

Display information about file security and audit policies

ONTAP 9

NetApp May 12, 2023

This PDF was generated from https://docs.netapp.com/us-en/ontap/smb-admin/display-file-security-audit-policies-concept.html on May 12, 2023. Always check docs.netapp.com for the latest.

Table of Contents

| Di | isplay information about file security and audit policies | 1 |
|----|---|------|
| | Display information about file security and audit policies overview | 1 |
| | Display information about file security on NTFS security-style volumes | 2 |
| | Display information about file security on mixed security-style volumes | 8 |
| | Display information about file security on UNIX security-style volumes. | . 11 |
| | Display information about NTFS audit policies on FlexVol volumes using the CLI | . 14 |
| | Display information about NFSv4 audit policies on FlexVol volumes using the CLI | . 17 |
| | Ways to display information about file security and audit policies | . 18 |

Display information about file security and audit policies

Display information about file security and audit policies overview

You can display information about file security on files and directories contained within volumes on storage virtual machines (SVMs). You can display information about audit policies on FlexVol volumes. If configured, you can display information about Storage-Level Access Guard and Dynamic Access Control security settings on FlexVol volumes.

Displaying information about file security

You can display information about file security applied to data contained within volumes and qtrees (for FlexVol volumes) with the following security styles:

- NTFS
- UNIX
- Mixed

Displaying information about audit policies

You can display information about audit policies for auditing access events on FlexVol volumes over the following NAS protocols:

- · SMB (all versions)
- NFSv4.x

Displaying information about Storage-Level Access Guard (SLAG) security

Storage-Level Access Guard security can be applied on FlexVol volumes and qtree objects with the following security styles:

- NTFS
- Mixed
- UNIX (if a CIFS server is configured on the SVM that contains the volume)

Displaying information about Dynamic Access Control (DAC) security

Dynamic Access Control security can be applied on an object within a FlexVol volume with the following security styles:

- NTFS
- Mixed (if the object has NTFS effective security)

Related information

Securing file access by using Storage-Level Access Guard

Display information about file security on NTFS securitystyle volumes

You can display information about file and directory security on NTFS security-style volumes, including what the security style and effective security styles are, what permissions are applied, and information about DOS attributes. You can use the results to validate your security configuration or to troubleshoot file access issues.

About this task

You must supply the name of the storage virtual machine (SVM) and the path to the data whose file or folder security information you want to display. You can display the output in summary form or as a detailed list.

- Because NTFS security-style volumes and qtrees use only NTFS file permissions and Windows users and groups when determining file access rights, UNIX-related output fields contain display-only UNIX file permission information.
- · ACL output is displayed for file and folders with NTFS security.
- Because Storage-Level Access Guard security can be configured on the volume root or qtree, output for a volume or qtree path where Storage-Level Access Guard is configured might display both regular file ACLs and Storage-Level Access Guard ACLs.
- The output also displays information about Dynamic Access Control ACEs if Dynamic Access Control is configured for the given file or directory path.

Step

1. Display file and directory security settings with the desired level of detail:

| If you want to display information | Enter the following command |
|------------------------------------|---|
| In summary form | vserver security file-directory show -vserver vserver_name -path path |
| With expanded detail | vserver security file-directory show -vserver vserver_name -path path -expand-mask true |

Examples

The following example displays the security information about the path /vol4 in SVM vs1:

```
cluster::> vserver security file-directory show -vserver vs1 -path /vol4
                                 Vserver: vs1
                               File Path: /vol4
                       File Inode Number: 64
                          Security Style: ntfs
                         Effective Style: ntfs
                          DOS Attributes: 10
                  DOS Attributes in Text: ----D---
                 Expanded Dos Attributes: -
                            Unix User Id: 0
                           Unix Group Id: 0
                          Unix Mode Bits: 777
                  Unix Mode Bits in Text: rwxrwxrwx
                                    ACLs: NTFS Security Descriptor
                                           Control:0x8004
                                           Owner:BUILTIN\Administrators
                                           Group:BUILTIN\Administrators
                                           DACL - ACEs
                                           ALLOW-Everyone-0x1f01ff
                                           ALLOW-Everyone-0x1000000-
OI|CI|IO
```

