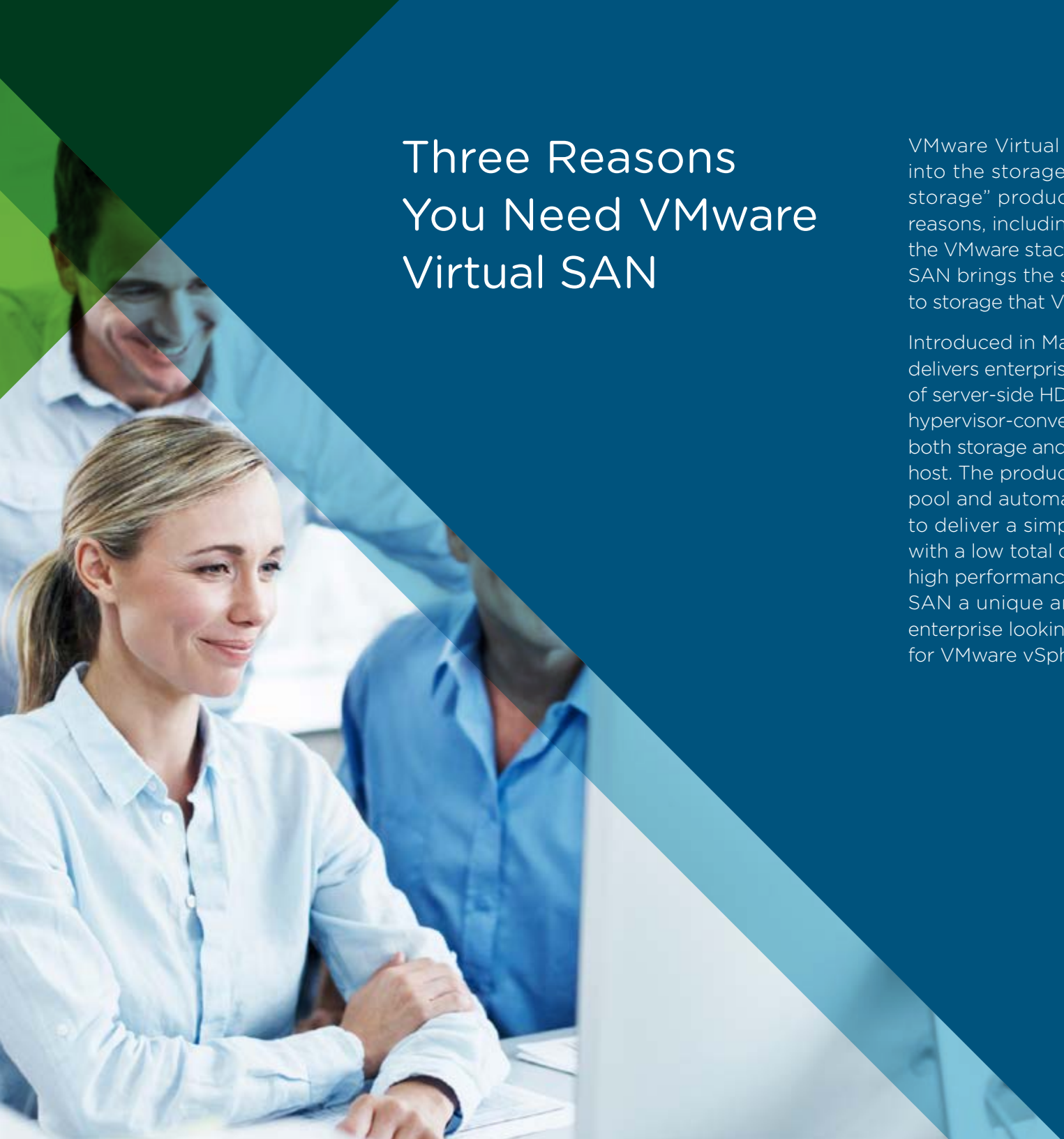
Three Reasons You Need VMware Virtual SAN



VMware Virtual SAN™ is a dramatic new entrant into the storage market. This "software-defined storage" product stands apart for a variety of reasons, including simplicity, deep integration with the VMware stack, and deployment flexibility. Virtual SAN brings the same level of efficiency and savings to storage that VMware vSphere brought to compute.

Introduced in March 2014, VMware Virtual SAN™ delivers enterprises shared storage through the use of server-side HDDs and SSDs. Virtual SAN employs a hypervisor-converged storage architecture that runs both storage and compute from the same virtualized host. The product uses virtualization to abstract, pool and automate server-side storage resources to deliver a simple, high performance storage tier with a low total cost of ownership. The flexibility, high performance and ease of use make Virtual SAN a unique and compelling solution for any enterprise looking for a storage solution optimized for VMware vSphere® environments.

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While there are a multitude of storage products in the market today, it is difficult to differentiate and choose which one is best for your company. All seem to be touting the same claims of being simple, fast and cheaper than the next best alternative. Here are three compelling reasons why you should consider Virtual SAN:

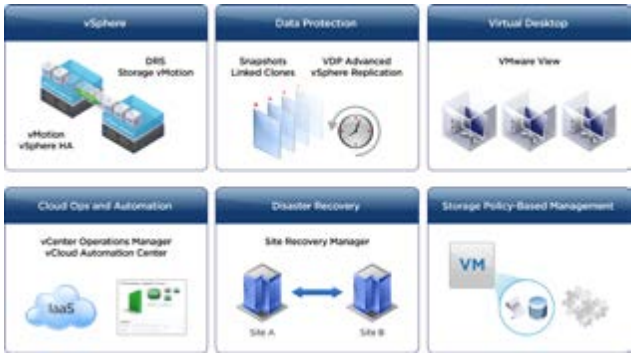
Reason #1: Simplicity, Efficiency and Automation: Virtual SAN leverages a policy-based management framework that allows storage to be provisioned and managed on a per-VM basis. This gives users the ability to set simple policies on a per-application basis around capacity, performance and availability.

