

## CASE STUDY

# TRUENAS® – SCALABLE HIGH-AVAILABILITY STORAGE FOR IT WORLDWIDE SERVICES

Chantilly, VA  
Professional IT Services



## Summary

**Challenge:** Low Storage Density / No Scalability

**Solution:** TrueNAS

**Use Case:** Virtualization & Hosting

## Benefits

- Higher Storage Density
- High Availability
- Easy & Unified Management



“FreeNAS® is great, I really love the product. We had it running in the data center and that worked out really well. TrueNAS was a natural progression for our needs.”

- Todd Lamonica, President & CEO

## THE STORAGE CHALLENGE

IT Worldwide Services offers network design and hosting on VMware servers to provide high performance and highly available storage to clients, as well as management services and technical support for VMware configurations. IT Worldwide Services started out using Buffalo Terastations as primary virtual machine (VM) storage for their clients, which worked for a while.

However, each Terastation could only support a small number of drives, severely limiting scalability. This led to inefficiency and

performance loss due to the low number of spinning disks per unit. IT Worldwide Services decided it was time to invest in a new storage solution that would meet the demanding High Availability (HA) needs of their customers.

## VMWARE HOSTING WITH TRUENAS

IT Worldwide Services was already familiar with the ZFS-based storage operating system FreeNAS, after deploying it on other servers in their data center. While testing FreeNAS, they heard about TrueNAS, the Enterprise edition of FreeNAS developed and built by iXsystems. IT Worldwide Services

found that TrueNAS uses the same web interface as FreeNAS and adds mission-critical features such as Fibre Channel, gold-standard customer support, and High Availability. After speaking with iXsystems, they were confident that TrueNAS would provide the enterprise-grade solution they needed to take their data management to the next level.

IT Worldwide Services chose TrueNAS because of its modular high-end hardware components, high speed read and write caching, high scalability, ease of management, and low cost per gigabyte. TrueNAS is built on the FreeBSD operating system, widely known for its legendary stability.

“I had deployed FreeNAS in the DataCenter on some Dell R715 servers and really loved the simplicity of management. The web interface is nice and easy to use. We just didn’t have enough throughput and needed something with High Availability to fit our service offering of no downtime. TrueNAS filled those needs.”

- Todd Lamonia

The TrueNAS unified storage solution was pre-configured with dual controllers, two expansion shelves, and two hot spare disks. Network redundancy was easily integrated with aggregated data links connected to 2x10GbE Cisco switches.

IT Worldwide Services can now host a large amount of virtual machines with a variety of operating systems including CentOS, Ubuntu, and various editions of Windows Server.

## IMPROVED PERFORMANCE AND RELIABILITY WITH TRUENAS HIGH AVAILABILITY

Since deploying their TrueNAS system, IT Worldwide Services has seen improved performance on multiple fronts. Maintenance tasks take 75% less time overall and applications load approximately 50% faster. The system administrators at IT Worldwide Services experience significantly quicker VM build times, freeing them up for other important tasks.

In addition to substantial performance gains, TrueNAS has dramatically reduced downtime. Because of high availability in TrueNAS, IT Worldwide Services can seamlessly switch to the other controller without interrupting workflows or losing any data.

A failed controller can also be serviced without interruption to the system. All of this provides IT Worldwide Services with peace of mind that their data is safely stored with TrueNAS.

Beyond performance and reliability, TrueNAS is highly scalable storage. IT Worldwide Services will need to expand storage as their business grows. With TrueNAS, expansion shelves can be easily added to quickly and painlessly upgrade storage capacity.

Minimizing downtime and data loss is essential for IT Worldwide Services. With data growing at approximately 50% annually, meeting recovery objectives became difficult for native, legacy tools, so they used a third-party backup product, Veeam.

TrueNAS is completely Veeam Certified, ensuring that it will quickly backup their customers’ VMs and data with no change to existing procedures. iXsystems provides 24/7 support for IT Worldwide Services, eliminating the risk of VM downtime should any problems arise.





## CONCLUSION

IT Worldwide Systems needed a solution that supported multiple types of servers and VM instances out of the box.

They also needed to eliminate the risk of VM downtime in the case of a hardware failure. TrueNAS helped them reduce their data loss risk and provided them with the power, stability, and reliability required to meet the service level expectations of their customers. The ease-of-use of the TrueNAS administrative

interface allows them to configure and manage their VMs with minimal headache. Maintenance was greatly reduced and support was improved, resulting in a better user experience for their customers.

## ABOUT IT WORLDWIDE SERVICES

IT Worldwide Services is a subsidiary of Intellifed Corporation which has provided IT and telecommunications services to the US Government

since 2009. After rapid growth, they launched the brand of IT Worldwide Services in 2014, which offers advanced and innovative services and solutions in the private and public sector. They offer many services including network design, system administration, 24x7 technical support, .NET software development, virtual machine hosting and more. They are authorized resellers for many popular brands, offering technical expertise and support in addition to hardware and licensing.



## ABOUT IXSYSTEMS

Through decades of expertise in system design and development of Open Source software (FreeNAS, FreeBSD, OpenZFS, and TrueOS), iXsystems has become an innovation leader in a global marketplace that relies on Open Source solutions, high availability storage and servers, technology partnerships, and expert support.

Since its founding in 2002, thousands of companies, universities, and government organizations have come to rely on iXsystems for its enterprise servers, TrueNAS Unified Storage, and consultative approach to building IT infrastructure and private clouds with Open Source economics. Millions of tech-savvy users also download and deploy our Open Source software each year. More information can be found at [www.ixsystems.com](http://www.ixsystems.com).

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