Protect data

SnapCenter Plug-in for VMware vSphere

NetApp
September 29, 2025

This PDF was generated from https://docs.netapp.com/us-en/sc-plugin-vmware-vsphere-48/scpivs44_protect_data_overview.html on September 29, 2025. Always check docs.netapp.com for the latest.

Table of Contents

Protect data . . . 1
- Data protection workflow . . . 1
- View VM and datastore backups . . . 2
- Create backup policies for VMs and datastores . . . 2
- Create resource groups . . . 6
  - Manage compatibility check failures . . . 11
- Prescripts and postscripts . . . 12
  - Supported script types . . . 12
  - Script path location . . . 12
  - Where to specify scripts . . . 12
  - When scripts are executed . . . 12
  - Environment variables passed to scripts . . . 13
  - Script timeouts . . . 13
  - Example PERL script #1 . . . 14
  - Example PERL script #2 . . . 14
  - Example shell script . . . 14
- Add a single VM or datastore to a resource group . . . 15
- Add multiple VMs and datastores to a resource group . . . 15
- Back up resource groups on demand . . . 16
- Back up the SnapCenter Plug-in for VMware vSphere MySQL database . . . 17
- Manage resource groups . . . 18
  - Suspend and resume operations on resource groups . . . 18
  - Modify resource groups . . . 18
  - Delete resource groups . . . 19
- Manage policies . . . 19
  - Detach policies . . . 19
  - Modify policies . . . 20
  - Delete policies . . . 20
- Manage backups . . . 20
  - Rename backups . . . 21
  - Delete backups . . . 21

Protect data

Data protection workflow

Use the SnapCenter vSphere client to perform data protection operations for VMs, VMDKs, and datastores. All backup operations are performed on resource groups, which can contain any combination of one or more VMs and datastores. You can back up on demand or according to a defined protection schedule.

When you back up a datastore, you are backing up all the VMs in that datastore.

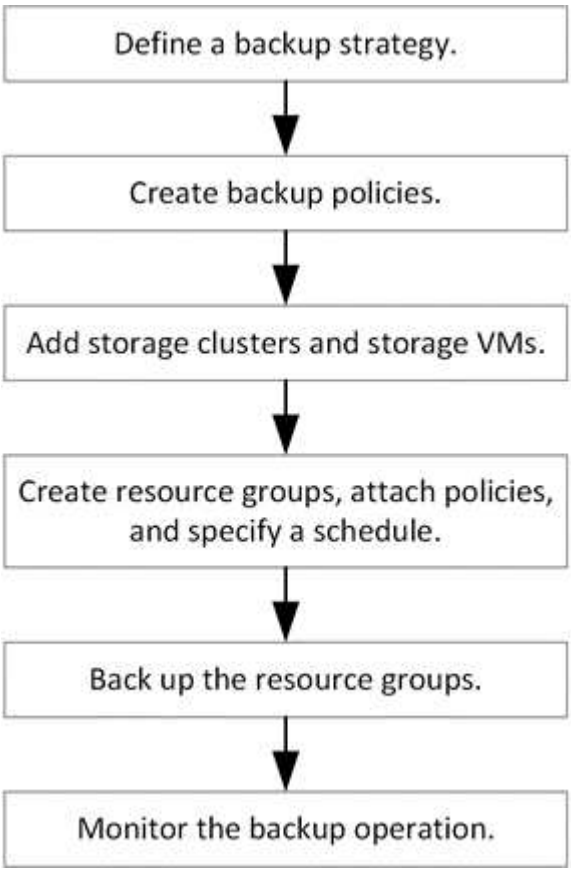
Backup and restore operations cannot be performed simultaneously on the same resource group.

You should review the information on what the SnapCenter VMware plug-in does and does not support. Deployment planning and requirements

In MetroCluster configurations:

- The SnapCenter VMware plug-in might not be able to detect a protection relationship after a failover. See KB article: Unable to detect SnapMirror or SnapVault relationship after MetroCluster failover.
- If backups fail with the error `Unable to discover resources on SCV: <xxx>…` for NFS and VMFS VMs after switchover/switch back, restart the SnapCenter VMware services from the maintenance console.

The following workflow figure shows the sequence in which you must perform backup operations:



View VM and datastore backups

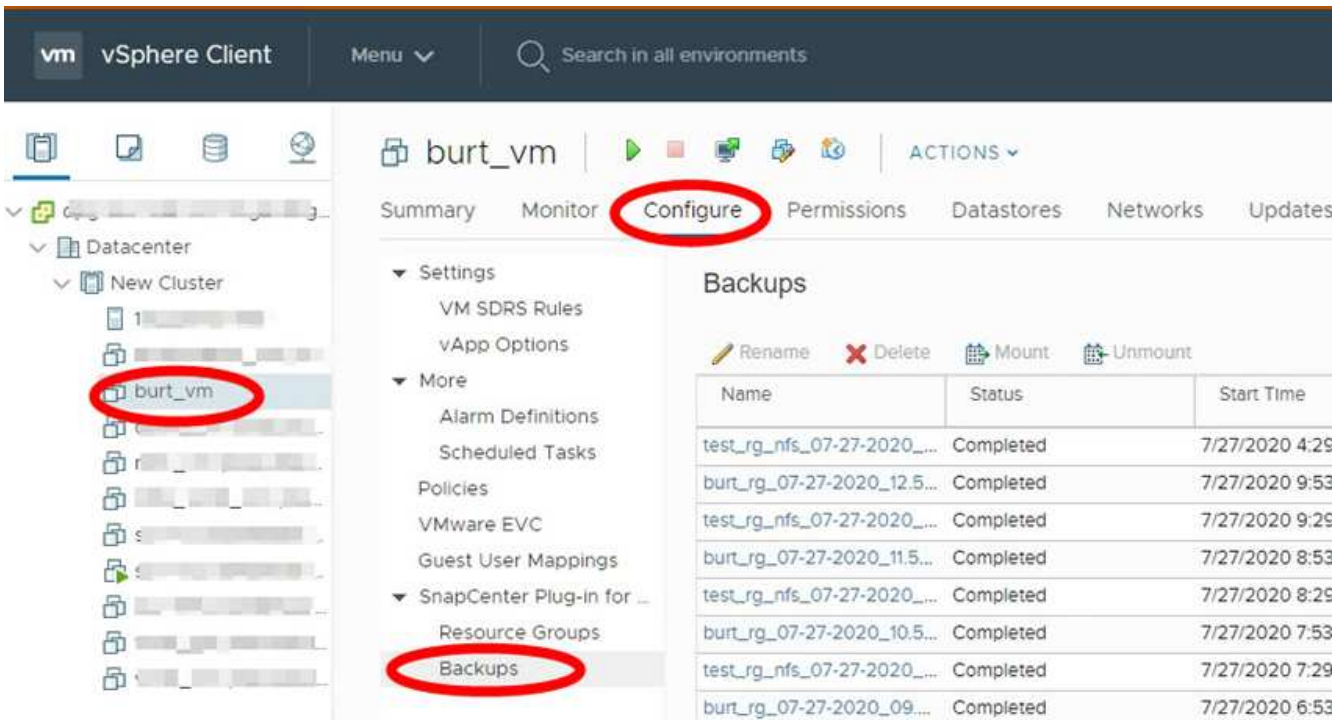
When you are preparing to back up or restore a VM or datastore, you might want to see all the backups that are available for that resource and view details of those backups.