The following example displays the security information with expanded masks about the path /data/engineering in SVM vs1:

```
cluster::> vserver security file-directory show -vserver vs1 -path -path
/data/engineering -expand-mask true
             Vserver: vs1
            File Path: /data/engineering
     File Inode Number: 5544
       Security Style: ntfs
      Effective Style: ntfs
       DOS Attributes: 10
DOS Attributes in Text: ----D---
Expanded Dos Attributes: 0x10
    ...0 .... = Offline
    .... = Sparse
    \dots 0\dots = Normal
    .... = Archive
    .... = Directory
    .... .... .0.. = System
    .... .... .... ..0. = Hidden
    \dots 0 = Read Only
```

Unix User Id: 0 Unix Group Id: 0 Unix Mode Bits: 777 Unix Mode Bits in Text: rwxrwxrwx ACLs: NTFS Security Descriptor Control:0x8004 1... = Self Relative .0.. = RM Control Valid ..0. = SACL Protected ...0 = DACL Protected 0... = SACL Inherited0.. = DACL Inherited = SACL Inherit Required = DACL Inherit Required = SACL Defaulted = SACL Present 0... = DACL Defaulted1.. = DACL Present \dots 0 = Owner Defaulted Owner: BUILTIN \ Administrators Group:BUILTIN\Administrators DACL - ACEs ALLOW-Everyone-0x1f01ff 0... = Generic Read .0.. = Generic Write ..0. = Generic Execute ...0 = Generic All = System Security 1 = Synchronize 1... = Write Owner1.. = Write DAC = Read Control = Delete

| Write Attributes | = |
|------------------|------------------------------------|
| Read Attributes | 1 = |
| Delete Child | = |
| Execute | = |
| Write EA | = |
| Read EA | 1 = |
| Append | 1 = |
| Write | |
| Read | = |
| Read | ALLOW-Everyone-0x10000000-OI CI IO |
| | |
| Generic Read | 0 = |
| Generic Write | .0 |
| Generic Execute | 0 = |
| Generic All | 1 = |
| System Security | 0 = |
| Synchronize | = |
| Write Owner | = |
| | = |
| Write DAC | = |
| Read Control | = |
| Delete | = |
| Write Attributes | 0 = |
| Read Attributes | = |
| Delete Child | |

| Execute | = |
|----------|-----|
| Execute | = |
| Write EA | 0 = |
| Read EA | |
| Append | |
| | |
| Write | = |
| Read | |

The following example displays security information, including Storage-Level Access Guard security information, for the volume with the path /datavol1 in SVM vs1:

```
cluster::> vserver security file-directory show -vserver vs1 -path
/datavol1
                Vserver: vs1
              File Path: /datavol1
      File Inode Number: 77
         Security Style: ntfs
        Effective Style: ntfs
         DOS Attributes: 10
 DOS Attributes in Text: ----D---
Expanded Dos Attributes: -
           Unix User Id: 0
          Unix Group Id: 0
         Unix Mode Bits: 777
 Unix Mode Bits in Text: rwxrwxrwx
                   ACLs: NTFS Security Descriptor
                         Control:0x8004
                         Owner:BUILTIN\Administrators
                         Group:BUILTIN\Administrators
                         DACL - ACEs
                           ALLOW-Everyone-0x1f01ff
                           ALLOW-Everyone-0x10000000-OI|CI|IO
                         Storage-Level Access Guard security
                         SACL (Applies to Directories):
                           AUDIT-EXAMPLE\Domain Users-0x120089-FA
                           AUDIT-EXAMPLE\engineering-0x1f01ff-SA
                         DACL (Applies to Directories):
                           ALLOW-EXAMPLE\Domain Users-0x120089
                           ALLOW-EXAMPLE\engineering-0x1f01ff
                           ALLOW-NT AUTHORITY\SYSTEM-0x1f01ff
                         SACL (Applies to Files):
                           AUDIT-EXAMPLE\Domain Users-0x120089-FA
                           AUDIT-EXAMPLE\engineering-0x1f01ff-SA
                         DACL (Applies to Files):
                           ALLOW-EXAMPLE\Domain Users-0x120089
                           ALLOW-EXAMPLE\engineering-0x1f01ff
                           ALLOW-NT AUTHORITY\SYSTEM-0x1f01ff
```

