

Seven Reasons to Consider Virtual SAN

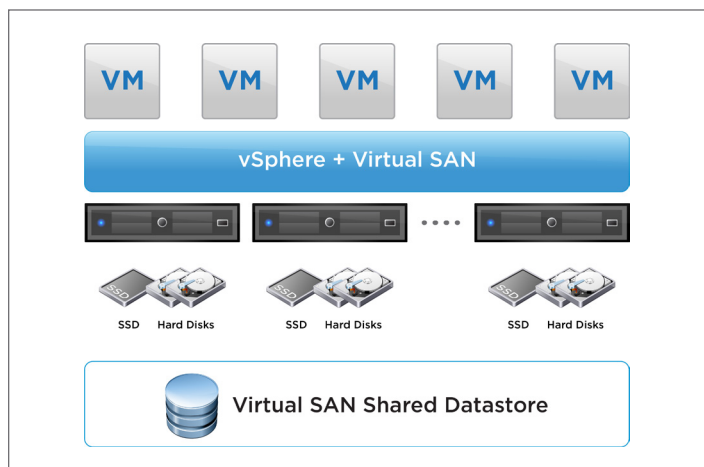
The storage market is inundated by new technologies and architectures. In March of 2014, it went in an entirely new direction. That is when VMware introduced Virtual SAN: the first VMware entry into the “software-defined storage” product category. Virtual SAN is optimized for VMware vSphere® environments and is doing for storage what VMware vSphere did for compute. Since its introduction, Virtual SAN has captured a lot of industry attention, winning top awards at the InterOp and TechEd conferences.

VMware Virtual SAN™ is a new approach to storage. Virtual SAN applies the principles of the VMware software-defined data center to storage to create a high-performance, cost-effective alternative for virtualized environments.

What is so special about it? Here are seven reasons why Virtual SAN is a truly unique storage solution that enterprises should incorporate into their storage strategy.

1. Software-Defined Storage Embedded in vSphere

Virtual SAN is a 100 percent software solution that is the x86 server instantiation of the VMware software-defined storage vision. Architecturally, Virtual SAN is embedded into the ESXi™ kernel to deliver unmatched performance by minimizing the data I/O path. The Virtual SAN hypervisor-converged architecture allows storage and compute to run in the same physical host with minimal overhead and easy management through the vSphere Web Client.

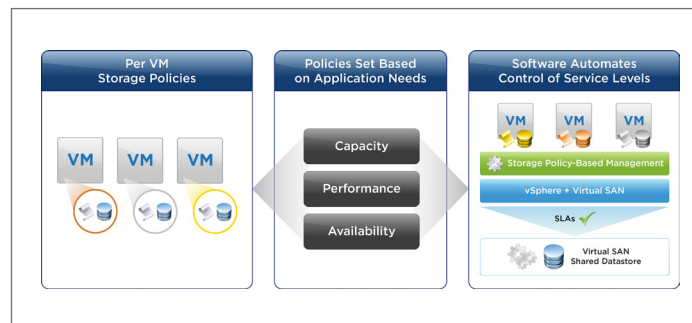


2. Runs on Any Standard x86 Server

Virtual SAN runs on any server currently supported by vSphere and a wide variety of other hardware components, which gives customers the flexibility to build a storage solution that meets their specific needs. The extensive list of supported components is documented in the constantly updated hardware compatibility guide¹ located on <http://www.vmware.com>.

3. Storage Policy-Based Management Framework

Virtual SAN leverages a policy-based management framework to enable storage provisioning and management on a per-VM basis.



The policy-based management framework enables the VM to define the right amount of capacity, performance and availability it needs. The Virtual SAN software takes care of the rest by matching requirements with underlying storage resources. Policies are then monitored and maintained through SLAs, with the Virtual SAN system self-monitoring to maintain service levels. This policy-based framework can simplify storage provisioning and management and automates routine storage tasks to increase efficiency.

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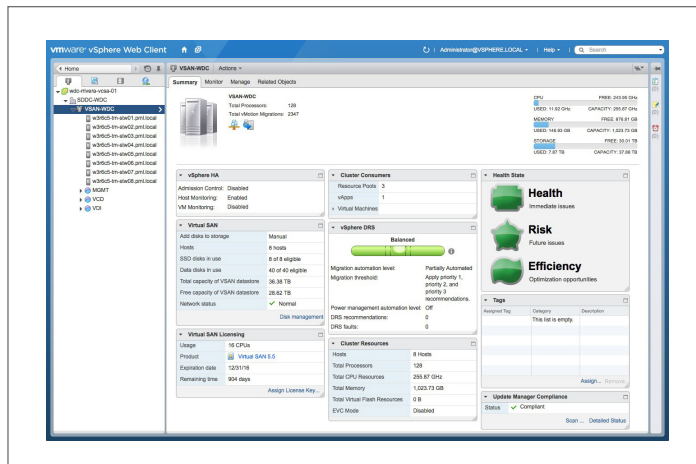
1. <http://www.vmware.com/resources/compatibility/search.php?deviceCategory=vsan>

“Virtual SAN allows us to build out scalable heterogeneous storage infrastructure like the Facebooks and Googles of the world. Virtual SAN allows us to add scale, add resources, while being able to service high performance workloads.”