About this task

Browsing large file folders, for example 10k file folders, might take one or more minutes the first time. Subsequent browsing sessions take less time.

Steps

1. Click **Menu** and select the **Hosts and Clusters** menu option, then select a VM, then select the **Configure** tab, and then click **Backups** in the **SnapCenter Plug-in for VMware vSphere section**.



2. Click the backup that you want to view.

Create backup policies for VMs and datastores

You must create backup policies before you use the SnapCenter Plug-in for VMware vSphere to back up VMs and datastores.

Before you begin

- You must have read the prerequisites.
- You must have secondary storage relationships configured.
  - If you are replicating Snapshot copies to a mirror or vault secondary storage, the relationships must be configured and the SnapCenter administrator must have assigned the storage VMs to you for both the source and destination volumes.
  - To successfully transfer Snapshot copies to secondary storage for Version-FlexibleMirror relationships on a NFS or VMFS datastore, make sure that the SnapMirror policy type is Asynchronous Mirror and that the "all_source_snapshots" option is checked.

- When the number of Snapshot copies on the secondary storage (mirror-vault) reaches the maximum limit, the activity to register backup and apply retention in the backup operation fails with the following error: `This Snapshot copy is currently used as a reference Snapshot copy by one or more SnapMirror relationships. Deleting the Snapshot copy can cause future SnapMirror operations to fail.`

  To correct this issue, configure the SnapMirror retention policy for the secondary storage to avoid reaching the maximum limit of Snapshot copies.

  For information about how administrators assign resources to users, see the SnapCenter information on using role-based access control.

- If you want VM-consistent backups, you must have VMware tools installed and running. VMware tools is needed to quiesce VMs. VM-consistent backups are not supported for vVol VMs.

About this task

Most of the fields on these wizard pages are self-explanatory. The following information describes some of the fields for which you might require guidance.

Steps

1. In the left Navigator pane of the SCV plug-in, click **Policies**.
2. On the **Policies** page, click ➕ **Create** to start the wizard.
3. On the **New Backup Policy** page, select the vCenter Server that will use the policy, and then enter the policy name and a description.
   - Linked mode

     In linked mode, each vCenter has a separate virtual appliance. Therefore, you can use duplicate names across vCenters. However, you must create the policy in the same vCenter as the resource group.

   - Unsupported characters

     Do not use the following special characters in VM, datastore, cluster, policy, backup, or resource group names: % & * $ # @ ! \ / : * ? " < > - | ; ' , .

     An underscore character (_) is allowed.
4. Specify the retention settings.

   ⓘ You should set the retention count to 2 backups or higher if you plan to enable SnapVault replication. If you set the retention count to 1 backup to keep, the retention operation can fail. This is because the first Snapshot copy is the reference Snapshot copy for the SnapVault relationship until the newer Snapshot copy is replicated to the target.

   ⓘ The maximum retention value is 1018 backups for resources on ONTAP 9.4 or later, and 254 backups for resources on ONTAP 9.3 or earlier. Backups will fail if retention is set to a value higher than what the underlying ONTAP version supports. This is also true for spanning datastores. If a spanning datastore includes resources on both ONTAP 9.3 and earlier and on ONTAP 9.4 and later, make sure you set the retention value below 254.
5. Specify the frequency settings.

The policy specifies the backup frequency only. The specific protection schedule for backing up is defined in the resource group. Therefore, two or more resource groups can share the same policy and backup frequency but have different backup schedules.

6. In the **Replication** fields, specify the type of replication to secondary storage, as shown in the following table:

For this field…	Do this…
Update SnapMirror after backup	Select this option to create mirror copies of backup sets on another volume that has a SnapMirror relationship to the primary backup volume. If a volume is configured with a mirror-vault relationship, you must select only the **Update SnapVault after backup** option if you want backups copied to the mirror-vault destinations. This option is supported for datastores in FlexGroup volumes in SnapCenter Plug-in for VMware vSphere 4.5 and later.
Update SnapVault after backup	Select this option to perform disk-to-disk backup replication on another volume that has a SnapVault relationship to the primary backup volume. If a volume is configured with a mirror-vault relationship, you must select only this option if you want backups copied to the mirror-vault destinations. This option is supported for datastores in FlexGroup volumes in SnapCenter Plug-in for VMware vSphere 4.5 and later.
Snapshot label	Enter an optional, custom label to be added to SnapVault and SnapMirror Snapshot copies created with this policy. The Snapshot label helps to distinguish Snapshots created with this policy from other Snapshots on the secondary storage system. A maximum of 31 characters is allowed for Snapshot copy labels.

7. Optional: In the **Advanced** fields, select the fields that are needed. The Advanced field details are listed in the following table.

For this field…	Do this…
VM consistency	Check this box to quiesce the VMs and create a VMware snapshot each time the backup job runs. This option is not supported for vVols. For vVol VMs, only crash-consistent backups are performed. You must have VMware tools running on the VM to perform VM consistent backups. If VMware Tools is not running, a crash-consistent backup is performed instead. When you check the VM consistency box, backup operations might take longer and require more storage space. In this scenario, the VMs are first quiesced, then VMware performs a VM consistent snapshot, then SnapCenter performs its backup operation, and then VM operations are resumed. VM guest memory is not included in VM consistency Snapshots.
Include datastores with independent disks	Check this box to include in the backup any datastores with independent disks that contain temporary data.
Scripts	Enter the fully qualified path of the prescript or postscript that you want the SnapCenter VMware plug-in to run before or after backup operations. For example, you can run a script to update SNMP traps, automate alerts, and send logs. The script path is validated at the time the script is executed. Prescripts and postscripts must be located on the virtual appliance VM. To enter multiple scripts, press **Enter** after each script path to list each script on a separate line. The character ";" is not allowed.

