



## CASE STUDY TRUENAS<sup>®</sup> HIGH AVAILABILITY STORAGE MAKES THE CUT WITH 1STAVEMACHINE

Brooklyn, New York www.1stavemachine.com Film / Production / Editing



#### Summary

Challenge: Decentralized Infrastructure & Low Performance Solution: TrueNAS Use Case: Centralized Redundant Storage

#### Benefits

- TCO Savings
- Increased Performance
- Productivity Gains



"We started looking at TrueNAS when we had some questions on TrueNAS CORE and were very impressed with the response. The Support Team went above and beyond the expected level of knowledge and service to help us. It was then that we realized TrueNAS was the enterprise solution we had been looking for."

- Chris Caravella, Chief Engineer

## THE STORAGE CHALLENGE

1stAveMachine, a New Yorkbased media and entertainment production company, was using traditional Linux servers distributed across multiple departments to store their vital film footage. Unfortunately, this decentralized IT infrastructure created silos of data that were inaccessible to many of the production staff across multiple departments. 1stAveMachine first tried to solve this problem with a Nexenta software-only storage solution on a server built in-house. However, it quickly became evident that Nexenta was not a good option due to the costly pricing structure

as your data grows. After several frustrating experiences trying to use the Nexenta hardware compatibility list and difficulty sourcing compatible parts, 1stAveMachine decided to search for a better solution.

1stAveMachine still had an undeployed server they had built to use with Nexenta but were unsure if it could be used with a new software solution. 1stAveMachine knew they liked the features of the Zettabyte File System (ZFS) from previous experience, but there were a limited number of operating systems utilizing ZFS.

1stAveMachine tested NAS4Free

but determined it did not have the features needed to serve as their core storage platform. After that, 1stAveMachine decided to give TrueNAS CORE, the world's #1 most used software-defined storage OS, a try on their pre-built storage servers. While qualifying TrueNAS CORE as part of their storage solution, 1stAveMachine was blown away by the extensive documentation and helpfulness of the TrueNAS community and decided to dig deeper. "Box to box performance is exponentially better. It used to take a few days for replication to finish, but now it tops out right around a day. I can also use the management console anywhere on the network making administration a snap."

- Chris Caravella

## THE UPGRADE TO TRUENAS ENTERPRISE

1stAveMachine reached out to iXsystems, the developers of TrueNAS CORE, with questions during the qualification process. The experienced TrueNAS storage experts quickly answered 1stAveMachine's guestions and informed them about TrueNAS Enterprise turnkey storage solutions that could consolidate the company's decentralized IT infrastructure. 1stAveMachine learned that TrueNAS builds on the stability of TrueNAS CORE and the ZFS file system with additional features like fibre channel support, high availability, enclosure management, and 24/7/365 USbased customer support.

1stAveMachine decided to purchase a TrueNAS Enterprise high availability system with two expansion shelves and have seamlessly integrated it with a TrueNAS CORE server that serves as a replication target. Their TrueNAS has hundreds of terabytes of disk space configured in a mirrored configuration, giving 1stAveMachine confidence that their data is safe and secure.

Each storage controller on the TrueNAS high availability system has a 10GbE fiber SFP+ connection networked to a 24-port 10GbE switch, which then connects to four stacked 1GbE switches. The TrueNAS system is also able to utilize the 10GbE switch for backup and replication with closed access and a 1GbE switch for client access.

1stAveMachine found that TrueNAS eliminated performance issues that were seen with other storage solutions during post-production editing. Pairing TrueNAS with high-speed read and write caches, 1stAveMachine achieves significantly higher performance compared to what they had seen with the Nexenta storage solution. In fact, the production staff can easily saturate their 1GbE connection with about 110 MB/s of read and write performance.

TrueNAS Enterprise provides the thirty-five member production staff at 1stAveMachine with a storage system that unifies their IT infrastructure and helps prevent a proliferation of walled-off data silos across departments. With TrueNAS, 1stAveMachine can perform a variety of actions with ease, including editing directly on the server and exchanging raw files of all sizes. Their users can access TrueNAS storage via the SMB protocol from Mac and Windows clients, making project collaboration easier than ever. Using their existing 10GbE fabric for backup and replication with TrueNAS. 1stAveMachine has seen their backup times cut in half.



TrueNAS comes with industryleading storage support that allows 1stAveMachine to spend their time editing film projects instead of worrying about limited documentation and challenging compatibility issues. The support team works closely with TrueNAS developers to provide 1stAveMachine with a team of dedicated storage experts if they need help.

# TRUENAS DELIVERSABOUTRESULTS FOR1STAVE1STAVEMACHINE

1stAveMachine needed a stable, unified, ZFS-based storage solution that could serve their growing studio and store their most vital film project footage. After testing and eliminating several storage solutions that couldn't keep up with their intensive workload, 1stAveMachine discovered TrueNAS CORE, which performed beyond their expectations.

1stAveMachine turned to the TrueNAS ZFS specialists when they had questions about TrueNAS CORE and learned about TrueNAS Enterprise Systems solutions that could unify their non-centralized IT infrastructure, while scaling with their company to meet increasing post-production demands. 1stAveMachine then decided to implement a TrueNAS storage appliance that seamlessly integrated with their TrueNAS CORE replication server. 1stAveMachine now enjoys unprecedented performance and stability, cutting their backup times in half. On top of all this, TrueNAS Enterprise includes industryleading storage support with every TrueNAS Enterprise system, allowing 1stAveMachine 24/7 access to OpenZFS experts to keep things running smoothly.

## ABOUT 1STAVEMACHINE

1stAveMachine is a collective of international directors, artists, and designers headquartered in Brooklyn, New York. Since 2004, 1stAveMachine has been a beacon for creative ideas, working to entertain audiences and touch on human emotion with top quality video production.

1stAveMachine works to engage their audience with new perspectives and deliver media that gives them a reason to think and remember the message. Rooted in a culture of collaboration, 1stAveMachine works with agencies and brands to build the most stand out, creative ideas. Since its inception, 1stAveMachine has expanded and diversified, while producing award winning videos and remaining committed to presenting a singular vision for stories to share.



### **ABOUT TRUENAS**

With over one million deployments and backed by ZFS, TrueNAS offers legendary stability and reliability you can count on. TrueNAS can be used in a variety of applications, including, Backup, Multimedia, Healthcare, Government, Education, Cloud, Virtualization, and Hyperconvergence. Using Open Source economics, TrueNAS Systems are the best value in enterprise storage and offer the lowest total cost of ownership compared to similar solutions. TrueNAS builds on the reputation of FreeNAS as the world's most trusted Open Source storage OS. Get to know the new TrueNAS Family at TrueNAS.com and find out why TrueNAS is the clear choice to scale with you as your business grows.

## CONTACT

#### **Corporate Headquarters:**

2490 Kruse Dr San Jose, CA 95131

#### US South:

222 Keller Ln Maryville, TN, 37801

#### Call Us:

Toll-Free (USA Only) : (855) GREP-4-IX Phone : (408) 943-4100 Fax: (408) 943-4101

#### E-mail:

Sales: sales@iXsystems.com

#### Web:

www.iXsystems.com www.truenas.com



©2022 iX, TrueNAS and TrueNAS CORE are registered trademarks of iXsystems, Inc. All rights reserved. Nexenta is a registered trademark of Nexenta Systems Inc.