

Expect a Perfect Fit

ACE
TECHNOLOGY WITH A VISION
www.acecomputers.com



Case Study

**Ace Powerworks
Virtual Host / SAN
Servers**



“With the help of Ace, we created a solution that went from the one basket one handle ESXi VM solution (one VM Host, one SAN), to a fully redundant Windows Hyper-V Cluster with fully redundant StarWind iSCSI SAN’s at a cost less than a single hardware based SAN device that would have fit our storage needs. They designed servers that met the needs for our current and future environment without the waste of one size fits all providers like Dell and HP.”

Chris Sprague
Network Specialist

Ace provides Poquoson City Public Schools with new Server / SAN Solution.

Customer Challenge

Located just north of Langley Air Force Base, in the Newport News / Hampton, Virginia area of the state, Chris Sprague, Network Specialist for Poquoson City Public Schools (PCPS), was facing some real challenges in the spring of 2010. Tasked with limited budget and the goal of achieving a fully redundant infrastructure of virtualized servers and storage as quickly as possible across his split campus environment of four schools, he wasn't happy with what he was hearing from the big multi-national firms. Working on his new Ace Vision 6AT Series workstation, he suddenly realized that the answer was staring up from his fingertips.



Solution Overview

Chris contacted Barry Weinstein (Aprisa Technology LLC, his Ace Reseller) and Marc Fertik (Director, Ace Computers) to discuss his need to migrate off an old SAN, and working together with detailed support from Daniel Arendt (Technical Manager at Ace Computers) a solution emerged. PCPS intended to transition the district in stages (West Campus and then the East Campus). **“StarWind software runs on a Win2k8R2 standard [Ace server], and the 4 storage [Ace servers] are included in the Enterprise HA Unlimited [license from StarWind]. It has been working very well, using MPIO for the iSCSI and bonded NICs for the SAN sync, we have been able to get better throughput than with our Legacy Lefthand SAN.”** notes Chris.



Why Ace?

Ace specializes in custom built servers that are perfect for clustering, storage, high availability, and virtualization, all built to the highest industry standards. As an ISO9001:2008 certified company, Ace delivers for the staff and students of Poquoson City Public Schools.

What are the specific performance and productivity goals that the customer needed?



- 16TB of Storage within each 2U Server on a budget
- 32GB Minimum Memory per Dual CPU Server
- High Performance Hyper-V Hosts
- True Redundancy and near High Availability
- High Performance SAS/SATA RAID with Battery Backup
- Additional Gigabit NIC support for iSCSI SAN Interface

Who else can take advantage of this Ace solution?



Virtualization is at the top of priority lists for IT departments everywhere, no matter whether they are

schools, SMB's or multinational corporations. It's easy to understand why. Server virtualization using solutions such as Microsoft Windows Hyper-V saves money, utilizes untapped resources and helps enhance availability and performance.

However, server virtualization is only half the solution. You also need storage virtualization to maximize server virtualization's pay off. That's where StarWind Server Software really delivers. It's an affordable and scalable storage virtualization platform for Microsoft Hyper-V that's easy to deploy and starts generating ROI as soon as you install it.

StarWind's IP SAN solution supports the widely used iSCSI protocol, and installs on Microsoft Windows Server 2003 and Server 2008 or on any Hyper-V Virtual Machine itself. There's no need to deploy a high-cost, complex, proprietary SAN. With StarWind, Microsoft Windows Hyper-V administrators get a scalable, cost-effective and easy-to-use Windows-based iSCSI SAN that fully protects your Microsoft Windows Hyper-V environment in the event of a catastrophic failure.



Contact ACE Today:
877-ace-comp (223-2667)



Detailed Tech Specs:

Major System Features

- Up to 128GB Per Server (PCHS used 32GB / 64GB per unit)
- Dual AMD Opteron 2000 Series (PCHS used Dual QuadCore 2380 each SAN, Dual HexCore 2435 each Virtual Host)
- 4x PCIe 2.0 slots, 2x PCI-X Per Server
- Redundant 720W 80 Plus Gold Power



Total Solution

- 4x Virtual Hosts (Hyper-V) (2 Clustered per Campus)
- 4x SAN Nodes (16TB Each) (2 Clustered per Campus)
- 5 Year Warranty – Custom Support

Storage Controller / Drives

- LSI 3ware 9690SA-8I each SAN Node High-Performance SAS RAID Low Profile, 512MB, BBWC
- Seagate Constellation ES 2TB HDD 16x Enterprise Class HDD each SAN SATA 3Gbps, 7200RPM

For more information please contact your Ace Computers' Account Executive