8. Click **Add.**

   You can verify that the policy is created and review the policy configuration by selecting the policy in the Policies page.

Create resource groups

A resource group is the container for VMs, datastores, and vVol VMs that you want to protect.

A resource group can contain the following:

- Traditional VMs and datastores

  Any combination of traditional VMs, traditional SAN datastores, and traditional NAS datastores. Traditional VMs cannot be combined with vVol VMs.

- Flexgroup datastores

  A single FlexGroup datastore. Spanning Flexgroup datastores are not supported. A FlexGroup datastore cannot be combined with traditional VMs or datastores.

- FlexVol datastores

  One or more FlexVol datastores. Spanning datastores are supported.

- vVol VMs

  One or more vVol VMs. vVol VMs cannot be combined with traditional VMs or datastores.

- vVol VMs with a tag

  All vVol VMs with a specified vCenter tag. Other entities with tags, such as datastores or traditional VMs, with the same tag in the same vCenter or in a different vCenter, are not supported. If the list of VMs with the specified tag contains a mix of vVol VMs and traditional VMs, SnapCenter Plug-in for VMware vSphere backs up the vVol VMs and skips the traditional VMs.

- vVol VMs in a folder

  All vVols in a single, specified vVol folder. If the folder contains a mix of vVol VMs and traditional VMs, SnapCenter Plug-in for VMware vSphere backs up the vVol VMs and skips the traditional VMs.

For all resource groups:

If you are using VMware vSphere Cluster Service (vCLS), do not include VMs managed by vCLS in SnapCenter VMware plug-in resource groups.

SnapCenter Plug-in for VMware vSphere 4.5 and later supports datastores on large LUN sizes up to 128 TB on ASA aggregates. If you are protecting large LUNs, use only thick provisioned LUNs to avoid latency.

Do not add VMs that are in an inaccessible state. Although it is possible to create a resource group that contains inaccessible VMs, backups for that resource group will fail.

Before you begin

ONTAP tools for VMware must be deployed before you create a resource group that contains vVol VMs.

For more information, see ONTAP tools for VMware vSphere.

About this task

You can add or remove resources from a resource group at any time.

- Backing up a single resource

  To back up a single resource (for example, a single VM), you must create a resource group that contains that single resource.

- Backing up multiple resources

  To back up multiple resources, you must create a resource group that contains multiple resources.

- Resource groups that contain FlexGroup volumes in MetroCluster environments

  If you are running on ONTAP 9.8 or ONTAP 9.9, then after a switchover or switchback, you must restart the SnapCenter VMware plug-in service and resynchronize the SnapMirror relationships before you back up resource groups in MetroCluster environments.

  In ONTAP 9.8, the backups hang after the switchback. This issue is fixed in ONTAP 9.9.

- Optimizing Snapshot copies

  To optimize Snapshot copies, you should group the VMs and datastores that are associated with the same volume into one resource group.

- Backup policies

  Although it is possible to create a resource group without a backup policy, you can only perform scheduled data protection operations when at least one policy is attached to the resource group. You can use an existing policy, or you can create a new policy while creating a resource group.

- Compatibility checks

  SnapCenter performs compatibility checks when you create a resource group.

  Manage compatibility check failures

Steps

1. In the left Navigator pane of the SCV plug-in, click **Resource Groups**, then click ➕ **Create** to start the wizard.

This is the easiest way to create a resource group. However, you can also create a resource group with one resource by performing one of the following:

+
To create a resource group for one VM, click Menu > Hosts and Clusters, then right-click a VM, then select NetApp SnapCenter, and then click ➕ Create Resource Group.
To create a resource group for one datastore, click **Menu** > **Hosts and Clusters**, then right-click a datastore, then select **NetApp SnapCenter**, and then click ➕ **Create Resource Group**.

1. On the **General Info & Notification** page in the wizard, do the following:

For this field…	Do this…
vCenter Server	Select a vCenter server.
Name	Enter a name for the resource group. Do not use the following special characters in VM, datastore, policy, backup, or resource group names: % & * $ # @ ! \ / : * ? " < > - [vertical bar] ; ' , . An underscore character (_) is allowed. VM or datastore names with special characters are truncated, which makes it difficult to search for a specific backup. In linked mode, each vCenter has a separate SnapCenter VMware plug-in repository. Therefore, you can use duplicate names across vCenters.
Description	Enter a description of the resource group.
Notification	Select when you want to receive notifications about operations on this resource group: Error or warnings: Send notification for errors and warnings only Errors: Send notification for errors only Always: Send notification for all message types Never: Do not send notification
Email send from	Enter the email address you want the notification sent from.
Email send to	Enter the email address of the person you want to receive the notification. For multiple recipients, use a comma to separate the email addresses.
Email subject	Enter the subject you want for the notification emails.
Latest Snapshot name	If you want the suffix “_recent” added to the latest Snapshot copy, then check this box. The “_recent” suffix replaces the date and timestamp. A `_recent` backup is created for each policy that is attached to a resource group. Therefore, a resource group with multiple policies will have multiple `_recent` backups. Do not manually rename `_recent` backups.

For this field…	Do this…
Custom Snapshot format	If you want to use a custom format for the Snapshot copy names, then check this box and enter the name format. • By default, this feature is disabled. • The default Snapshot copy names use the format `<ResourceGroup>_<Date-TimeStamp>` However, you can specify a custom format using the variables $ResourceGroup, $Policy, $HostName, $ScheduleType, and $CustomText. Use the drop-down list in the custom name field to select which variables you want to use and the order in which they are used. If you select $CustomText, the name format is `<CustomName>_<Date-TimeStamp>`. Enter the custom text in the additional box that is provided. NOTE: If you also select the "_recent" suffix, you must make sure that the custom Snapshot names will be unique in the datastore, therefore, you should add the $ResourceGroup and $Policy variables to the name. • Special characters For special characters in names, follow the same guidelines given for the Name field.