Dave Burns, VP Tech Ops,
Cincinnati Bell

4. Managed Through vSphere Web Client

All Virtual SAN setup and management happen using the vSphere Web Client. Deploying Virtual SAN takes a few clicks and uses the same user interface that is used for vSphere and compute. Unlike other storage products that introduce new management tools or loosely integrate into vCenter™, Virtual SAN was designed into the vSphere product, making it easy to monitor and manage.

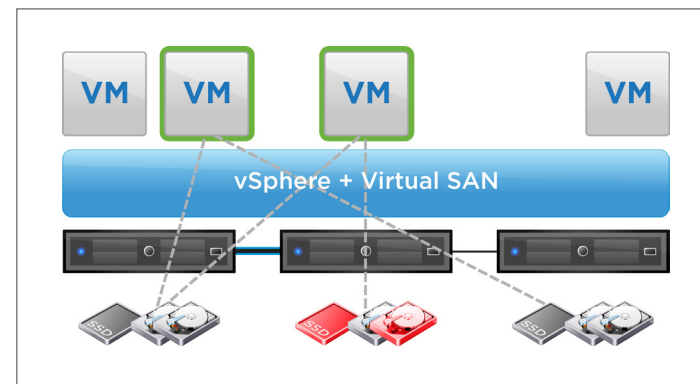


5. High Performance with Flash Acceleration

Virtual SAN can accelerate performance by pooling server-side HDD and SSD storage resources to create a read/write caching tier. This cache tier operates like a write buffer and read cache to speed write-intensive workloads and improve system I/O performance.

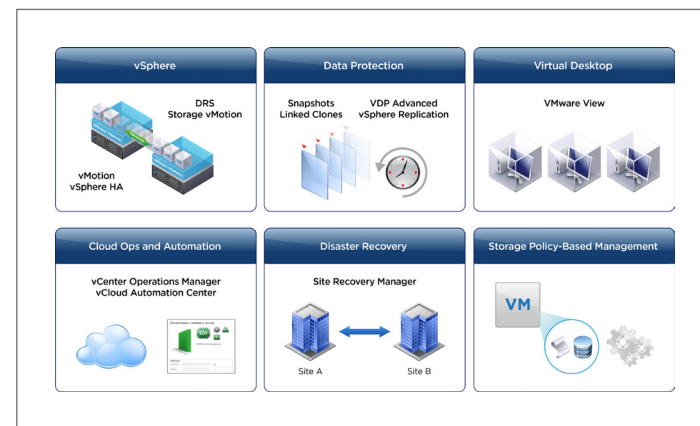
6. Highly Resilient Distributed RAID

Virtual SAN can deliver a highly resilient shared storage tier optimized for virtual environments. Through policies, Virtual SAN enables users to replicate data to tolerate simultaneous failures leveraging a distributed RAID architecture. By leveraging vSphere HA, Virtual SAN can identify and remediate failures without interrupting service levels.



7. Deeply Integrated with VMware Stack

Virtual SAN is interoperable and works with the VMware stack to deliver convenience and ease of use. Virtual SAN is designed to work seamlessly with other VMware products to make it easy to integrate into the data center and use across multiple use cases.



Summary

Virtual SAN is a unique storage solution optimized for vSphere environments. It puts the application in charge and handles storage provisioning and management from the hypervisor level. CIOs reconsidering their storage architectures and evaluating new technologies to better manage, store, and use data should put Virtual SAN at the top of the list. Virtual SAN has been called “a standard bearer for a new class of storage solutions that promise to change the way enterprises buy storage².”

To learn more about using Virtual SAN to create a simple, powerful, and cost-effective storage tier for virtual environments, visit www.vmware.com/products/virtual-san.

2. http://www.networkcomputing.com/networking/best-of-interop-2014-product-award-winners/d/d-id/1234727?page_number=9

More Information

What's New in Virtual SAN 6.1 provides a technical introduction to Virtual SAN

Virtual SAN 6.0 Design & Sizing Guide provides configuration tips and insights

For VDI/View environments, read the **Virtual SAN Design & Sizing Guide for Horizon View**



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