Related information

Displaying information about file security on mixed security-style volumes

Displaying information about file security on UNIX security-style volumes

Display information about file security on mixed securitystyle volumes

You can display information about file and directory security on mixed security-style volumes, including what the security style and effective security styles are, what permissions are applied, and information about UNIX owners and groups. You can use the results to validate your security configuration or to troubleshoot file access issues.

About this task

You must supply the name of the storage virtual machine (SVM) and the path to the data whose file or folder security information you want to display. You can display the output in summary form or as a detailed list.

- Mixed security-style volumes and qtrees can contain some files and folders that use UNIX file permissions, either mode bits or NFSv4 ACLs, and some files and directories that use NTFS file permissions.
- The top level of a mixed security-style volume can have either UNIX or NTFS effective security.
- ACL output is displayed only for file and folders with NTFS or NFSv4 security.

This field is empty for files and directories using UNIX security that have only mode bit permissions applied (no NFSv4 ACLs).

- The owner and group output fields in the ACL output apply only in the case of NTFS security descriptors.
- Because Storage-Level Access Guard security can be configured on a mixed security-style volume or
 qtree even if the effective security style of the volume root or qtree is UNIX, output for a volume or qtree
 path where Storage-Level Access Guard is configured might display both UNIX file permissions and
 Storage-Level Access Guard ACLs.
- If the path entered in the command is to data with NTFS effective security, the output also displays information about Dynamic Access Control ACEs if Dynamic Access Control is configured for the given file or directory path.

Step

1. Display file and directory security settings with the desired level of detail:

| If you want to display information | Enter the following command |
|------------------------------------|---|
| In summary form | vserver security file-directory show -vserver vserver_name -path path |
| With expanded detail | vserver security file-directory show -vserver vserver_name -path path -expand-mask true |

Examples

The following example displays the security information about the path /projects in SVM vs1 in expanded-mask form. This mixed security-style path has UNIX effective security.

```
cluster1::> vserver security file-directory show -vserver vs1 -path
/projects -expand-mask true
              Vserver: vs1
            File Path: /projects
     File Inode Number: 78
        Security Style: mixed
       Effective Style: unix
        DOS Attributes: 10
 DOS Attributes in Text: ----D---
Expanded Dos Attributes: 0x10
    ...0 .... = Offline
    .... = Sparse
    \dots 0\dots = Normal
    .... = Archive
    .... = Directory
    .... .... .0.. = System
    .... .... .... ... ... = Hidden
    \dots 0 = Read Only
         Unix User Id: 0
        Unix Group Id: 1
        Unix Mode Bits: 700
 Unix Mode Bits in Text: rwx-----
                ACLs: -
```

The following example displays the security information about the path / data in SVM vs1. This mixed security-style path has an NTFS effective security.

```
cluster1::> vserver security file-directory show -vserver vs1 -path /data
                                 Vserver: vs1
                               File Path: /data
                       File Inode Number: 544
                          Security Style: mixed
                         Effective Style: ntfs
                          DOS Attributes: 10
                  DOS Attributes in Text: ----D---
                 Expanded Dos Attributes: -
                            Unix User Id: 0
                           Unix Group Id: 0
                          Unix Mode Bits: 777
                  Unix Mode Bits in Text: rwxrwxrwx
                                    ACLs: NTFS Security Descriptor
                                          Control:0x8004
                                          Owner:BUILTIN\Administrators
                                          Group:BUILTIN\Administrators
                                          DACL - ACEs
                                            ALLOW-Everyone-0x1f01ff
                                            ALLOW-Everyone-0x1000000-
OI|CI|IO
```