2. On the **Resources** page, do the following:

For this field…	Do this…
Scope	Select the type of resource you want to protect: * Datastores (all traditional VMs in one or more specified datastores). You cannot select a vVol datastore. * Virtual Machines (individual traditional or vVol VMs; in the field you must navigate to the datastore that contains the VMs or vVol VMs). You cannot select individual VMs in a FlexGroup datastore. * Tags (all vVol VMs with a single, specified VMware tag; in the list box you must enter the tag) * VM Folder (all vVol VMs in a specified folder; in the popup field you must navigate to the datacenter in which the folder is located)
Datacenter	Navigate to the VMs or datastores or folder that you want to add.
Available entities	Select the resources you want to protect, then click **>** to move your selections to the Selected entities list.

When you click **Next**, the system first checks that SnapCenter manages and is compatible with the storage on which the selected resources are located.

If the message `Selected <resource-name> is not SnapCenter compatible` is displayed, then a selected resource is not compatible with SnapCenter. See Manage compatibility check failures for more information.

To globally exclude one or more datastores from backups, you must specify the datastore name(s) in the `global.ds.exclusion.pattern` property in the `scbr.override` configuration file. See Properties you can override.

3. On the **Spanning disks** page, select an option for VMs with multiple VMDKs across multiple datastores:
   - Always exclude all spanning datastores [This is the default for datastores.]
   - Always include all spanning datastores [This is the default for VMs.]
   - Manually select the spanning datastores to be included

     Spanning VMs are not supported for FlexGroup and vVol datastores.
4. On the **Policies** page, select or create one or more backup policies, as shown in the following table:

To use…	Do this…
An existing policy	Select one or more policies from the list.
A new policy	1. Click ➕ **Create**. 2. Complete the New Backup Policy wizard to return to the Create Resource Group wizard.

In Linked Mode, the list includes policies in all the linked vCenters. You must select a policy that is on the same vCenter as the resource group.

5. On the **Schedules** page, configure the backup schedule for each selected policy.

In the starting hour field, enter a date and time other than zero. The date must be in the format `day/month/year`.

When you select a number of days in the **Every** field, then backups are performed on day 1 of the month, and thereafter at every interval that is specified. For example, if you select the option **Every 2 days**, then

backups are performed on day 1, 3, 5, 7, and so on throughout the month, regardless of whether the starting date is even or odd.

You must fill in each field. The SnapCenter VMware plug-in creates schedules in the time zone in which the SnapCenter VMware plug-in is deployed. You can modify the time zone by using the SnapCenter Plug-in for VMware vSphere GUI.

Modify the time zones for backups.

6. Review the summary, and then click **Finish**.

   Before you click **Finish**, you can go back to any page in the wizard and change the information.

   After you click **Finish**, the new resource group is added to the resource groups list.

   If the quiesce operation fails for any of the VMs in the backup, then the backup is marked as not VM- consistent even if the policy selected has VM consistency selected. In this case, it is possible that some of the VMs were successfully quiesced.

Manage compatibility check failures

SnapCenter performs compatibility checks when you attempt to create a resource group.

Reasons for incompatibility might be:

- VMDKs are on unsupported storage; for example, on an ONTAP system running in 7-Mode or on a non-ONTAP device.
- A datastore is on NetApp storage running Clustered Data ONTAP 8.2.1 or earlier.

  SnapCenter version 4.x supports ONTAP 8.3.1 and later.

  The SnapCenter Plug-in for VMware vSphere does not perform compatibility checks for all ONTAP versions; only for ONTAP versions 8.2.1 and earlier. Therefore, always see the NetApp Interoperability Matrix Tool (IMT) for the latest information about SnapCenter support.

- A shared PCI device is attached to a VM.
- A preferred IP is not configured in SnapCenter.
- You have not added the storage VM (SVM) management IP to SnapCenter.
- The storage VM is down.

To correct a compatibility error, perform the following:

1. Make sure the storage VM is running.
2. Make sure that the storage system on which the VMs are located have been added to the SnapCenter Plug-in for VMware vSphere inventory.
3. Make sure the storage VM is added to SnapCenter. Use the Add storage system option on the VMware vSphere client GUI.
4. If there are spanning VMs that have VMDKs on both NetApp and non-NetApp datastores, then move the VMDKs to NetApp datastores.

Prescripts and postscripts

You can use custom prescripts and postscripts as part of your data protection operations. These scripts enable automation either before your data protection job or after. For example, you might include a script that automatically notifies you of data protection job failures or warnings. Before you set up your prescripts and postscripts, you should understand some of the requirements for creating these scripts.

Supported script types

Perl and shell scripts are supported.
Shell scripts must start with `!/bin/bash`. (`!/bin/sh` is not supported.)

Script path location

Prescripts and postscripts are run by the SnapCenter Plug-in for VMware vSphere. Therefore, the scripts must be located in the SnapCenter Plug-in for VMware vSphere OVA, with executable permissions.

For example:
* A PERL script path might be `/support/support/script.pl`
* A shell script path might be `/support/support/script.sh`

The script path is validated at the time the script is executed.

Where to specify scripts

Scripts are specified in backup policies. When a backup job is started, the policy automatically associates the script with the resources being backed up.

To specify multiple scripts, press **Enter** after each script path to list each script on a separate line. Semicolons (;) are not allowed. You can specify multiple prescripts and multiple postscripts. A single script can be coded as both a prescript and a postscript and can call other scripts.

When scripts are executed

Scripts are executed according to the value set for BACKUP_PHASE.

- BACKUP_PHASE=PRE_BACKUP

  Prescripts are executed in the PRE_BACKUP phase of the operation.

  If a prescript fails, the backup completes successfully, and a warning message is sent.

- BACKUP_PHASE=POST_BACKUP or BACKUP_PHASE=FAILED_BACKUP

  Postscripts are executed in the POST_BACKUP phase of the operation after the backup completes successfully or in the FAILED_BACKUP phase if the backup does not complete successfully.

  If a postscript fails, the backup completes successfully, and a warning message is sent.

Check the following to verify that the script values are populated:
* For PERL scripts: `/support/support/log_env.log`
* For shell scripts: `/support/support/log_file.log`

Environment variables passed to scripts

You can use the environment variables shown in the following table in scripts.

Environment variable	Description
`BACKUP_NAME`	Name of the backup. Variable passed in postscripts only.
`BACKUP_DATE`	Date of the backup, in the format `yyyymmdd` Variable passed in postscripts only.
`BACKUP_TIME`	Time of the backup, in the format `hhmmss` Variable passed in postscripts only.
`BACKUP_PHASE`	The phase of the backup in which you want the script to run. Valid values are: `PRE_BACKUP, POST_BACKUP, and FAILED_BACKUP`. Variable passed in prescripts and postscripts.
`STORAGE_SNAPSHOTS`	The number of storage snapshots in the backup. Variable passed in postscripts only.
`STORAGE_SNAPSHOT.#`	One of the defined storage snapshots, in the following format: `<filer>:/vol/<volume>:<ONTAP-snapshot-name>` Variable passed in postscripts only.
`VIRTUAL_MACHINES`	The number of VMs in the backup. Variable passed in prescripts and postscripts.

