



# **Configure scanner pools**

ONTAP 9

NetApp  
August 18, 2023

# Table of Contents

- Configure scanner pools ..... 1
  - Configure scanner pools overview ..... 1
  - Create a scanner pool on a single cluster ..... 1
  - Create scanner pools in MetroCluster configurations ..... 2
  - Apply a scanner policy on a single cluster ..... 4
  - Apply scanner policies in MetroCluster configurations ..... 6
  - Commands for managing scanner pools ..... 7

# Configure scanner pools

## Configure scanner pools overview

A scanner pool defines the Vscan servers and privileged users that can connect to SVMs. A scanner policy determines whether a scanner pool is active.



If you use an export policy on an SMB server, you must add each Vscan server to the export policy.

## Create a scanner pool on a single cluster

A scanner pool defines the Vscan servers and privileged users that can connect to SVMs. You can create a scanner pool for an individual SVM or for all the SVMs in a cluster.

### What you'll need

- SVMs and Vscan servers must be in the same domain or in trusted domains.
- For scanner pools defined for an individual SVM, you must have configured ONTAP Antivirus Connector with the SVM management LIF or SVM data LIF.
- For scanner pools defined for all the SVMs in a cluster, you must have configured ONTAP Antivirus Connector with the cluster management LIF.
- The list of privileged users must include the domain user account the Vscan server uses to connect to the SVM.
- Once the scanner pool is configured, check the connection status to the servers.

### Steps

1. Create a scanner pool:

```
vserver vscan scanner-pool create -vserver data_SVM|cluster_admin_SVM -scanner-pool scanner_pool -hostnames Vscan_server_hostnames -privileged-users privileged_users
```

- Specify a data SVM for a pool defined for an individual SVM, and specify a cluster admin SVM for a pool defined for all of the SVMs in a cluster.
- Specify an IP address or FQDN for each Vscan server host name.
- Specify the domain and user name for each privileged user. For a complete list of options, see the man page for the command.

The following command creates a scanner pool named `SP` on the `vs1` SVM:

```
cluster1::> vserver vscan scanner-pool create -vserver vs1 -scanner-pool SP -hostnames 1.1.1.1,vmwin204-27.fsct.nb -privileged-users cifs\u1,cifs\u2
```

2. Verify that the scanner pool was created:

```
vserver vscan scanner-pool show -vserver data_SVM|cluster_admin_SVM -scanner-pool scanner_pool
```

For a complete list of options, see the man page for the command.

The following command displays the details for the SP scanner pool:

```
cluster1::> vserver vscan scanner-pool show -vserver vs1 -scanner-pool SP

Vserver: vs1
Scanner Pool: SP
Applied Policy: idle
Current Status: off
Cluster on Which Policy Is Applied: -
Scanner Pool Config Owner: vserver
List of IPs of Allowed Vscan Servers: 1.1.1.1, 10.72.204.27
List of Host Names of Allowed Vscan Servers: 1.1.1.1, vmwin204-27.fsct.nb
List of Privileged Users: cifs\u1, cifs\u2
```

You can also use the `vserver vscan scanner-pool show` command to view all of the scanner pools on an SVM. For complete command syntax, see the man page for the command.

## Create scanner pools in MetroCluster configurations

You must create primary and secondary scanner pools on each cluster in a MetroCluster configuration, corresponding to the primary and secondary SVMs on the cluster.

### What you'll need

- SVMs and Vscan servers must be in the same domain or in trusted domains.
- For scanner pools defined for an individual SVM, you must have configured ONTAP Antivirus Connector with the SVM management LIF or SVM data LIF.
- For scanner pools defined for all the SVMs in a cluster, you must have configured ONTAP Antivirus Connector with the cluster management LIF.
- The list of privileged users must include the domain user account the Vscan server uses to connect to the SVM.
- Once the scanner pool is configured, check the connection status to the servers.