The following example displays the security information about the volume at the path /datavol5 in SVM vs1. The top level of this mixed security-style volume has UNIX effective security. The volume has Storage-Level Access Guard security.

```
cluster1::> vserver security file-directory show -vserver vs1 -path
/datavol5
                Vserver: vs1
              File Path: /datavol5
      File Inode Number: 3374
         Security Style: mixed
        Effective Style: unix
         DOS Attributes: 10
 DOS Attributes in Text: ----D---
Expanded Dos Attributes: -
           Unix User Id: 0
          Unix Group Id: 0
         Unix Mode Bits: 755
 Unix Mode Bits in Text: rwxr-xr-x
                   ACLs: Storage-Level Access Guard security
                         SACL (Applies to Directories):
                           AUDIT-EXAMPLE\Domain Users-0x120089-FA
                           AUDIT-EXAMPLE\engineering-0x1f01ff-SA
                           AUDIT-EXAMPLE\market-0x1f01ff-SA
                         DACL (Applies to Directories):
                           ALLOW-BUILTIN\Administrators-0x1f01ff
                           ALLOW-CREATOR OWNER-0x1f01ff
                           ALLOW-EXAMPLE\Domain Users-0x120089
                           ALLOW-EXAMPLE\engineering-0x1f01ff
                           ALLOW-EXAMPLE\market-0x1f01ff
                         SACL (Applies to Files):
                           AUDIT-EXAMPLE\Domain Users-0x120089-FA
                           AUDIT-EXAMPLE\engineering-0x1f01ff-SA
                           AUDIT-EXAMPLE\market-0x1f01ff-SA
                         DACL (Applies to Files):
                           ALLOW-BUILTIN\Administrators-0x1f01ff
                           ALLOW-CREATOR OWNER-0x1f01ff
                           ALLOW-EXAMPLE\Domain Users-0x120089
                           ALLOW-EXAMPLE\engineering-0x1f01ff
                           ALLOW-EXAMPLE\market-0x1f01ff
```

Related information

Displaying information about file security on NTFS security-style volumes

Displaying information about file security on UNIX security-style volumes

Display information about file security on UNIX securitystyle volumes

You can display information about file and directory security on UNIX security-style

volumes, including what the security styles and effective security styles are, what permissions are applied, and information about UNIX owners and groups. You can use the results to validate your security configuration or to troubleshoot file access issues.

About this task

You must supply the name of the storage virtual machine (SVM) and the path to the data whose file or directory security information you want to display. You can display the output in summary form or as a detailed list.

- UNIX security-style volumes and qtrees use only UNIX file permissions, either mode bits or NFSv4 ACLs when determining file access rights.
- ACL output is displayed only for file and folders with NFSv4 security.

This field is empty for files and directories using UNIX security that have only mode bit permissions applied (no NFSv4 ACLs).

• The owner and group output fields in the ACL output does not apply in the case of NFSv4 security descriptors.

They are only meaningful for NTFS security descriptors.

 Because Storage-Level Access Guard security is supported on a UNIX volume or qtree if a CIFS server is configured on the SVM, the output might contain information about Storage-Level Access Guard security applied to the volume or qtree specified in the -path parameter.

Step

1. Display file and directory security settings with the desired level of detail:

| If you want to display information | Enter the following command |
|------------------------------------|--|
| In summary form | <pre>vserver security file-directory show -vserver vserver_name -path path</pre> |
| With expanded detail | <pre>vserver security file-directory show -vserver vserver_name -path path -expand-mask true</pre> |

Examples

The following example displays the security information about the path /home in SVM vs1:

```
cluster1::> vserver security file-directory show -vserver vs1 -path /home

Vserver: vs1
File Path: /home
File Inode Number: 9590
Security Style: unix
Effective Style: unix
DOS Attributes: 10
DOS Attributes: 10
DOS Attributes in Text: ----D---
Expanded Dos Attributes: -
Unix User Id: 0
Unix Group Id: 1
Unix Mode Bits: 700
Unix Mode Bits in Text: rwx-----
ACLs: -
```