`VIRTUAL_MACHINE.#`	One of the defined virtual machines, in the following format:
	`<VM name>[vertical bar]<VM UUID>[vertical bar]<power-state>[vertical bar]<VM snapshot>[vertical bar]<ip-addresses>`
	`<power-state>` has the values `POWERED_ON, POWERED_OFF, or SUSPENDED`
	`<VM snapshot>` has the values `true` or `false`
	Variable passed in prescripts and postscripts.

Script timeouts

The timeout for backup scripts is 15 minutes and cannot be modified.

Example PERL script #1

The following example PERL script prints the environmental variables when a backup is run.

```
#!/usr/bin/perl
use warnings;
use strict;
my $argnum;
my $logfile = '/support/support/log_env.log';
open (FH, '>>', $logfile) or die $!;
foreach (sort keys %ENV) {
print FH "$_ = $ENV{$_}\n";
}
print FH "=========\n";
close (FH);
```

Example PERL script #2

The following example prints information about the backup.

```
#!/usr/bin/perl
use warnings;
use strict;

my $argnum;
my $logfile = '/support/support/log_env.log';
open (FH, '>>', $logfile) or die $!;

print FH "BACKUP_PHASE is $ENV{'BACKUP_PHASE'}\n";
print FH "Backup name $ENV{'BACKUP_NAME'}\n";
print FH "Virtual Machine $ENV{'VIRTUAL_MACHINES'}\n";
print FH "VIRTUAL_MACHINE # is $ENV{'VIRTUAL_MACHINE.1'}\n";
print FH "BACKUP_DATE is $ENV{'BACKUP_DATE'}\n";
print FH "BACKUP_TIME is $ENV{'BACKUP_TIME'}\n";
print FH "STORAGE_SNAPSHOTS is $ENV{'STORAGE_SNAPSHOTS'}\n";
print FH "STORAGE_SNAPSHOT # is $ENV{'STORAGE_SNAPSHOT.1'}\n";

print FH "PWD is $ENV{'PWD'}\n";
print FH "INVOCATION_ID is $ENV{'INVOCATION_ID'}\n";

print FH "=========\n";
close (FH);
```

Example shell script

```
=============================================
#!/bin/bash
echo Stage $BACKUP_NAME >> /support/support/log_file.log
env >> /support/support/log_file.log
=============================================
```

Add a single VM or datastore to a resource group

You can quickly add a single VM or datastore to any existing resource group managed by the SnapCenter Plug-in for VMware vSphere.

About this task

You can add SAN and NAS datastores but not VSAN or VVOL datastores.

Steps

1. In the VMware vSphere client GUI, click **Menu** in the toolbar, and navigate to the VM or datastore that you want to add.
2. In the left Navigator pane, right-click on the VM or datastore, select **NetApp SnapCenter** from the drop-down list, and then select **Add To Resource Group** from the secondary drop-down list.

   The system first checks that SnapCenter manages and is compatible with the storage system on which the selected VM is located and then displays the **Add to Resource Group** page. If the message `SnapCenter Compatibility Error` is displayed, then the selected VM is not compatible with SnapCenter and you must first add the appropriate storage VM to SnapCenter.

3. In the **Add To Resource Group** page, select a resource group, and then click **OK**.

   When you click **OK**, the system first checks that SnapCenter manages and is compatible with the storage on which the selected VMs or datastores are located.

   If the message `Selected <resource-name> is not SnapCenter compatible` is displayed, then a selected VM or datastore is not compatible with SnapCenter. See Manage compatibility check failures for more information.

Add multiple VMs and datastores to a resource group

Using the SnapCenter VMware vSphere client Edit Resource Group wizard, you can add multiple resources to an existing resource group.

A resource group can contain one of the following:

- Any combination of traditional VMs and SAN and NAS datastores (vVol datastores not supported).
- One FlexGroup datastore (spanning VMs are not supported).
- One or more FlexVol datastores (spanning VMs are supported).
- One or more vVol VMs.
- All vVol VMs with a specified vCenter tag.
- All vVol VMs in a specified folder.

vVol VMs that span multiple vVol datastores are not supported because SnapCenter only backs up vVols in the primary, selected, vVol datastore.

Steps

1. In the left Navigator pane of the SCV plug-in, click **Resource Groups**, then select a resource group, and then click **Edit Resource Group** to start the wizard.

2. On the **Resource** page, do the following:
   a. In the Datastores field, navigate to the VMs or datastores that you want to add.
   b. In the Available entities list, select one or more VMs or datastores you want to add to the resource group, then click **>** to move your selection to the Selected entities list. Click **>>** to move all the available entities.

      By default, the Available entities list displays the Datacenter object. You can click a datastore to view the VMs within the datastore and add them to the resource group.

      When you click **Next**, the system first checks that SnapCenter manages and is compatible with the storage on which the selected VMs or datastores are located. If the message `Some entities are not SnapCenter compatible` is displayed, then a selected VM or datastore is not compatible with SnapCenter. See Manage compatibility check failures for more information.
3. Repeat Step 2 for each VM or datastore that you want to add.
4. Click **Next** until you reach the **Summary** page, and then review the summary and click **Finish**.

Back up resource groups on demand

Backup operations are performed on all the resources defined in a resource group. If a resource group has a policy attached and a schedule configured, then backups occur automatically according to the schedule.

Before you begin

You must have created a resource group with a policy attached.

> Do not start an on-demand backup job when a job to back up the SnapCenter VMware plug-in MySQL database is already running. Use the maintenance console to see the configured backup schedule for the MySQL database.

About this task

In earlier releases of Virtual Storage Console (VSC), you could perform an on-demand backup without having a backup job configured for a VM or datastore. However, for the SnapCenter VMware plug-in, VMs and datastores must be in a resource group before you can perform backups.

