

## CASE STUDY: A US COURT SELECTS TRUENAS FOR THEIR STORAGE AND REPLICATION NEEDS

*“We particularly like TrueNAS because it is based on Open Source technology, but comes with the features, performance and support of proprietary hardware.”*

**- Assistant System Manager**

### THE STORAGE CHALLENGE

A United States District Court needed to expand their storage for their two locations in 2014. Their office environment was Windows-based and they wanted something compatible that wouldn't require much administrative overhead and training. They also wanted a solution that did not have hardware lock-in and was open source based. They had previously used Novell servers and looked at Microsoft based solutions as well, but those platforms served more functions than needed for file storage and required considerable training and administrative overhead.

From there, they looked towards network attached storage appliance vendors as an alternative. They evaluated several consumer solutions and found that performance was limited and the solution did not meet their support needs, while legacy storage vendors like EMC did not match their economic needs. Fortunately, they had some people on staff who were familiar with FreeNAS, so they inquired with iXsystems about their TrueNAS appliance line, which is based on FreeNAS. TrueNAS met all their functional requirements and came with the level of support they needed for their operations.

*“The sales staff was very helpful. They were more concerned about getting the right solution for our needs, rather than taking the cookie cutter approach adopted by other vendors. They seemed very well versed and more technically capable than what I’d expect from a sales person.”*

**- Assistant System Manager**

## QUALITY STORAGE SOLUTIONS SOLD BY EXPERTS

The court staff worked with the iXsystems sales team to select a storage system that would meet their needs. The iXsystems sales team prides itself on product knowledge and tailoring solutions to customer needs, and provided a qualified Solutions Architect to the Court. The Solutions Architect worked closely with the Court to gain a detailed picture of their use case and office environment to design a system that met all their performance and feature requirements.

The Court acquired two TrueNAS Unified Storage appliances, each with about 8.4TB of storage, fronted with more than 400GB of mirrored read cache and a write cache configured for high performance. A TrueNAS storage array was installed at each of the Court’s two locations. The customer used snapshots and replication along with rsync to keep their business data protected. Both systems were set up on a 1GbE network infrastructure.

The Court shares their files with all computers on the network, including Excel spreadsheets, PDFs, court recordings, and other documents. Users can access storage locally over CIFS or through VPN, allowing them to work outside the office. Dedicated workstations are setup to record court proceedings that save files locally and copy them to their TrueNAS storage. The TrueNAS systems can be securely administered from either court location or off-site. They also use replication and rsync for redundancy between locations.

*“Performance is better than we expected without even setting up link aggregation. Our courtroom recordings, which would occasionally create large, multi-gigabyte files, used to take 10 minutes to index, but only take 5 minutes now. VPN users have been very happy with TrueNAS’ performance from offsite. It also gives us an added level of availability between locations.”*

**- Assistant System Manager**

## IMPROVED PERFORMANCE, FUNCTIONALITY AND ADMINISTRATION WITH TRUENAS

Implementing TrueNAS Unified Storage Appliances has provided tangible benefits for the Court. Nearly one hundred users access storage in both locations and share their files with other users on the network, with the systems handling traffic over a single 1GbE port with ease. After TrueNAS was installed, the dedicated courtroom recording workstations saw a doubling in performance while VPN users also got a performance boost that enabled home-based and mobile employees to work more efficiently. In the event of a site outage (such as would be caused by a power failure, flood or fire) the TrueNAS at the remote site can be utilized, allowing employees to continue business operations. TrueNAS has also reduced the Court’s administration overhead over their previous solutions. Due to the fact that TrueNAS can be remotely managed, training costs are decreased and they only require two full time administrators between locations, along with two additional staff that can help out on occasion. TrueNAS is also designed to share data, which means fewer things in the operating system can fail, leading to less incidents that require downtime for maintenance.

## CONCLUSION

When a United States District Court needed to expand their storage, they turned to iXsystems for a solution for their Windows users as well as one that reduced administration overhead and downtime across their two locations. TrueNAS provided a solution based on open technology that had the performance, functionality, scalability, and support of the protocols they needed. The sales staff at iXsystems utilized their unparalleled storage expertise to propose a TrueNAS solution that met the Court’s unique requirements and exceeded their expectations. TrueNAS enables them to maintain their storage with minimal administration overhead, allows them to scale, and satisfies their storage requirements with a single array. They know they can turn to the iXsystems support team if they ever run into a problem that is beyond their in-house capabilities.

*“Due to the ease of administration of TrueNAS, along with the familiarity of our staff with FreeNAS, we were able to easily add a storage repository for users that has capabilities similar to what our Windows users are familiar with.”*

**- Assistant System Manager**

## 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.