The following example displays the security information about the path /home in SVM vs1 in expanded-mask form:

```
cluster1::> vserver security file-directory show -vserver vs1 -path /home
-expand-mask true
                             Vserver: vs1
                           File Path: /home
                    File Inode Number: 9590
                       Security Style: unix
                      Effective Style: unix
                       DOS Attributes: 10
                DOS Attributes in Text: ----D---
               Expanded Dos Attributes: 0x10
                   ...0 .... = Offline
                   .... = Sparse
                   \dots 0\dots = Normal
                   .... = Archive
                   .... = Directory
                   .... .... .0.. = System
                   .... .... .... ... ... = Hidden
                   \dots 0 = Read Only
                        Unix User Id: 0
                        Unix Group Id: 1
                       Unix Mode Bits: 700
                Unix Mode Bits in Text: rwx-----
                                ACLs: -
```

Related information

Displaying information about file security on NTFS security-style volumes

Displaying information about file security on mixed security-style volumes

Display information about NTFS audit policies on FlexVol volumes using the CLI

You can display information about NTFS audit policies on FlexVol volumes, including what the security styles and effective security styles are, what permissions are applied, and information about system access control lists. You can use the results to validate your security configuration or to troubleshoot auditing issues.

About this task

You must provide the name of the storage virtual machine (SVM) and the path to the files or folders whose audit information you want to display. You can display the output in summary form or as a detailed list.

- NTFS security-style volumes and qtrees use only NTFS system access control lists (SACLs) for audit
 policies.
- Files and folders in a mixed security-style volume with NTFS effective security can have NTFS audit
 policies applied to them.

Mixed security-style volumes and qtrees can contain some files and directories that use UNIX file permissions, either mode bits or NFSv4 ACLs, and some files and directories that use NTFS file permissions.

- The top level of a mixed security-style volume can have either UNIX or NTFS effective security and might or might not contain NTFS SACLs.
- Because Storage-Level Access Guard security can be configured on a mixed security-style volume or
 qtree even if the effective security style of the volume root or qtree is UNIX, the output for a volume or qtree
 path where Storage-Level Access Guard is configured might display both regular file and folder NFSv4
 SACLs and Storage-Level Access Guard NTFS SACLs.
- If the path that is entered in the command is to data with NTFS effective security, the output also displays information about Dynamic Access Control ACEs if Dynamic Access Control is configured for the given file or directory path.
- When displaying security information about files and folders with NTFS effective security, UNIX-related output fields contain display-only UNIX file permission information.

NTFS security-style files and folders use only NTFS file permissions and Windows users and groups when determining file access rights.

· ACL output is displayed only for files and folders with NTFS or NFSv4 security.

This field is empty for files and folders using UNIX security that have only mode bit permissions applied (no NFSv4 ACLs).

The owner and group output fields in the ACL output apply only in the case of NTFS security descriptors.

Step

1. Display file and directory audit policy settings with the desired level of detail:

| If you want to display information | Enter the following command |
|------------------------------------|---|
| In summary form | vserver security file-directory show -vserver vserver_name -path path |
| As a detailed list | vserver security file-directory show -vserver vserver_name -path path -expand-mask true |

Examples

The following example displays the audit policy information for the path /corp in SVM vs1. The path has NTFS effective security. The NTFS security descriptor contains both a SUCCESS and a SUCCESS/FAIL SACL entry.

```
cluster::> vserver security file-directory show -vserver vs1 -path /corp
                Vserver: vs1
              File Path: /corp
      File Inode Number: 357
         Security Style: ntfs
        Effective Style: ntfs
         DOS Attributes: 10
 DOS Attributes in Text: ----D---
Expanded Dos Attributes: -
           Unix User Id: 0
          Unix Group Id: 0
         Unix Mode Bits: 777
 Unix Mode Bits in Text: rwxrwxrwx
                   ACLs: NTFS Security Descriptor
                         Control:0x8014
                         Owner: DOMAIN\Administrator
                         Group:BUILTIN\Administrators
                         SACL - ACEs
                           ALL-DOMAIN\Administrator-0x100081-OI|CI|SA|FA
                           SUCCESSFUL-DOMAIN\user1-0x100116-0I|CI|SA
                         DACL - ACEs
                           ALLOW-BUILTIN\Administrators-0x1f01ff-OI|CI
                           ALLOW-BUILTIN\Users-0x1f01ff-OI|CI
                           ALLOW-CREATOR OWNER-0x1f01ff-OI|CI
                           ALLOW-NT AUTHORITY\SYSTEM-0x1f01ff-OI|CI
```

