the line of supported TrueNAS solutions iXsystems was putting out there, I knew we had to look further into it.”*

**- Ari Orlinsky,**  
*Director of Information Systems*

### THE STORAGE CHALLENGE

iostudio wanted to consolidate their storage solutions into a single manageable solution that could be scaled easily and used by their many applications. They had diverse storage solutions, including Apple Xserve servers, some direct attached storage (DAS), and GraniteStor servers. These solutions were aging and required a significant amount of time to manage, increasing their storage costs. These solutions also didn't have much in the way of data protection, so they needed storage with the kind of data integrity checks that a next generation file system has to offer. iostudio was aware that the Zettabyte File System (ZFS) had the features they were looking for in a storage system through their IT staff's familiarity with FreeNAS. This led them down a path of looking for a commercially supported storage solution, like TrueNAS, that used a file system based off of the Open Source version of ZFS, called OpenZFS.

The IT staff at iostudio was familiar with the FreeNAS operating system and its underlying file system that was based on OpenZFS, but they needed to know more about TrueNAS so they spoke to an iXsystems sales engineer that described how TrueNAS worked and would address the issues relevant to their use case. In TrueNAS they found a hardware and software solution that could handle the industry change requiring them to supply files in the 4K resolution, which necessitates about four times the data to be processed when editing raw video files and requires four times the storage space to store their data. As an Apple shop, they also needed a solution that supported the Apple Filing Protocol (AFP). The iXsystems staff worked closely with iostudio to design a TrueNAS solution that could handle their performance requirements and support their use case.

*“The biggest thing that stands out is that we requested a quote with the parameters of what we needed and iXsystems was quick to reply with multiple solutions that fit our needs. Other companies we looked at all wanted to have many hours of conversations before giving us a quote for something that ultimately wouldn’t fit our needs.”*

**- Ari Orlinsky,**  
*Director of Information Systems*

*“Deployment was painless. We simply moved our data over from the old storage solution, migrated the shares, then our applications were up & running. With TrueNAS we know our data is safe.”*

**- Ari Orlinsky,**  
*Director of Information Systems*

## **IOSTUDIO DEPLOYS TRUENAS FOR VIDEO PRODUCTION**

They chose an iXsystems TrueNAS Z20 because it combined high quality, scalable hardware with professional support. They also chose the TrueNAS Z20 due to its reduced acquisition costs, AFP support, and a self-healing file system. They purchased a TrueNAS Z20 storage system with 192TB of storage that used RAIDZ2 (similar to RAID-6), along with hot spares. Their TrueNAS provides primary storage for about 50 users, and shared data using AFP and NFS over a dual port 10GbE network card. One port runs on a 1GB network fabric and serves as a storage repository and the other port runs over a 10GbE Brocade Fastiron Switch to serve as primary data storage for video editing.

iostudio is using this as fast and easily accessible storage for their video editing team as well as for general corporate use. The Apple-based production applications connect to TrueNAS with AFP for file storage, while some servers simultaneously connected to the TrueNAS using NFS. Video data is then backed up to S3 from TrueNAS. Previously, they had rsynced their documents to a machine at Amazon, and now they take advantage of TrueNAS’ native S3 Backup Option.

## **TRUENAS DELIVERS POWERFUL, SCALABLE, RELIABLE PERFORMANCE**

The TrueNAS Z20 provides iostudio with the hundreds of megabytes of throughput and low latency storage necessary for creating multiple 4K video files without performance degradation. TrueNAS helped iostudio reduce their storage costs, which was a major component of their video production budget. iostudio is ready for future growth as the TrueNAS gives them the ability to expand the number of network ports for even greater throughput and scales to 1PB of storage.

In addition to providing responsive data storage to support their move to 4K images, TrueNAS provides multiple data integrity safeguards that provide data redundancy. Volume management is on the same layer of the Operating System as the file system, meaning that TrueNAS is able to provide top-to-bottom data integrity checks that make TrueNAS self-

*“The TrueNAS is performing quite beautifully. We’ll have three people editing 4K video from the TrueNAS at the same time with no noticeable performance lag.”*

**- Ari Orlinsky,**  
*Director of Information Systems*

*“Knowing that our data is correct and protected from data corruption is very important to us, which makes TrueNAS with OpenZFS a tremendous step up from other solutions.”*

**- Ari Orlinsky,**  
*Director of Information Systems*

healing and resistant to data corruption. TrueNAS’ native snapshot and replication tools give iostudio even more features that safeguard their data with little performance overhead.

In addition to all the tools TrueNAS includes, iXsystems provides iostudio with the expertise they need to make complicated storage decisions from sales to support. iostudio gets 30 days of deployment assistance to help ensure their solution works properly in their environment. Post-deployment, iXsystems provides iostudio with white-glove support. In the event of a support incident, they are assigned a support engineer with specialized knowledge of their issue who can leverage an in-house development team as conditions warrant.

## CONCLUSION

iostudio needed centralized storage that could handle the increasing performance and capacity demands of a modern video production environment and serve as a file server for the office. They also needed a storage platform that could provide safeguards against data loss and corruption. TrueNAS provides iostudio with a powerful, scalable solution that has a self-healing file system and includes the tools necessary to protect critical data. The team at iXsystems provides an added level of assurance, providing expert assistance from the pre-sales process to post-deployment. iostudio also plans to greatly reduce their risk of downtime by upgrading their Z20 to a High Availability system in the near future.

*“Whenever we had questions, the answers iXsystems gave us were spot on. They were able to help us throughout every stage, providing optimal system design, and make sure our deployment went smoothly. TrueNAS comes with the technology needed to protect our data.”*

**- Ari Orlinsky,**  
*Director of Information Systems*

## ABOUT IOSTUDIO

iostudio is an award-winning marketing agency based in Nashville, Tennessee, that specializes in content marketing, platform development and audience engagement. Our mission is to create meaningful, authentic experiences that empower and enrich people’s lives—while showing measureable results for our clients.

We integrate and execute video production, editorial and design, digital development, and social media solutions, as well as end-to-end contact center support. Along the way, we ensure each solution is backed by a data strategy to ensure quantifiable return on investment.

## ABOUT IXSYSTEMS

iXsystems is a pioneer in building innovative storage solutions and enterprise servers for a global marketplace based on open technology. With decades of expertise, many contributions to Open Source communities, and stewardship of leading Open Source projects, iXsystems has become the leader of innovative storage and server solutions for the global open technology market.

Thousands have come to rely on iXsystems’ approach to doing business. Headquartered in Silicon Valley since its founding in 1996, its consultative approach and dedication to customer service, support, and technological contributions has never wavered and builds the foundation for a new era powered by open technology.

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