



Create a file and directory auditing configuration on SVMs

ONTAP 9

NetApp
April 21, 2023

Table of Contents

- Create a file and directory auditing configuration on SVMs 1
 - Create the auditing configuration 1
 - Enable auditing on the SVM. 2
 - Verify the auditing configuration 3

Create a file and directory auditing configuration on SVMs

Create the auditing configuration

Creating a file and directory auditing configuration on your storage virtual machine (SVM) includes understanding the available configuration options, planning the configuration, and then configuring and enabling the configuration. You can then display information about the auditing configuration to confirm that the resultant configuration is the desired configuration.

Before you can begin auditing file and directory events, you must create an auditing configuration on the storage virtual machine (SVM).

Before you begin

If you plan on creating an auditing configuration for central access policy staging, a SMB server must exist on the SVM.



- Although you can enable central access policy staging in the auditing configuration without enabling Dynamic Access Control on the SMB server, central access policy staging events are generated only if Dynamic Access Control is enabled.

Dynamic Access Control is enabled through a SMB server option. It is not enabled by default.
- If the arguments of a field in a command is invalid, for example, invalid entries for fields, duplicate entries, and non-existent entries, then the command fails before the audit phase.

Such failures do not generate an audit record.

About this task

If the SVM is an SVM disaster recovery source, the destination path cannot be on the root volume.

Step

1. Using the information in the planning worksheet, create the auditing configuration to rotate audit logs based on log size or a schedule:

If you want to rotate audit logs by...	Enter...
Log size	<code>vserver audit create -vserver vserver_name -destination path -events [{file-ops cifs-logon-logoff cap-staging file-share audit-policy-change user-account security-group authorization-policy-change}] [-format {xml evtx}] [-rotate-limit integer] [-rotate-size {integer[KB MB GB TB PB]}]</code>

A schedule

```
vserver audit create -vserver vserver_name  
-destination path -events [{file-ops|cifs-logon-  
logoff|cap-staging}] [-format {xml|evtx}] [-rotate-  
limit integer] [-rotate-schedule-month chron_month] [-  
rotate-schedule-dayofweek chron_dayofweek] [-rotate-  
schedule-day chron_dayofmonth] [-rotate-schedule-hour  
chron_hour] -rotate-schedule-minute chron_minute
```



The `-rotate-schedule-minute` parameter is required if you are configuring time-based audit log rotation.

Examples

The following example creates an auditing configuration that audits file operations and SMB logon and logoff events (the default) using size-based rotation. The log format is `EVTX` (the default). The logs are stored in the `/audit_log` directory. The log file size limit is 200 MB. The logs are rotated when they reach 200 MB in size:

```
cluster1::> vserver audit create -vserver vs1 -destination /audit_log  
-rotate-size 200MB
```

The following example creates an auditing configuration that audits file operations and SMB logon and logoff events (the default) using size-based rotation. The log format is `EVTX` (the default). The log file size limit is 100 MB (the default), and the log rotation limit is 5:

```
cluster1::> vserver audit create -vserver vs1 -destination /audit_log  
-rotate-limit 5
```

The following example creates an auditing configuration that audits file operations, CIFS logon and logoff events, and central access policy staging events using time-based rotation. The log format is `EVTX` (the default). The audit logs are rotated monthly, at 12:30 p.m. on all days of the week. The log rotation limit is 5:

```
cluster1::> vserver audit create -vserver vs1 -destination /audit_log  
-events file-ops,cifs-logon-logoff,file-share,audit-policy-change,user-  
account,security-group,authorization-policy-change,cap-staging -rotate  
-schedule-month all -rotate-schedule-dayofweek all -rotate-schedule-hour  
12 -rotate-schedule-minute 30 -rotate-limit 5
```

Enable auditing on the SVM

After you finish setting up the auditing configuration, you must enable auditing on the storage virtual machine (SVM).

What you'll need

The SVM audit configuration must already exist.

About this task

When an SVM disaster recovery ID discard configuration is first started (after the SnapMirror initialization is complete) and the SVM has an auditing configuration, ONTAP automatically disables the auditing configuration. Auditing is disabled on the read-only SVM to prevent the staging volumes from filling up. You can enable auditing only after the SnapMirror relationship is broken and the SVM is read-write.

Step

1. Enable auditing on the SVM:

```
vserver audit enable -vserver vserver_name
```

```
vserver audit enable -vserver vs1
```

Verify the auditing configuration

After completing the auditing configuration, you should verify that auditing is configured properly and is enabled.

Steps

1. Verify the auditing configuration:

```
vserver audit show -instance -vserver vserver_name
```

The following command displays in list form all auditing configuration information for storage virtual machine (SVM) vs1:

```
vserver audit show -instance -vserver vs1
```

```

                Vserver: vs1
            Auditing state: true
        Log Destination Path: /audit_log
Categories of Events to Audit: file-ops
                Log Format: evtX
            Log File Size Limit: 200MB
    Log Rotation Schedule: Month: -
Log Rotation Schedule: Day of Week: -
        Log Rotation Schedule: Day: -
        Log Rotation Schedule: Hour: -
Log Rotation Schedule: Minute: -
            Rotation Schedules: -
        Log Files Rotation Limit: 0
```

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.