The following example displays the audit policy information for the path /datavol1 in SVM vs1. The path contains both regular file and folder SACLs and Storage-Level Access Guard SACLs.

cluster::> vserver security file-directory show -vserver vs1 -path /datavol1 Vserver: vs1 File Path: /datavol1 File Inode Number: 77 Security Style: ntfs Effective Style: ntfs DOS Attributes: 10 DOS Attributes in Text: ----D---Expanded Dos Attributes: -Unix User Id: 0 Unix Group Id: 0 Unix Mode Bits: 777 Unix Mode Bits in Text: rwxrwxrwx ACLs: NTFS Security Descriptor Control: 0xaa14 Owner:BUILTIN\Administrators Group:BUILTIN\Administrators SACL - ACEs AUDIT-EXAMPLE\marketing-0xf01ff-OI|CI|FA DACL - ACEs ALLOW-EXAMPLE\Domain Admins-0x1f01ff-OI|CI ALLOW-EXAMPLE\marketing-0x1200a9-OI|CI Storage-Level Access Guard security SACL (Applies to Directories): AUDIT-EXAMPLE\Domain Users-0x120089-FA AUDIT-EXAMPLE\engineering-0x1f01ff-SA DACL (Applies to Directories): ALLOW-EXAMPLE\Domain Users-0x120089 ALLOW-EXAMPLE\engineering-0x1f01ff ALLOW-NT AUTHORITY\SYSTEM-0x1f01ff SACL (Applies to Files): AUDIT-EXAMPLE\Domain Users-0x120089-FA AUDIT-EXAMPLE\engineering-0x1f01ff-SA DACL (Applies to Files): ALLOW-EXAMPLE\Domain Users-0x120089 ALLOW-EXAMPLE\engineering-0x1f01ff ALLOW-NT AUTHORITY\SYSTEM-0x1f01ff

Display information about NFSv4 audit policies on FlexVol volumes using the CLI

You can display information about NFSv4 audit policies on FlexVol volumes using the ONTAP CLI, including what the security styles and effective security styles are, what permissions are applied, and information about system access control lists (SACLs). You can use the results to validate your security configuration or to troubleshoot auditing issues.

About this task

You must supply the name of the storage virtual machine (SVM) and the path to the files or directories whose audit information you want to display. You can display the output in summary form or as a detailed list.

- UNIX security-style volumes and gtrees use only NFSv4 SACLs for audit policies.
- Files and directories in a mixed security-style volume that are of UNIX security style can have NFSv4 audit policies applied to them.

Mixed security-style volumes and qtrees can contain some files and directories that use UNIX file permissions, either mode bits or NFSv4 ACLs, and some files and directories that use NTFS file permissions.

- The top level of a mixed security-style volume can have either UNIX or NTFS effective security and might or might not contain NFSv4 SACLs.
- ACL output is displayed only for file and folders with NTFS or NFSv4 security.

This field is empty for files and folders using UNIX security that have only mode bit permissions applied (no NFSv4 ACLs).

- The owner and group output fields in the ACL output apply only in the case of NTFS security descriptors.
- Because Storage-Level Access Guard security can be configured on a mixed security-style volume or
 qtree even if the effective security style of the volume root or qtree is UNIX, output for a volume or qtree
 path where Storage-Level Access Guard is configured might display both regular NFSv4 file and directory
 SACLs and Storage-Level Access Guard NTFS SACLs.
- Because Storage-Level Access Guard security is supported on a UNIX volume or qtree if a CIFS server is configured on the SVM, the output might contain information about Storage-Level Access Guard security applied to the volume or qtree specified in the -path parameter.