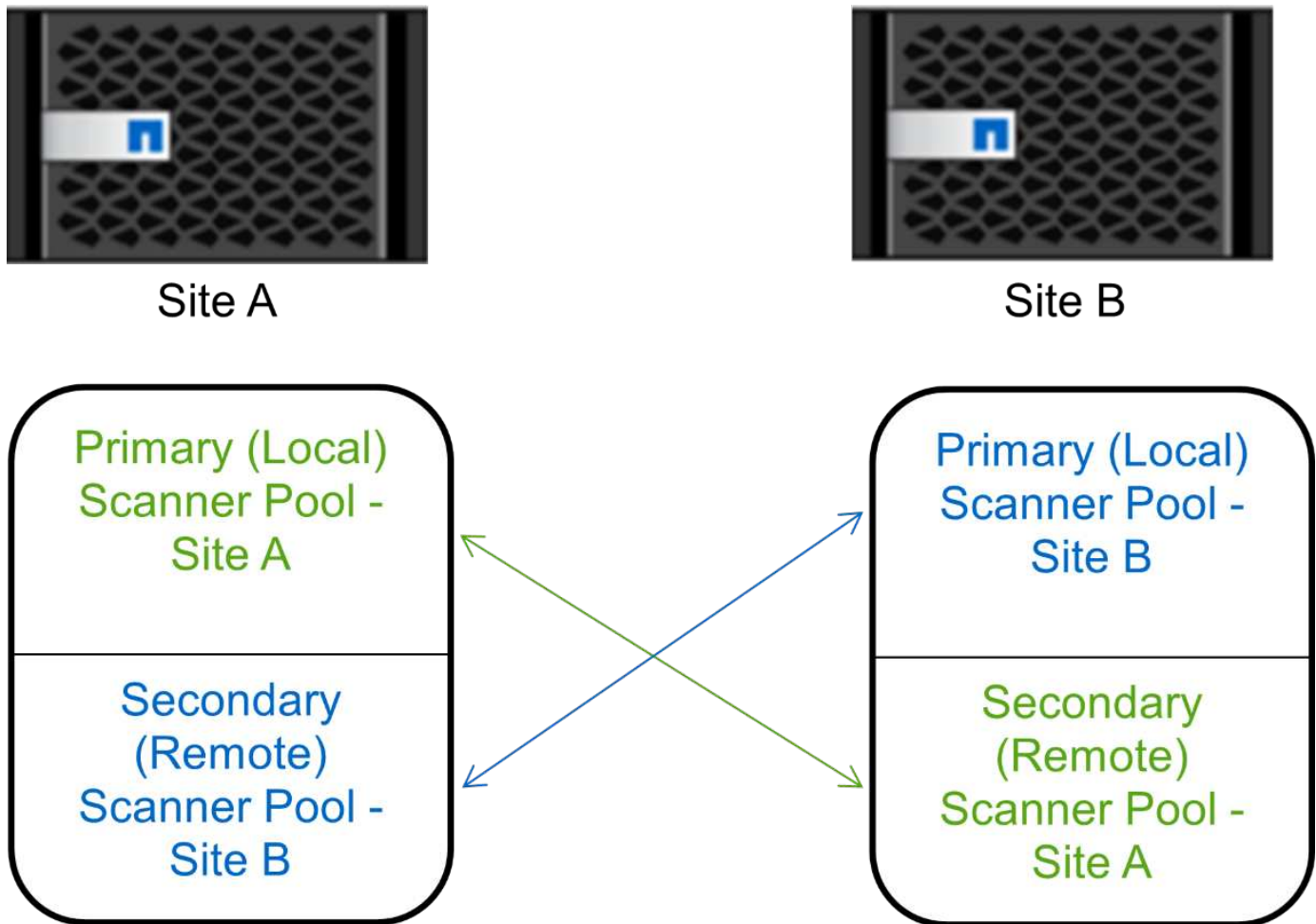
### About this task

MetroCluster configurations protect data by implementing two physically separate mirrored clusters. Each cluster synchronously replicates the data and SVM configuration of the other. A primary SVM on the local cluster serves data when the cluster is online. A secondary SVM on the local cluster serves data when the remote cluster is offline.

This means that you must create primary and secondary scanner pools on each cluster in a MetroCluster configuration. The secondary pool becomes active when the cluster begins serving data from the secondary

SVM. For Disaster Recovery (DR) the configuration is similar to MetroCluster.

This figure shows a typical MetroCluster/DR configuration.