Steps

1. In the left Navigator pane of the SCV plug-in, click **Resource Groups**, then select a resource group, and then click **Run Now** to start the backup.
2. If the resource group has multiple policies configured, then in the **Backup Now** dialog box, select the policy you want to use for this backup operation.
3. Click **OK** to start the backup.
4. Optional: Monitor the operation progress by clicking **Recent Tasks** at the bottom of the window or on the dashboard **Job Monitor** for more details.
   .Result

If the quiesce operation fails for any of the VMs in the backup, then the backup completes with a warning and is marked as not VM consistent even if the selected policy has VM consistency selected. In this case, it is possible that some of the VMs were successfully quiesced. In the job monitor, the failed VM details will show the quiesce as failed.

Back up the SnapCenter Plug-in for VMware vSphere MySQL database

The SnapCenter VMware plug-in includes a MySQL database (also called an NSM database) that contains the metadata for all jobs performed by the plug-in. You should back up this repository regularly.

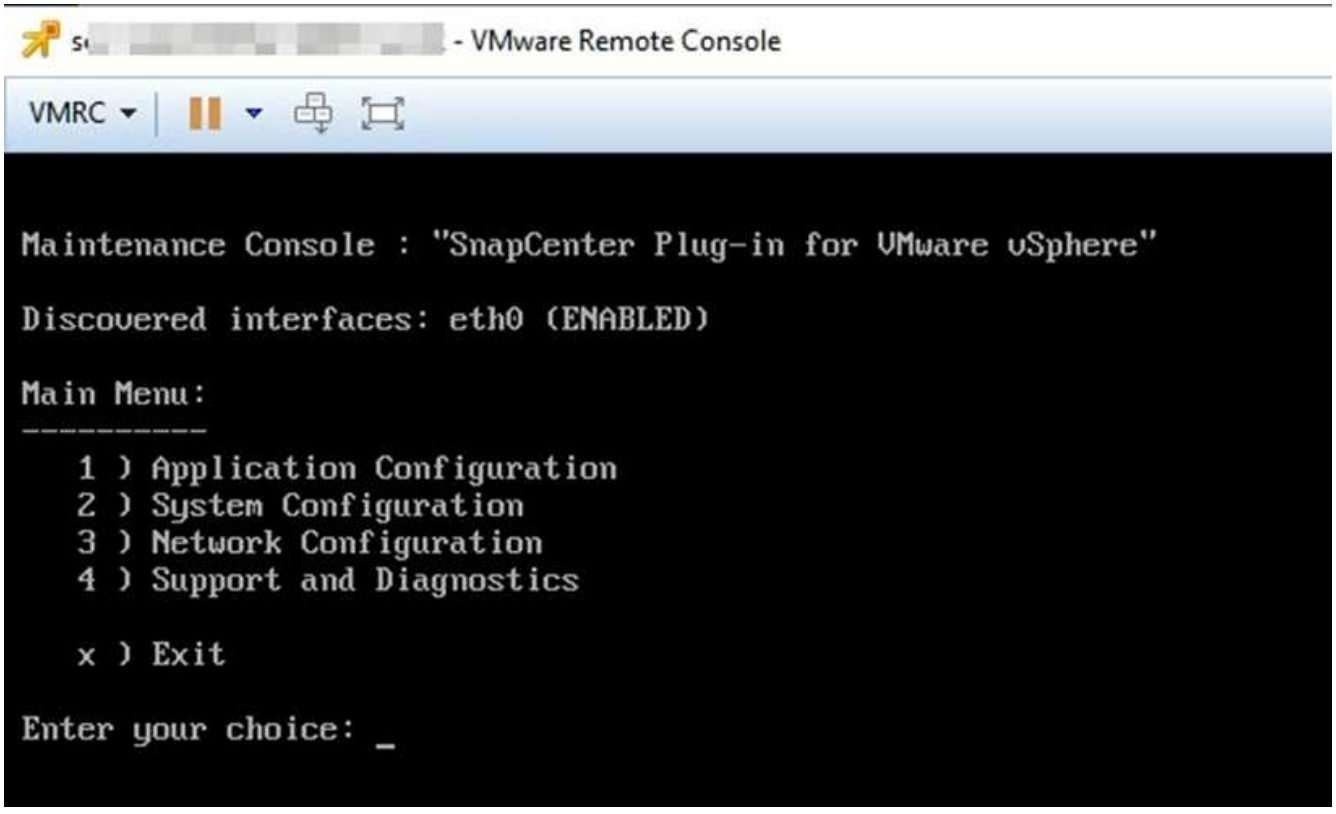
You should also back up the repository before performing migrations or upgrades.

Before you begin

Do not start a job to back up the MySQL database when an on-demand backup job is already running.

Steps

1. From the VMware vSphere client, select the VM where the SnapCenter VMware plug-in is located.
2. Right-click the VM, then on the **Summary** tab of the virtual appliance click **Launch Remote Console or Launch Web Console** to open a maintenance console window.



3. From the Main Menu, enter option **1) Application Configuration.**
4. From the Application Configuration Menu, enter option **6) MySQL backup and restore.**
5. From the MySQL Backup and Restore Configuration Menu, enter option **1) Configure MySQL backup**.
6. At the prompt, enter the backup location for the repository, the number of backups to keep, and the time the backup should start.

   All inputs are saved when you enter them. When the backup retention number is reached, older backups are deleted when new backups are performed.

Repository backups are named "backup-<date>". Because the repository restore function looks for the "backup" prefix, you should not change it.

Manage resource groups

You can create, modify, and delete backup resource groups, and perform backup operations on resource groups.

Resource groups are called backup jobs in Virtual Storage Console (VSC).

Suspend and resume operations on resource groups

You can temporarily disable scheduled operations from starting on a resource group. Later when you want, you can enable those operations.

Steps

1. In the left Navigator pane of the SCV plug-in, click **Resource Groups**, then right-click a resource group and click **Suspend** (or click **Resume**).
2. In the confirmation box, click **OK** to confirm.

After you finish

On the Resource Groups page, the job status for the suspended resource is `Under_Maintenance`. You might need to scroll to the right of the table to see the Job Status column.

After backup operations are resumed, the Job Status changes to `Production`.

Modify resource groups

You can remove or add resources in resource groups in vCenter, detach or attach policies, modify schedules, or modify any other resource group option.

About this task

If you want to modify the name of a resource group, do not use the following special characters in VM, datastore, policy, backup, or resource group names:

% & * $ # @ ! \ / : * ? " < > - | ; ' , .

An underscore character (_) is allowed.