The impact of this is that there are no more LUNs or volumes, no more RAID levels, and no more back and forth between the storage admin team and the virtualization admin team. Virtual SAN enables the VI Admin to make storage provisioning and management changes on the fly by using simple policies. Not only does this increase efficiency, but it means that you no longer have to make employees with specialized storage skill sets perform simple administrative storage tasks like carving or re-carving preconfigured storage pools. This frees up the storage team to focus more on storage architecture than on storage administration.

This new approach to storage is particularly compelling for virtualized workloads where new VMs are created, migrated or destroyed rapidly and I/O needs change constantly as more workloads get virtualized and consolidated. Having this type of control at the hypervisor level lets users make on-the-fly adjustments quickly and easily.

Virtual SAN not only delivers a product that enables you to be more granular with storage assignment and optimizations, but it also delivers a fundamentally new more efficient operational model that removes unnecessary complexity, and automates routine storage tasks within a datacenter.

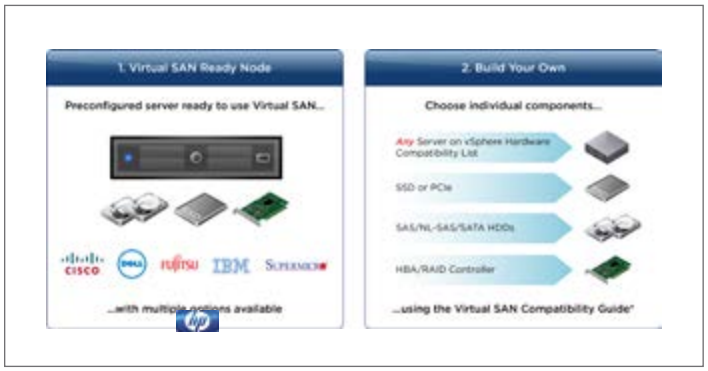
Reason #2: Integrated into VMware Stack: Virtual SAN makes provisioning and managing storage in virtual environments simple. The product seamlessly integrates with other products and tools while offering VMware standard support. Virtual SAN is embedded into the vSphere ESXi™ kernel and interoperates with the VMware stack seamlessly through the vSphere Web Client. For example, Virtual SAN works well with vSphere Replication™, vSphere Data Protection™, and vCenter™ Site Recovery Manager™ for Disaster Recovery (DR) use cases. Virtual SAN also integrates well with the View component of VMware Horizon™ for virtual desktop deployments.



Virtual SAN allows companies to implement storage for vSphere environments using the same management tools that are used for other day to day vSphere operations. Unlike other storage solutions that either introduce a new management tool or run as a separate storage appliance, Virtual SAN is built into the vSphere kernel. Virtual SAN was designed to bring the same level of efficiency and savings to storage that vSphere brought to compute.

> "We actually had clinics calling us up to say how much faster the apps were running once they were in a pure Virtual SAN environment... it seems like the more applications we migrate to Virtual SAN, the more departments are requesting to be on it."
>
> Chad Elliott, Network Systems Consultant
> Union Hospital

Reason #3: Deployment Flexibility: Virtual SAN gives users the ability to build and create their own storage system according to their needs. The architecture allows users to easily scale-up or scale-out their systems based on their needs. Customers don't need to do large upfront bulk storage buys, but rather can scale their system granularly as they need to — eliminating costly overprovisioning. Virtual SAN gives customers flexibility around deployment. VMware gives customers the option of deploying a Virtual SAN Ready Node configuration, a pre-validated server configuration jointly recommended by VMware and OEM vendors. The other deployment option for customers is to build their own system off the Virtual SAN Compatibility Guide. VMware supports different types of hardware and components to give customers the ability to use different components produced by different vendors.



VMware supports a compatibility list with the help of its storage ecosystem partners to give customers the ability to support hardware and discs from different vendors. It enables customers to mix and match hardware to create a storage system and to make on-the-fly modifications if necessary. Giving customers deployment options and enabling Virtual SAN to be able to run Virtual SAN on heterogeneous x86 hardware gives customers the ability to minimize hardware costs, custom build storage systems, and scale-up or scale-out to adjust to changing business requirements. With Virtual SAN, VMware delivers an enterprise-grade storage product that offers the flexibility to reduce the total cost of ownership while delivering a simple and effective product designed for enterprise virtual environments.

Summary

As the storage market evolves and enterprises seek to modernize their data centers, storage is a critical piece of that conversation. CIOs should take the time to re-evaluate their approach and consider employing different approaches, especially if those approaches deliver more performance at a fraction of the price. Virtual SAN is simple, fast and less expensive than comparable storage products in the market today and is optimized for vSphere environments. It gives companies the flexibility to scale with changing business needs while delivering it at a fraction of the cost. As you look for better technologies to handle data growth, storage complexity, and meeting SLAs, Virtual SAN is a can't miss product.

More Information

For an overview of Virtual SAN, go to:
http://www.vmware.com/products/virtual-san

For a technical overview of Virtual SAN, read the What's New in Virtual SAN 6 whitepaper

Visit the vSphere Storage blog for more technical insights and product information at
http://blogs.vmware.com/vsphere/storage

"Virtual SAN allows us to build geographically dispersed clusters in a metro area, **allowing a level of redundancy previously not available**. More importantly, Virtual SAN **provides an unmatched TCO** for private cloud infrastructures."

Dave Burns, VP of Tech Ops
Cincinnati Bell

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