Steps

1. Display file and directory security settings with the desired level of detail:

| If you want to display information | Enter the following command |
|------------------------------------|---|
| In summary form | vserver security file-directory show -vserver vserver_name -path path |
| With expanded detail | vserver security file-directory show -vserver vserver_name -path path -expand-mask true |

Examples

The following example displays the security information about the path /lab in SVM vs1. This UNIX security-style path has an NFSv4 SACL.

```
cluster::> vserver security file-directory show -vserver vs1 -path /lab
                Vserver: vs1
              File Path: /lab
      File Inode Number: 288
         Security Style: unix
        Effective Style: unix
         DOS Attributes: 11
 DOS Attributes in Text: ----D--R
Expanded Dos Attributes: -
           Unix User Id: 0
          Unix Group Id: 0
         Unix Mode Bits: 0
 Unix Mode Bits in Text: -----
                   ACLs: NFSV4 Security Descriptor
                         Control:0x8014
                         SACL - ACEs
                           SUCCESSFUL-S-1-520-0-0xf01ff-SA
                           FAILED-S-1-520-0-0xf01ff-FA
                         DACL - ACEs
                           ALLOW-S-1-520-1-0xf01ff
```

Ways to display information about file security and audit policies

You can use the wildcard character (*) to display information about file security and audit policies of all files and directories under a given path or a root volume.

The wildcard character () can be used as the last subcomponent of a given directory path below which you want to display information of all files and directories. If you want to display information of a particular file or directory named as "", then you need to provide the complete path inside double quotes ("``").

Example

The following command with the wildcard character displays the information about all files and directories below the path /1/ of SVM vs1:

```
cluster::> vserver security file-directory show -vserver vs1 -path /1/*
                    Vserver: vs1
                  File Path: /1/1
             Security Style: mixed
            Effective Style: ntfs
             DOS Attributes: 10
     DOS Attributes in Text: ----D---
   Expanded Dos Attributes: -
               Unix User Id: 0
              Unix Group Id: 0
             Unix Mode Bits: 777
     Unix Mode Bits in Text: rwxrwxrwx
                       ACLs: NTFS Security Descriptor
                             Control:0x8514
                             Owner:BUILTIN\Administrators
                             Group:BUILTIN\Administrators
                             DACL - ACEs
                             ALLOW-Everyone-0x1f01ff-OI|CI (Inherited)
                    Vserver: vs1
                  File Path: /1/1/abc
             Security Style: mixed
            Effective Style: ntfs
             DOS Attributes: 10
     DOS Attributes in Text: ----D---
   Expanded Dos Attributes: -
               Unix User Id: 0
              Unix Group Id: 0
             Unix Mode Bits: 777
     Unix Mode Bits in Text: rwxrwxrwx
                       ACLs: NTFS Security Descriptor
                             Control:0x8404
                             Owner:BUILTIN\Administrators
                             Group:BUILTIN\Administrators
                             DACL - ACEs
                             ALLOW-Everyone-0x1f01ff-OI|CI (Inherited)
```

The following command displays the information of a file named as "*" under the path /vol1/a of SVM vs1. The path is enclosed within double quotes (" ").

cluster::> vserver security file-directory show -vserver vs1 -path
"/vol1/a/*"

Vserver: vs1

File Path: "/vol1/a/*"

Security Style: mixed Effective Style: unix DOS Attributes: 10

DOS Attributes in Text: ----D---

Expanded Dos Attributes: -

Unix User Id: 1002 Unix Group Id: 65533 Unix Mode Bits: 755

Unix Mode Bits in Text: rwxr-xr-x

ACLs: NFSV4 Security Descriptor

Control:0x8014
SACL - ACEs

AUDIT-EVERYONE@-0x1f01bf-FI|DI|SA|FA

DACL - ACES

ALLOW-EVERYONE@-0x1f00a9-FI|DI ALLOW-OWNER@-0x1f01ff-FI|DI ALLOW-GROUP@-0x1200a9-IG

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.