



# **Requirements for deploying SCV**

## **SnapCenter Plug-in for VMware vSphere**

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# Requirements for deploying SCV

## Deployment planning and requirements

You should be aware of the deployment requirements before you deploy the virtual appliance. The deployment requirements are listed in the following four tables.

### Host requirements

Before you begin deployment of SnapCenter Plug-in for VMware vSphere, you should be familiar with the host requirements.

- You must deploy the SnapCenter VMware plug-in as a Linux VM.

The SnapCenter VMware plug-in is deployed as a Linux VM regardless of whether you use the plug-in to protect data on Windows systems or Linux systems.

- You should deploy the SnapCenter VMware plug-in on the vCenter Server.

Backup schedules are executed in the time zone in which the SnapCenter VMware plug-in is deployed. vCenter reports data in the time zone in which the vCenter is located. Therefore, if the SnapCenter VMware plug-in and vCenter are in different time zones, data in the SnapCenter VMware plug-in Dashboard might not be the same as the data in the reports.

- You must not deploy the SnapCenter VMware plug-in in a folder that has a name with special characters.

The folder name should not contain the following special characters: `!@#%^&()+_+{}';:.,*?"<>|`

- You must deploy and register a separate, unique instance of the SnapCenter VMware plug-in for each vCenter Server.

- Each vCenter Server, whether or not it is in Linked Mode, must be paired with a separate instance of the SnapCenter VMware plug-in.
- Each instance of the SnapCenter VMware plug-in must be deployed as a separate Linux VM.

For example, if you want to perform backups from six different instances of the vCenter Server, then you must deploy the SnapCenter VMware plug-in on six hosts and each vCenter Server must be paired with a unique instance of the SnapCenter VMware plug-in.

- The SnapCenter VMware plug-in provides limited support of shared PCI or PCIe devices (for example, NVIDIA Grid GPU) due to a limitation of the virtual machines in supporting Storage vMotion. For more information, see the vendor's document Deployment Guide for VMware.

- What is supported:

Creating resource groups

Creating backups without VM consistency

Restoring a complete VM when all the VMDKs are on an NFS datastore and the plug-in does not need to use Storage vMotion

Attaching and detaching VMDKs

Mounting and unmounting datastores

Guest file restores

◦ What is not supported:

Creating backups with VM consistency

Restoring a complete VM when one or more VMDKs are on a VMFS datastore.

- For a detailed list of the SnapCenter VMware plug-in limitations, see the [SnapCenter Plug-in for VMware vSphere Release Notes](#).

## License requirements

You must provide licenses for...	License requirement
ONTAP	One of these: SnapMirror or SnapVault (for secondary data protection regardless of the type of relationship)
Additional products	vSphere Standard, Enterprise, or Enterprise Plus A vSphere license is required to perform restore operations, which use Storage vMotion. vSphere Essentials or Essentials Plus licenses do not include Storage vMotion.
Primary destinations	To perform application-based protection over VMware SnapCenter Standard To perform protection of VMware VMs and datastores only SnapRestore: used for restore operations FlexClone: used for mount and attach operations
Secondary destinations	To perform application-based protection over VMware SnapCenter Standard: used for failover operations To perform protection of VMware VMs and datastores only FlexClone: used for mount and attach operations

## Software support

Item	Supported versions
vCenter vSphere	HTML5 client: 6.5U2/U3, 6.7x, 7.0, 7.0U1, 7.0U2 Flex client is not supported.
ESXi	6.5U2
IP addresses	IPv4, IPv6
Java	8
.Net Core	2.1
SnapCenter Plug-in for VMware vSphere MySQL database	MySQL 8.0.23

Item	Supported versions
VMware TLS	1.2
TLS on the SnapCenter Server	TLSv1.1 and later The SnapCenter Server uses this to communicate with the SnapCenter VMware plug-in for application over VMDK data protection operations.
VMware application vStorage API for Array Integration (VAAI)	SnapCenter Plug-in for VMware vSphere uses this to improve performance for restore operations. It also improves performance in NFS environments.

For the latest information about supported versions, see the [NetApp Interoperability Matrix Tool](#).

