StorMagic

CASE STUDY

KEISER CORPORATION

LOCATION: UNITED STATES | **INDUSTRY:** MANUFACTURING

Three-node cluster provides redundant storage, high availability and disaster-proofing for sports equipment manufacturer Keiser Corporation

KEISER®

BUSINESS CHALLENGE

Keiser Corporation designs and manufactures innovative exercise equipment used by more than 80% of the top professional sports teams in the world. This includes every baseball team in the majors, the soccer champions of nine countries, several American football champions and countless Olympians. They're joined by everyone from NASA to Navy Seals, medical experts and rehabilitation specialists, and major gyms.

At their factory in Fresno, California, Gus Gustafson recognized the drawbacks of their existing server and storage solution. All of their servers and racks were housed in a single room at the factory and the set-up provided no resiliency in the event of a system or component failure and any disaster such as a fire, would result in them having to recover all of the servers. Added to that their existing fire protection was a sprinkler system and this would need to be replaced with a dry chemical fire solution which was prohibitively expensive. On Gus' recommendation, Keiser Corporation used VMware to virtualize their servers, and looked to StorMagic for a solution to virtualize their storage.

SOLUTION

Keiser deployed SvSAN on three Tyan servers, virtualized using VMware vSphere hypervisors, in a three-node cluster.
Each server sits at a distant corner of the factory,

> *"The primary benefit of StorMagic SvSAN is redundant storage and physical space between the servers. We have a very large factory and the servers are in opposite corners of the building - rather than housed in one room, which would be a disaster if there was a fire or an accident."*

Gus Gustafson
Information Systems Manager, Keiser Corporation

providing resiliency in the event of a component failure or disaster. The highly available shared storage provided by SvSAN is used by 22 virtual machines keeping the business and manufacturing plant running even when a component fails in one of the servers. Everything is backed up to a stand alone server using SEP Sesam.

Today's needs, future-proofed:

SvSAN delivers on today's performance needs, leveraging any CPU and storage type, with the confidence of scaling for tomorrow's demands.

WHY STORMAGIC

StorMagic SvSAN is fully certified for use with VMware vSphere and by combining SvSAN with vSphere, Keiser benefit from high availability. In the event of a failure, their 22 virtual machines will simply be restarted on one of the other available servers, allowing Gus and his IT team to replace failed server components as a non-emergency event.

In addition, SvSAN enables Gus and his team to carry out essential maintenance and upgrades without the need for system downtime which would otherwise disrupt the business and bring the manufacturing plant to a standstill.

By placing the three servers at distant corners of the factory, Keiser not only has redundancy in the event of a failure but there is less likelihood of all of the servers being affected by a disaster, such as a fire.

SvSAN also eliminates the need for an external RAID array or SAN, reducing the amount of equipment Keiser must accommodate at the factory.

Server Configuration (Per Server)

SvSAN License	SvSAN 6TB Gold
Hardware	Tyan
CPU	2 per server
Memory	128GB per server
Storage	2.5TB usable SvSAN storage per pair of nodes (RAID 6)
Networking	10GbE for primary connections for mirroring and iSCSI traffic Backup 1GbE network The backup server uses 1GbE connectivity to the storage
Hypervisor	VMware vSphere 5.5 Essentials Plus Kit
Applications	22 VMs running NetWare 5, Linux (SLES) and Windows Mercury Email Novell file sharing Winmagi ERP software
Data Protection	SEP sesam