#### Steps

1. Create a scanner pool:

```
vserver vscan scanner-pool create -vserver data_SVM|cluster_admin_SVM -scanner  
-pool scanner_pool -hostnames Vscan_server_hostnames -privileged-users  
privileged_users
```

- Specify a data SVM for a pool defined for an individual SVM, and specify a cluster admin SVM for a pool defined for all the SVMs in a cluster.
- Specify an IP address or FQDN for each Vscan server host name.
- Specify the domain and user name for each privileged user.



You must create all scanner pools from the cluster containing the primary SVM.

For a complete list of options, see the man page for the command.

The following commands create primary and secondary scanner pools on each cluster in a MetroCluster configuration:

```

cluster1::> vserver vscan scanner-pool create -vserver cifssvm1 -
scanner-pool pool1_for_site1 -hostnames scan1 -privileged-users cifs
\u1,cifs\u2

cluster1::> vserver vscan scanner-pool create -vserver cifssvm1 -
scanner-pool pool1_for_site2 -hostnames scan1 -privileged-users cifs
\u1,cifs\u2

cluster1::> vserver vscan scanner-pool create -vserver cifssvm1 -
scanner-pool pool2_for_site1 -hostnames scan2 -privileged-users cifs
\u1,cifs\u2

cluster1::> vserver vscan scanner-pool create -vserver cifssvm1 -
scanner-pool pool2_for_site2 -hostnames scan2 -privileged-users cifs
\u1,cifs\u2

```

## 2. Verify that the scanner pools were created:

```
vserver vscan scanner-pool show -vserver data_SVM|cluster_admin_SVM -scanner
-pool scanner_pool
```

For a complete list of options, see the man page for the command.

The following command displays the details for the scanner pool pool1:

```

cluster1::> vserver vscan scanner-pool show -vserver cifssvm1 -scanner
-pool pool1_for_site1

                                Vserver: cifssvm1
                                Scanner Pool: pool1_for_site1
                                Applied Policy: idle
                                Current Status: off
                                Cluster on Which Policy Is Applied: -
                                Scanner Pool Config Owner: vserver
                                List of IPs of Allowed Vscan Servers:
                                List of Host Names of Allowed Vscan Servers: scan1
                                List of Privileged Users: cifs\u1,cifs\u2

```

You can also use the `vserver vscan scanner-pool show` command to view all of the scanner pools on an SVM. For complete command syntax, see the man page for the command.

## Apply a scanner policy on a single cluster

A scanner policy determines whether a scanner pool is active. You must activate a scanner pool before the Vscan servers that it defines can connect to an SVM.

## About this task

- You can apply only one scanner policy to a scanner pool.
- If you created a scanner pool for all the SVMs in a cluster, you must apply a scanner policy on each SVM individually.

## Steps

1. Apply a scanner policy:

```
vserver vscan scanner-pool apply-policy -vserver data_SVM -scanner-pool  
scanner_pool -scanner-policy primary|secondary|idle -cluster  
cluster_to_apply_policy_on
```

A scanner policy can have one of the following values:

- `Primary` specifies that the scanner pool is active.
- `Secondary` specifies that the scanner pool is active only if none of the Vscan servers in the primary scanner pool are connected.
- `Idle` specifies that the scanner pool is inactive.

The following example shows that the scanner pool named `SP` on the `vs1` SVM is active:

```
cluster1::> vserver vscan scanner-pool apply-policy -vserver vs1  
-scanner-pool SP -scanner-policy primary
```

2. Verify that the scanner pool is active:

```
vserver vscan scanner-pool show -vserver data_SVM|cluster_admin_SVM -scanner  
-pool scanner_pool
```

For a complete list of options, see the man page for the command.

The following command displays the details for the `SP` scanner pool:

```
cluster1::> vserver vscan scanner-pool show -vserver vs1 -scanner-pool  
SP  
  
Vserver: vs1  
Scanner Pool: SP  
Applied Policy: primary  
Current Status: on  
Cluster on Which Policy Is Applied: cluster1  
Scanner Pool Config Owner: vserver  
List of IPs of Allowed Vscan Servers: 1.1.1.1, 10.72.204.27  
List of Host Names of Allowed Vscan Servers: 1.1.1.1, vmwin204-  
27.fsct.nb  
List of Privileged Users: cifs\u1, cifs\u2
```

You can use the `vserver vscan scanner-pool show-active` command to view the active scanner pools on an SVM. For the complete command syntax, see the man page for the command.

