



VMware vSAN Small Scale Deployment (16 Host)

At a glance

The VMware vSAN Small Scale Deployment service remotely deploys vSAN and the underlying supporting virtual infrastructure.

Key benefits

- Quickly deploy software-defined storage infrastructure
- Take advantage of a validated architecture from VMware that uses and proven best practices.
- Mitigate risk by leveraging experienced consultants

SKU

VA-PS-VSAN-SSDPY-16

Service overview

The VMware vSAN™ Small Scale Deployment (16 Host) service provides a foundational deployment of vSAN and the underlying supporting virtual infrastructure remotely using the capabilities provided by VMware vSphere®.

The service includes the following:

- Deployment of the VMware ESXi™ hosts to support the virtualization solution according to a VMware standard architecture that is implemented and validated in the Customer environment.
- Deployment of the VMware vCenter Server® infrastructure for the virtualization solution according to a VMware standard architecture that is implemented and validated in the Customer environment.
- Deployment of the core network configuration for the virtualization solution according to a VMware standard architecture that is implemented and validated in the Customer environment.
- Deployment of vSAN for shared storage according to a VMware standard architecture that is implemented and verified in the Customer environment.
- Deployment and validation of technology components.
- Knowledge transfer of the design, deployment, and operations procedures.

As a part of the engagement, one of the following two architectures must be chosen:

- Option 1 — a standard vSAN cluster
- Option 2 — a Remote Office Branch Office (ROBO) configuration

This service requires the following products:

- VMware vSphere
- VMware vSAN

Project scope

Only one of two architectures options, either a standard cluster or a ROBO configuration, can be chosen for this service. The service includes the following scope as appropriate to the individual architectures:

ESXi host deployment		
Specification	Parameters	Description
Standard option		
ESXi hosts deployed	Up to sixteen (16)	ESXi hosts deployed and configured.
ROBO option		
ESXi hosts deployed	Up to eight (8)	ESXi hosts deployed and configured in remote sites.

vCenter Server deployment		
Specification	Parameters	Description
Standard option		
Physical sites deployed	Up to one (1)	Physical data center locations deployed and configured.
VMware vCenter Server Appliance™ instances deployed	Up to one (1)	vCenter Server Appliance instances deployed and configured.
VMware vSphere High Availability clusters configured	Up to sixteen (16)	vSphere HA enabled clusters configured.
VMware vSphere vMotion® enabled hosts configured	Up to one (1)	vSphere vMotion enabled hosts configured.
VMware vSphere Distributed Resource Scheduler™ clusters configured	Up to one (1)	DRS enabled clusters configured.
ROBO option		
Physical central sites deployed	Up to one (1)	Central data center location deployed and configured.
Physical remote sites deployed	Up to four (4)	Remote site data center locations deployed and configured.

vCenter Server Appliance instances deployed	Up to one (1)	vCenter Server Appliance instances deployed and configured, if creating a secondary ROBO management cluster.
vSphere HA clusters configured	Up to one (1)	vSphere HA enabled clusters configured.
vMotion enabled hosts configured	Up to eight (8)	vMotion enabled hosts configured.
vSphere DRS clusters configured	Up to one (1)	DRS enabled clusters configured.

vSphere network infrastructure deployment

Specification	Parameters	Description
Standard and ROBO options		
vSphere distributed switches	Up to one (1)	vSphere distributed switches created and configured.
Network port groups	Up to four (4)	Network port groups created and configured.
VMkernel network adapters	Up to three (3)	VMkernel network adapters and IP Addresses needed per host.

vSAN deployment

Specification	Parameters	Description
Standard option		
vSAN clusters	Up to one (1)	vSAN enabled clusters deployed.
ROBO option		
vSAN clusters	Up to four (4)	vSAN enabled clusters deployed in a 2-node ROBO configuration.
vSAN witness appliances	Up to four (4)	vSAN witness appliances deployed in a remote site.

Out of scope

General

- Installing and configuring custom or third-party applications and operating systems on deployed virtual machines.
- Operating system administration including the operating system itself or any operating system features or components.
- Managing change to virtual machines, operating systems, custom or third-party applications, databases, and administration of general network changes within Customer control.
- Remediation work associated with any problems resulting from the content, completeness, accuracy, and consistency of any data, materials, or information supplied by Customer.
- Installing or configuring VMware products not included in the scope of this document.
- Installing or configuring third-party software or other technical services that are not applicable to VMware components.
- Installing or configuring Customer-signed certificates.
- Configuring VMware products used for the service other than those implemented for the mutually agreed-to use cases.
- Customer solution training other than the defined knowledge transfer session.
- Documentation and deliverables not in the English language.

ESXi host deployment

- Planning or designing a custom virtualization solution.
- Documenting or performing any migration activities, such as physical-to-virtual or virtual-to-virtual migration.
- Business continuity / disaster recovery design and deployment beyond the core capabilities of vSphere.
- Analyzing capacity for physical servers.
- Deploying vSphere from the Unified Extensible Firmware Interface (UEFI).

vCenter Server deployment

- Planning or designing a custom virtualization solution.
- Documenting or performing any migration activities, such as physical-to-virtual or virtual-to-virtual migration.
- Business continuity / disaster recovery design and deployment beyond the core capabilities of vSphere.
- Analyzing capacity for physical servers.
- VMware NSX® design.
- Planning or designing a custom high availability design.