## Space and sizing requirements

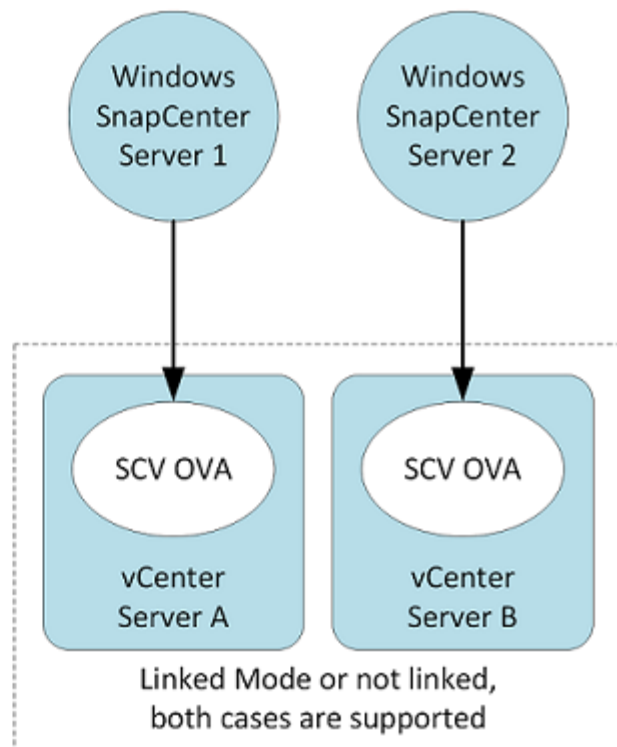
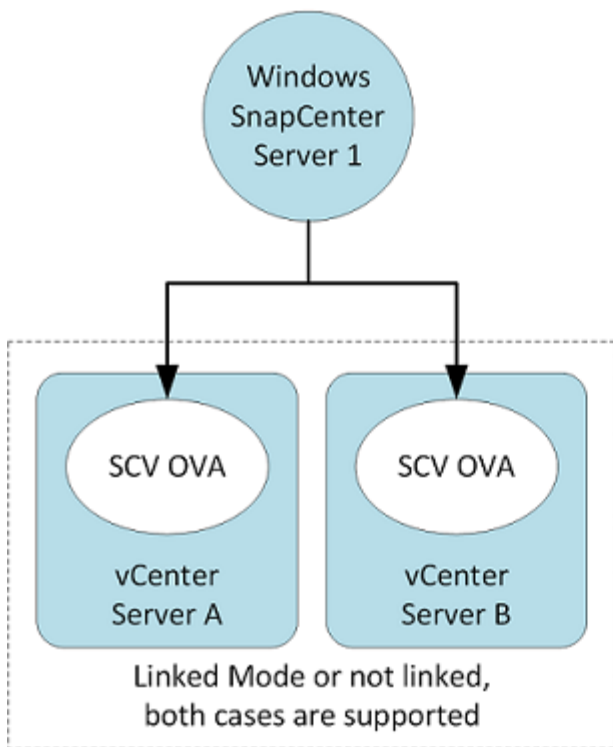
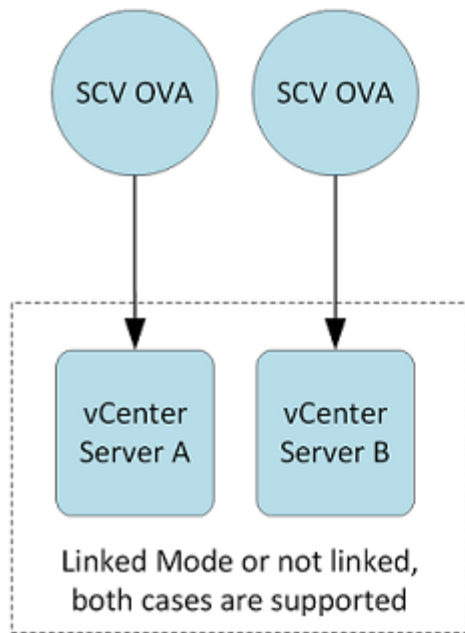
Item	Requirements
Operating system	Linux
Minimum CPU count	4 cores
Minimum RAM	Minimum: 12 GB Recommended: 16 GB
Minimum hard drive space for the SnapCenter Plug-in for VMware vSphere, logs, and MySQL database	100 GB

## Connection and port requirements

Type of port	Preconfigured port
SnapCenter Plug-in for VMware vSphere port	8144 (HTTPS), bidirectional The port is used for communications from the VMware vSphere web client and from the SnapCenter Server. 8080 bidirectional This port is used to manage the virtual appliance. Note: You cannot modify the port configuration.
VMware vSphere vCenter Server port	443 (HTTPS), bidirectional The port is used for communication between the SnapCenter Plug-in for VMware vSphere and vCenter.