Steps

1. In the left Navigator pane of the SCV plug-in, click **Resource Groups**, then select a resource group and click **Edit**.
2. On the left list in the **Edit Resource Group** wizard, click the category that you want to modify and enter your changes.

   You can make changes in multiple categories.

3. Click **Next** until you see the Summary page, and then click **Finish**.

Delete resource groups

You can delete a resource group in vCenter if you no longer need to protect the resources in the resource group. You must ensure that all resource groups are deleted before you remove SnapCenter Plug-in for VMware vSphere from vCenter.

About this task

All resource group delete operations are performed as force deletes. The delete operation detaches all policies from the vCenter resource group, removes the resource group from SnapCenter Plug-in for VMware vSphere, and deletes all backups and Snapshot copies of the resource group.

> In a SnapVault relationship, the last Snapshot copy cannot be deleted; therefore, the resource group cannot be deleted. Before deleting a resource group that is part of a SnapVault relationship, you must use either OnCommand System Manager or use the ONTAP CLI to remove the SnapVault relationship, and then you must delete the last Snapshot copy.

Steps

1. In the left Navigator pane of the SCV plug-in, click **Resource Groups**, then select a resource group and click **Delete**.
2. In the **Delete resource group** confirmation box, click **OK** to confirm.

Manage policies

You can create, modify, view, detach, and delete backup policies for SnapCenter Plug-in for VMware vSphere. Policies are required to perform data protection operations.

Detach policies

You can detach policies from a SnapCenter VMware plug-in resource group when you no longer want those policies to govern data protection for the resources. You must detach a policy before you can remove it or before you modify the schedule frequency.

About this task

The guidelines for detaching policies from the SnapCenter VMware plug-in resource groups differ from the guidelines for SnapCenter resource groups. For a VMware vSphere client resource group, it is possible to detach all policies, which leaves the resource group with no policy. However, to perform any data protection operations on that resource group, you must attach at least one policy.

Steps

1. In the left Navigator pane of the SCV plug-in, click **Resource Groups**, then select a resource group and click **Edit**.
2. On the **Policies** page of the **Edit Resource Group** wizard, clear the check mark next to the policies you want to detach.

   You can also add a policy to the resource group by checking the policy.
3. Make any additional modifications to the resource group in the rest of the wizard, and then click **Finish**.

Modify policies

You can modify policies for a SnapCenter Plug-in for VMware vSphere resource group. You can modify the frequency, replication options, Snapshot copy retention settings, or scripts information while a policy is attached to a resource group.

About this task

Modifying SnapCenter VMware plug-in backup policies differs from modifying backup policies for SnapCenter application-based plug-ins. You do not need to detach policies from resource groups when you modify the plug-in policies.

Before you modify the replication or retention settings, you should consider the possible consequences.

- Increasing replication or retention settings

  Backups continue to accumulate until they reach the new setting.

- Decreasing replication or retention settings

  Backups in excess of the new setting are deleted when the next backup is performed.

To modify a SnapCenter VMware plug-in policy schedule, you must modify the schedule in the plug-in resource group.

Steps

1. In the left Navigator pane of the SCV plug-in, click **Policies**, then select a policy and click **Edit**.
2. Modify the policy fields.
3. When you are finished, click **Update**.

The changes take effect when the next scheduled backup is performed.

Delete policies

If you no longer require a configured backup policy for SnapCenter Plug-in for VMware vSphere, you might want to delete it.

Before you begin

You must have detached the policy from all resource groups in the virtual appliance for SnapCenter before you can delete it.

Steps

1. In the left Navigator pane of the SCV plug-in, click **Policies**, then select a policy and click **Remove**.
2. In the confirmation dialog box click **OK**.

Manage backups

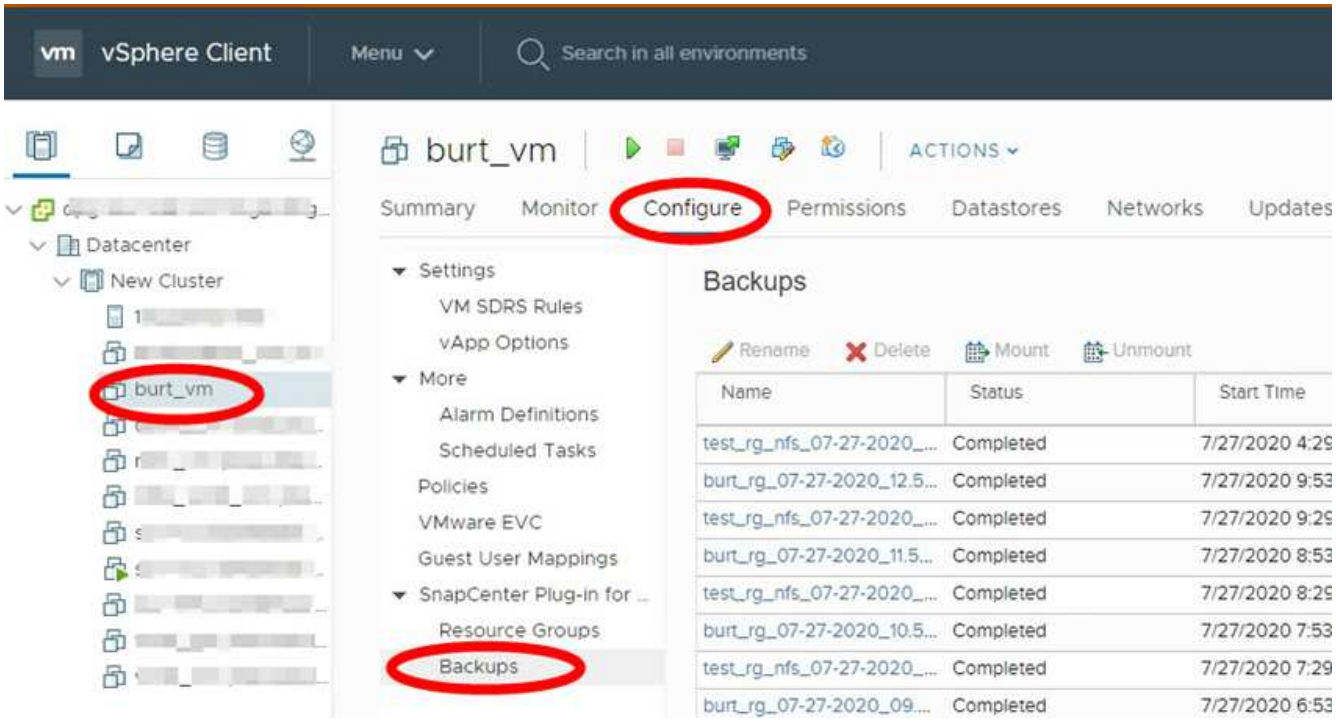
You can rename and delete backups performed by SnapCenter Plug-in for VMware vSphere. You can also delete multiple backups simultaneously.