- Configuring external systems, such as networking and storage, to support vSphere HA and VMware vSphere Fault Tolerance features.
- Planning or designing a custom dynamic resourcing design.
- Configuring external systems, such as networking and storage, to support the vSphere vMotion, DRS, or VMware vSphere Distributed Power Management (DPM) features.
- ROBO option only: Deploying the central management site. This service assumes that a centralized management site with appropriate shared storage allocation is completed prior to the start of the service.

vSphere network infrastructure deployment

- Planning or designing a custom network infrastructure solution.
- Documenting or performing any migration activities between networks.
- Business continuity / disaster recovery design and deployment beyond the core capabilities of vSphere.
- VMware NSX design.
- ROBO option only: Configuring inter-site network connectivity. It is assumed that the network between central and remote sites has been configured prior to the start of this service.

vSAN deployment

- Planning or designing a custom vSAN solution.
- Standard option only: Configuring vSAN Stretch Clustering or 2-node configurations.
- Configuring custom storage policies.
- Configuring vSAN Native Encryption.

Estimated schedule

This is a fixed-fee service, requiring an estimated sixty (60) hours of effort over a duration of sixty (60) days after project kick-off. VMware Professional Services are performed during normal business hours and workdays (weekdays and non-holidays).

Project activities

Phase 1: Initiate

The VMware Project Manager hosts one (1) project initiation call with key Customer and VMware stakeholders.

Topics to be discussed include:

- Project business drivers, scope, and objectives.
- Project deadlines, timelines, scheduling, and logistics.

- Identification of key Customer team members who VMware will work with to accomplish the tasks defined in this data sheet.
- Customer technology prerequisites necessary for a successful project, including review of the Service Checklist for the VMware solution.

Deliverables

- One (1) project initiation meeting
- Prerequisites checklist

Phase 2: Plan

VMware leads one (1) project kickoff meeting with Customer project sponsors and stakeholders to review expectations about the purpose of the engagement, the delivery approach, and estimated timelines.

The objectives of the meeting are:

- Introduce the VMware team, roles, and responsibilities.
- Describe the project goals, phases, and key dates.
- Review technical prerequisites completion readiness.
- Explain the expected project results and deliverables.

Deliverables

- One (1) project kickoff meeting
- VMware standard architecture
- vSAN deployment kickoff presentation

Phase 3: Execute

VMware deploys the VMware standard architecture and validates the technology components.

VMware does the following:

- Installs and configures the VMware technologies according to the VMware standard architecture.
- Finalizes the Configuration Workbook with physical design elements.
- Executes service and service component functional test validation.
- Conducts technical knowledge transfer sessions for administrators and operators

Deliverables

- Virtualization configuration workbook
- Virtualization installation and configuration procedures document
- Knowledge transfer presentation

Phase 4: Close

The VMware Project Manager conducts one (1) closure meeting with the Customer covering project status, next steps, and how to engage further with VMware.

Deliverables

- One (1) closure meeting
- Transition to Customer Support

Appendix

Service checklist

The Customer is responsible for executing all items discussed in the service checklist prior to arrival of the VMware Consultants on site.

The participation of the following Customer stakeholders is required for the Service to be performed:

- Storage team leads
- Enterprise architect
- Infrastructure architect
- Network architecture team leads

The following prerequisites are required for this service engagement:

- Physical hardware, including servers, storage, and networking, must be procured, installed, and confirmed to be operational.
- ROBO option only: Network connectivity between the central and remote sites is configured, tested, and functional.
- ROBO option only: Central management vCenter Server is provisioned and available with enough storage resources to host the vSAN Witness appliance. This service does not include installing and configuring the central site vCenter or ESXi hosts.

The following are required for component installation (ESXi host and vCenter Server):

- Static IP address assignment.
- Configured DNS entries.
- Host names tested for forward, reverse, short name, and long name resolution.
- Access to an NTP server that can be used for configuration

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- Physical network provisioned for the appropriate VLANs for ESXi configuration completed. Standard configuration of ESXi hosts includes distributed virtual switches and VMkernel ports configured and tested to support management traffic on a dedicated VLAN, vMotion on a dedicated VLAN, and vSAN traffic on a dedicated VLAN.
- The hardware must be supported as listed on the VMware vSAN Compatibility List.
- Supported remote access protocols must be configured, such as DRAC, ILO, and so on.

The following are the technical prerequisites required to deliver this service:

- Standard option only: Number of hosts sixteen (16).
- ROBO option only: Number of hosts eight (8).
- vCenter Version 7.x or 8.x.
- ESXi Version 7.x or 8.x.
- DNS must be configured and tested for forward, reverse, short and long name resolution.
- Active Directory required.
- Number of 10Gb Ethernet Physical NIC interfaces: Required 1.
- Number of IP subnets: Required 3.
- Number of VLANs: Required 3.
- ROBO Option Only: Network latency for vSAN Witness Appliance between Central and Remote sites: Required <500ms.
- ROBO Option Only: Network latency for vSAN Witness Appliance between Central and Remote sites: Required <5ms.

This service must be delivered and accepted within the first 12 months of purchase, or the service will be forfeited. Pricing for this service excludes travel and other expenses. For detailed pricing, contact your local VMware representative.