## Configurations supported

Each plug-in instance supports only one vCenter Server. vCenters in linked mode are supported. Multiple plug-in instances can support the same SnapCenter Server as shown in the following figure.



## RBAC privileges required

The vCenter administrator account must have the required vCenter privileges, as listed in the following table.

To do this operation...	You must have these vCenter privileges...
Deploy and register the SnapCenter Plug-in for VMware vSphere in vCenter	Extension: Register extension

To do this operation...	You must have these vCenter privileges...
Upgrade or remove the SnapCenter Plug-in for VMware vSphere	Extension <ul style="list-style-type: none"> <li>• Update extension</li> <li>• Unregister extension</li> </ul>
Allow the vCenter Credential user account registered in SnapCenter to validate user access to the SnapCenter Plug-in for VMware vSphere	sessions.validate.session
Allow users to access the SnapCenter Plug-in for VMware vSphere	SCV Administrator SCV Backup SCV Guest File Restore SCV Restore SCV View The privilege must be assigned at the vCenter root.

## AutoSupport

The SnapCenter Plug-in for VMware vSphere provides a minimum of information for tracking its usage, including the plug-in URL. AutoSupport includes a table of installed plug-ins that is displayed by the AutoSupport viewer.

## Minimum ONTAP privileges required

The minimum ONTAP privileges that are required vary according to the SnapCenter plug-ins you are using for data protection.

All SnapCenter plug-ins require the following minimum privileges.

All-access commands: Minimum privileges required for ONTAP 8.3 and later
event generate-autosupport-log
job history show job stop

**All-access commands: Minimum privileges required for ONTAP 8.3 and later**

lun  
lun create  
lun delete  
lun igroup add  
lun igroup create  
lun igroup delete  
lun igroup rename  
lun igroup show  
lun mapping add-reporting-nodes  
lun mapping create  
lun mapping delete  
lun mapping remove-reporting-nodes  
lun mapping show  
lun modify  
lun move-in-volume  
lun offline  
lun online  
lun persistent-reservation clear  
lun resize  
lun serial  
lun show

snapmirror list-destinations  
snapmirror policy add-rule  
snapmirror policy modify-rule  
snapmirror policy remove-rule  
snapmirror policy show  
snapmirror restore  
snapmirror show  
snapmirror show-history  
snapmirror update  
snapmirror update-ls-set

Version



**All-access commands: Minimum privileges required for ONTAP 8.3 and later**

volume clone create  
volume clone show  
volume clone split start  
volume clone split stop  
volume create  
volume destroy  
volume file clone create  
volume file show-disk-usage  
volume offline  
volume online  
volume modify  
volume qtree create  
volume qtree delete  
volume qtree modify  
volume qtree show  
volume restrict  
volume show  
volume snapshot create  
volume snapshot delete  
volume snapshot modify  
volume snapshot rename  
volume snapshot restore  
volume snapshot restore-file  
volume snapshot show  
volume unmount

vserver cifs  
vserver cifs share create  
vserver cifs share delete  
vserver cifs shadowcopy show  
vserver cifs share show  
vserver cifs show  
vserver export-policy  
vserver export-policy create  
vserver export-policy delete  
vserver export-policy rule create  
vserver export-policy rule show  
vserver export-policy show  
vserver iscsi  
vserver iscsi connection show  
vserver show  
network interface  
network interface failover-groups  
network interface show

**Read-only Commands: Minimum Privileges Required for ONTAP 8.3 and Later**

vserver

**Additional ONTAP information**

- If you are running ONTAP 8.2.x:

You must login as `vsadmin` on the storage VM to have the appropriate privileges for SnapCenter Plug-in for VMware vSphere operations.

- If you are running ONTAP 8.3 and later:

You must login as `vsadmin` or with a role that has the minimum privileges listed in the tables above.

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