Rename backups

You can rename SnapCenter Plug-in for VMware vSphere backups if you want to provide a better name to improve searchability.

Steps

1. Click **Menu** and select the **Hosts and Clusters** menu option, then select a VM, then select the **Configure** tab, and then click **Backups** in the **SnapCenter Plug-in for VMware vSphere** section.



2. On the Configure tab, select a backup, and click **Rename**.
3. On the **Rename Backup** dialog box, enter the new name, and click **OK**.

   Do not use the following special characters in VM, datastore, policy, backup, or resource group names: & * $ # @ ! \ / : * ? " < > - | ; ' , . An underscore character (_) is allowed.

Delete backups

You can delete SnapCenter Plug-in for VMware vSphere backups if you no longer require the backup for other data protection operations. You can delete one backup or delete multiple backups simultaneously.

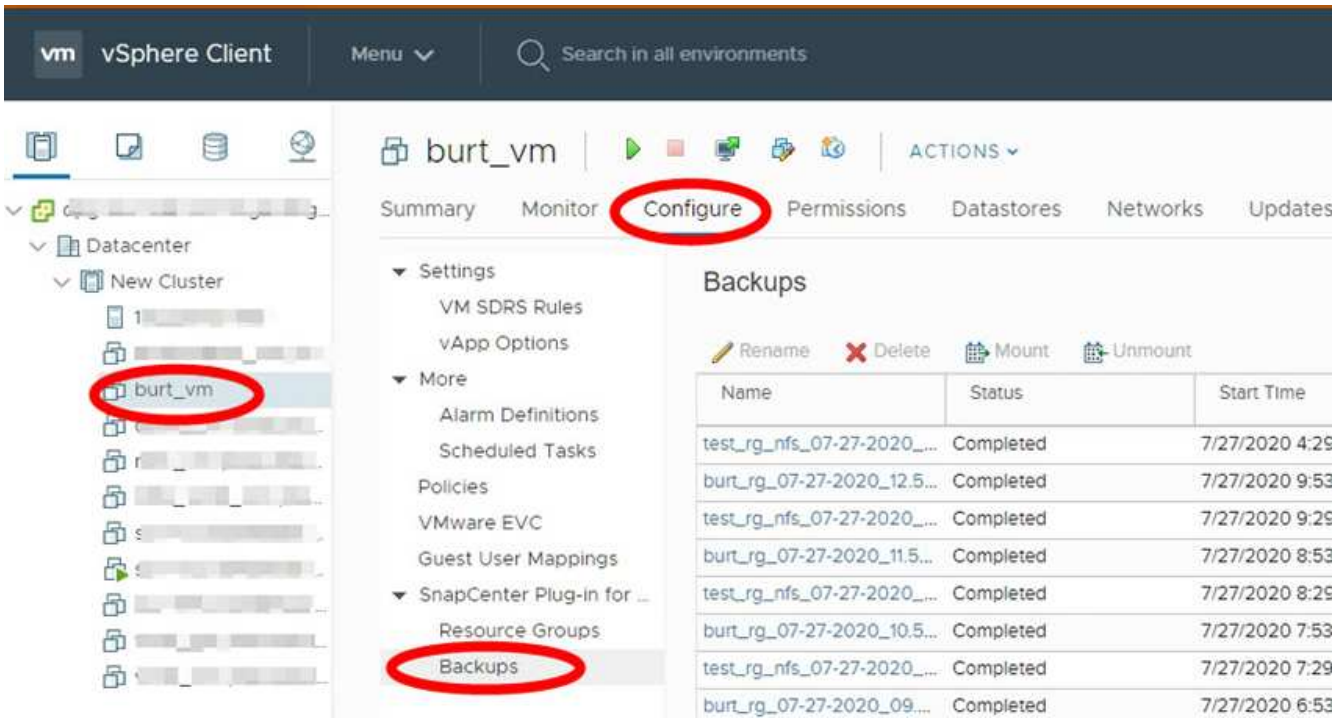
Before you begin

You cannot delete backups that are mounted. You must unmount a backup before you can delete it.

About this task

Snapshot copies on secondary storage are managed by your ONTAP retention settings, not by the SnapCenter VMware plug-in. Therefore, when you use the SnapCenter VMware plug-in to delete a backup, Snapshot copies on primary storage are deleted but Snapshot copies on secondary storage are not deleted. If a Snapshot copy still exists on secondary storage, the SnapCenter VMware plug-in retains the metadata associated with the backup to support restore requests. When the ONTAP retention process deletes the secondary Snapshot copy, then the SnapCenter VMware plug-in deletes the metadata using a purge job, which is executed at regular intervals.

1. Click **Menu** and select the **Hosts and Clusters** menu option, then select a VM, then select the **Configure** tab, and then click **Backups** in the **SnapCenter Plug-in for VMware vSphere** section.



2. Select one or more backups and click **Delete**.

   You can select a maximum of 40 backups to delete.

3. Click **OK** to confirm the delete operation.
4. Refresh the backup list by clicking the refresh icon on the left vSphere menu bar.

Copyright information

Copyright © 2025 NetApp, Inc. All Rights Reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system—without prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP “AS IS” AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

LIMITED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (b)(3) of the Rights in Technical Data -Noncommercial Items at DFARS 252.227-7013 (FEB 2014) and FAR 52.227-19 (DEC 2007).

Data contained herein pertains to a commercial product and/or commercial service (as defined in FAR 2.101) and is proprietary to NetApp, Inc. All NetApp technical data and computer software provided under this Agreement is commercial in nature and developed solely at private expense. The U.S. Government has a non-exclusive, non-transferrable, nonsublicensable, worldwide, limited irrevocable license to use the Data only in connection with and in support of the U.S. Government contract under which the Data was delivered. Except as provided herein, the Data may not be used, disclosed, reproduced, modified, performed, or displayed without the prior written approval of NetApp, Inc. United States Government license rights for the Department of Defense are limited to those rights identified in DFARS clause 252.227-7015(b) (FEB 2014).

Trademark information

NETAPP, the NETAPP logo, and the marks listed at http://www.netapp.com/TM are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.