## Apply scanner policies in MetroCluster configurations

A scanner policy determines whether a scanner pool is active. You must apply a scanner policy to the primary and secondary scanner pools on each cluster in a MetroCluster configuration.

### About this task

- You can apply only one scanner policy to a scanner pool.
- If you created a scanner pool for all the SVMs in a cluster, you must apply a scanner policy on each SVM individually.
- For disaster recovery and MetroCluster configurations, you must apply a scanner policy to every scanner pool in the local cluster and remote cluster.
- In the policy that you create for the local cluster, you must specify the local cluster in the `cluster` parameter. In the policy that you create for the remote cluster, you must specify the remote cluster in the `cluster` parameter. The remote cluster can then take over virus scanning operations in case of a disaster.

### Steps

1. Apply a scanner policy:

```
vserver vscan scanner-pool apply-policy -vserver data_SVM -scanner-pool  
scanner_pool -scanner-policy primary|secondary|idle -cluster  
cluster_to_apply_policy_on
```

A scanner policy can have one of the following values:

- `Primary` specifies that the scanner pool is active.
- `Secondary` specifies that the scanner pool is active only if none of the Vscan servers in the primary scanner pool are connected.
- `Idle` specifies that the scanner pool is inactive.



You must apply all scanner policies from the cluster containing the primary SVM.

The following commands apply scanner policies to the primary and secondary scanner pools on each cluster in a MetroCluster configuration:



```

cluster1::>vserver vscan scanner-pool apply-policy -vserver cifssvm1
-scanner-pool pool1_for_site1 -scanner-policy primary -cluster
cluster1

cluster1::>vserver vscan scanner-pool apply-policy -vserver cifssvm1
-scanner-pool pool2_for_site1 -scanner-policy secondary -cluster
cluster1

cluster1::>vserver vscan scanner-pool apply-policy -vserver cifssvm1
-scanner-pool pool1_for_site2 -scanner-policy primary -cluster
cluster2

cluster1::>vserver vscan scanner-pool apply-policy -vserver cifssvm1
-scanner-pool pool2_for_site2 -scanner-policy secondary -cluster
cluster2

```

## 2. Verify that the scanner pool is active:

```
vserver vscan scanner-pool show -vserver data_SVM|cluster_admin_SVM -scanner
-pool scanner_pool
```

For a complete list of options, see the man page for the command.

The following command displays the details for the scanner pool pool1:

```

cluster1::> vserver vscan scanner-pool show -vserver cifssvm1 -scanner
-pool pool1_for_site1

Vserver: cifssvm1
Scanner Pool: pool1_for_site1
Applied Policy: primary
Current Status: on
Cluster on Which Policy Is Applied: cluster1
Scanner Pool Config Owner: vserver
List of IPs of Allowed Vscan Servers:
List of Host Names of Allowed Vscan Servers: scan1
List of Privileged Users: cifs\u1,cifs\u2

```

You can use the `vserver vscan scanner-pool show-active` command to view the active scanner pools on an SVM. For complete command syntax, see the man page for the command.

## Commands for managing scanner pools

You can modify and delete scanner pools, and manage privileged users and Vscan servers for a scanner pool. You can also view summary information about the scanner

pool.

If you want to...	Enter the following command...
Modify a scanner pool	<code>vserver vscan scanner-pool modify</code>
Delete a scanner pool	<code>vserver vscan scanner-pool delete</code>
Add privileged users to a scanner pool	<code>vserver vscan scanner-pool privileged-users add</code>
Delete privileged users from a scanner pool	<code>vserver vscan scanner-pool privileged-users remove</code>
Add Vscan servers to a scanner pool	<code>vserver vscan scanner-pool servers add</code>
Delete Vscan servers from a scanner pool	<code>vserver vscan scanner-pool servers remove</code>
View summary and details for a scanner pool	<code>vserver vscan scanner-pool show</code>
View privileged users for a scanner pool	<code>vserver vscan scanner-pool privileged-users show</code>
View Vscan servers for all scanner pools	<code>vserver vscan scanner-pool servers show</code>

For more information about these commands, see the man pages.

## Copyright information

Copyright © 2023 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.