Alliance Engineering of Oregon saved on storage hardware by creating a virtual shared storage for HA ESXi deployment with StarWind Virtual SAN

“StarWind seemed the easiest and most straight-forward system to implement without tight storage limits for entry-level systems. We plan on continuing to host the ESXi servers datastores using StarWind Virtual SAN.”

Nicholas Sharp, IT Manager, Alliance Engineering of Oregon

**INTRO**

Alliance Engineering of Oregon has specialized in providing engineering services for post- or pole-frame buildings (also commonly called pole buildings or pole barns) in both new construction and renovation. Such structures are used for a variety of commercial, residential and agricultural applications: barns, storage sheds, warehouses, wineries, event centers, equestrian centers, or garages.

**PROBLEM**

Alliance Engineering had ESXi hosted virtual machines without High Availability, because ESXi requires shared storage to support it. Dedicated storage hardware (SAN, NAS, etc.) is expensive and takes time to install, implement and maintain.

**SOLUTION**

StarWind Virtual SAN provides shared storage between the ESXi hosts while still allowing local storage (fast) for their respective VMs. This was accomplished using the free Hyper-V OS from Microsoft installed on a VM on each ESXi host. (removing the Hyper-V role so as to have a bare server core install with no services) The StarWind management console was setup on a Windows Server 2012R2 express VM for managing the StarWind VSAN servers.

The resulting infrastructure provides the requirements for the shared storage component of VMware HA failover system and as such, solves the issue we were having without increasing the amount of hardware we have to support and maintain.