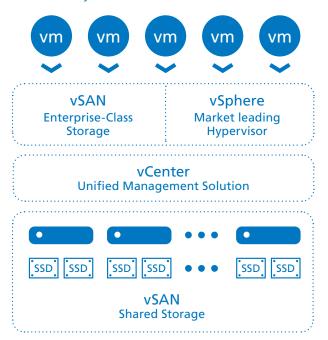**Datacenter**

VMware – vSAN 7.0

Software-defined Storage for a future-oriented architecture

What is VMware vSAN 7.0?

vSAN is a software-defined storage solution from VMware that can provide a strategic and economic advantage. It forms the basis for a hyperconverged infrastructure (HCI), which is a software-based architecture that runs on industry-standard x86 servers and components through the close collaboration of computing, networking, and shared storage. This allows for a predictable, risk-free building of a data center with the ability to be prepared for future requirements at any time.

For all critically virtualized workloads, vSAN offers flash-optimized, secure shared storage that is centrally managed (just as the entire solution) through the proven vSphere user interface.

Furthermore, vSAN 7.0 offers a completely new, explicitly hybrid cloud-oriented HCI experience with higher operational efficiency. The user interface impresses with proactive support information and thus provides the basis for consistent performance and availability of applications.

Hyper-Converged Infrastructure – Powered by VMware vSAN

vm vm vm vm vm

vSAN
Enterprise-Class Storage

vSphere
Market leading Hypervisor

vCenter
Unified Management Solution

SSD SSD   SSD SSD   SSD SSD

vSAN
Shared Storage

Risk-free development:

- Expandable at any time without interruption, for compute (CPU), memory (RAM), and storage
- No need for operating special storage interfaces due to vSAN's integration into SDDC stacks
- Existing management tools and knowledge can continue to be used
- Collaboration with the VMware partner network for complementary software solutions
- Secure data at all times thanks to the HCI encryption solution
- Multi-cloud capability - Develop a common control plane based on HCI from the central data center:
  - · Uniform operation across the entire environment
  - · Intrinsic security for data at rest and in transit
  - · Hundreds of public cloud providers

Reduced total cost of ownership:

- Integrated software stack provides simplified management
- Cost-effective, high-capacity servers
- Adaptable stretched clusters provide affordable site protection

Future-oriented architecture:

- As a provider of flash-optimized storage, VMware is able to ensure secure application performance for all virtualized workloads of both critical and next-generation applications in the future.

Main features and functions

Close Integration with vSphere

vSAN is integrated with vSphere, optimizing the I/O data path for maximum performance with minimal impact on CPU and memory.

VM-oriented, policy-based management

vSAN is part of the VMware Cloud Foundation stack, which supports unified, VM-oriented workflows through policy-based management.

Direct Connect with Two Nodes

Eliminating switches between servers in a 2-node deployment saves up to 20% per site. Servers can be directly connected with crossover cables, making it easy and reliable.

Integrated Fault Tolerance and Enhanced Availability

vSAN uses distributed RAID and cache mirroring to ensure that no data is lost in case of a disk, host, network, or rack failure.

System Requirements

Hardware for Host:

- 1GB NIC; 10GB or more NIC recommended
- SATA/SAS HBA or RAID controller
- At least one flash caching device and one persistent storage device (flash or disk) for each capacity-providing node

Cluster Size:

- Minimum of 2 hosts, maximum of 64 hosts

Software

- VMware vSphere 7.0
- VMware vSphere with Operations Management™ 6.1 (all editions)
- VMware vCloud Suite® 6.0 (all editions with update to 6.5)
- VMware vCenter Server 7.0

Would you like to find out more about this solution and how to maximize your business success? Contact us now at **sales@medialine.com** and we'll find out together.