



TriTech Software Systems chooses Nexenta to pool storage and lower their costs



System Configuration: NexentaStor

- 40TB NexentaStor Enterprise Edition with 12 months support
- 2X Intel Xeon 4 Core E5620 2.40 GHz
- 256 GB ECC Registered RAM 2 Rank ATP (8X 32768MB)
- 16X 1TB SAS Seagate 2.5" 10K
- 12X 2TB SAS Seagate 2.5" 10K

Business overview

During an emergency your first instinct is to dial 9-1-1. Phone calls are taken, recorded, dispatched, and the emergency is dealt with in the best possible way. But think about everything that takes place as a result of that initial call: whoever was dispatched has a report to file; if paramedics or police are involved there will be records for the jail or ambulance; who gets the invoice and for which patient?

Dealing with that complexity is the expertise of TriTech Software Systems. For over twenty years TriTech has been developing innovative technology solutions for public safety. More than twenty-five hundred customers across seven countries – encompassing nearly a quarter of a billion people – are relying on TriTech to make the drama of a 9-1-1 call a little less dramatic.

In the public safety arena acronyms are often tied to policy and procedures, and TriTech mitigates the pain of these procedures on behalf of their customers. There's RMS for Records Management System, FBR for Field Based Reporting, ESInets for Emergency Services Internet Protocol Networks, EMS, for Emergency Medical Services, ACD for Automatic Call Distribution, PSAPs for Public Safety Answering Points, not to mention compliance standards such as CJIS (Criminal

Justice Information System), EMR (Emergency Medical Records) and HIPAA (The Health Insurance Portability and Accountability Act of 1996). Given the complexity of the rules and regulations in the public safety industry, the data storage requirements are also significant. Images such as individual fingerprints and crime scene photos require constant uptime and the highest levels of security. In addition to images, TriTech also has to manage and integrate audio files such as 9-1-1 recorded calls, and data files such as background checks.

Challenges

Up until early 2011, TriTech's technology infrastructure was almost entirely virtualized. The company ran VMware Lab Manager on HP Blade servers to support four regional offices across the U.S. All employees were on Microsoft Windows VMs, including client support, development, and testing.

According to TriTech System Administrator Scott Key, "Our infrastructure served us very well up to a point, but we reached the stage where we were running out of space. We looked at expanding our existing storage array but found that to be too expensive. It may have been an unrealistic expectation, but we wanted to improve our storage system, expand out data capacity, and



provide more flexibility for our VMs – all without breaking the bank."

TriTech was eager to expand the existing NAS file system and replace several Drobos used for NFS and for VM Archiving, which didn't support a virtualized environment and was turning into an ongoing maintenance problem. A meeting with storage experts Aberdeen at VMworld led to an introduction to and recommendation of NexentaStor.

After consulting with Aberdeen, TriTech moved ahead with 40 terabytes of raw storage on the Nexenta platform. At the time, TriTech required 14 terabytes in the CIFS protocol and another 10 terabytes for VM storage, so 40 terabytes provided the company with plenty of room to grow. TriTech now has all network devices running off a single unit, having removed four physical storage devices from the infrastructure. In addition, there is now improved redundancy on network storage.

"I've worked with solutions from companies such as Nimble, EMC, and others, but the Nexenta implementation was far more intuitive," added Key. "We had all the software installed in less than thirty minutes and the storage system up and running in less than an hour. "

Benefits

According to Key: "The benefits of going with Nexenta came down to three important factors: price, simplicity, and manageability. "

Prior to installing Nexenta, storage was costing TriTech approximately \$5K per terabyte; this for a system that was showing real signs of strain at twenty terabytes. TriTech now pays approximately \$1.5K per terabyte and still has plenty of room to grow.

"The combined savings between lower storage costs, reduced maintenance and management needs added up to an amazing ROI," added Key. "The cost of entire storage infrastructure was earned back in about six months."

In addition to these savings, TriTech has had zero maintenance requirements in over eighteen months.

"The Nexenta system has added huge value to our organization," added Key. "Working with

About Nexenta

Nexenta is the global leader in Software-Defined Storage, delivering easy-to-use, secure and ultralow cost storage software solutions.

Nexenta solutions are hardware-, protocol-, and app-agnostic, providing innovation freedom and speed for organizations to realize "true" benefits of Software-Defined Infrastructure-centric Cloud Computing. Nexenta enables workloads from rich media-driven Social Living to Mobility; from the Internet of Things to Big Data; from OpenStack and CloudStack to Do-It-Yourself Cloud deployments. Founded around an "open source" platform and industry-disruptive vision.

Nexenta's software and their people has been a pleasurable experience, and we have gotten far more for our money's worth than I ever anticipated."

In the coming months, TriTech will be challenged to address storage and management needs around the growing Internet of Things phenomenon.

As Next-Generation 9-1-1 services and other public safety procedures begin to incorporate data from mobile devices, remote sensors and other end points, public safety organizations will be challenged to store, manage and secure such data. "TriTech is fortunate to be in a position to advise our customers on how to best incorporate audio files, images and other citizen-driven data," according to Key. "It appears inevitable that innovations around the growing Internet of Things phenomenon is going to lead to specific storage and management requirements. We look forward to growing with Nexenta as our business continues to grow."

Download the Nexenta Special Edition Software Defined Data Centers (SDDC) for Dummies eBook.

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