QNAP NAS

Auditing Guide

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Overview of QNAP NAS auditing

ManageEngine ADAudit Plus audits the following file events in QNAP network attached storage (NAS):

- Creation

- Modification

- Deletion

- Move

- Rename

- Read access

File storage auditing with ADAudit Plus offers several advantages:

- Enables single console auditing across hybrid Windows, EMC, NetApp, Huawei, Hitachi, Synology, Amazon FSx, QNAP, and more.

- Enhances threat response with user behavior analytics-driven anomaly detection, real-time email and SMS alerts, and automated responses.

- Provides built-in reports for various regulations, such as HIPAA, the GDPR, FISMA, SOX, and PCI DSS.

Configuring QNAP NAS auditing

This page describes the steps to configure your target QNAP network attached storage (NAS) device to send audit logs and add a QNAP NAS server to the ADAudit Plus console.

Configuring log settings and forwarding

To set up communication between ADAudit Plus and the target QNAP NAS server and to enable log forwarding, follow these steps:

1. In the QuLog Center, navigate to **Local device > Log Settings > Access Log Settings.**
2. Under Connection Types, select **SMB (Windows)** and click **Apply.**
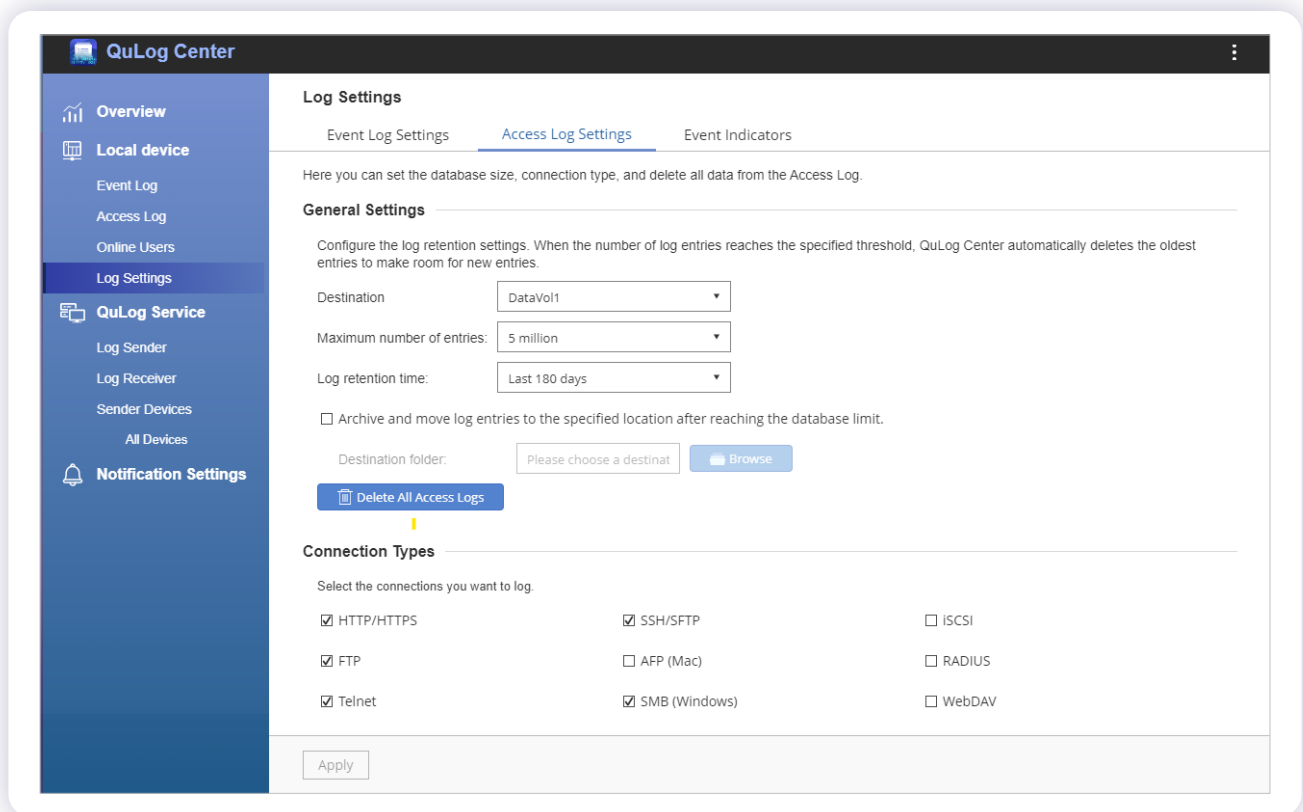
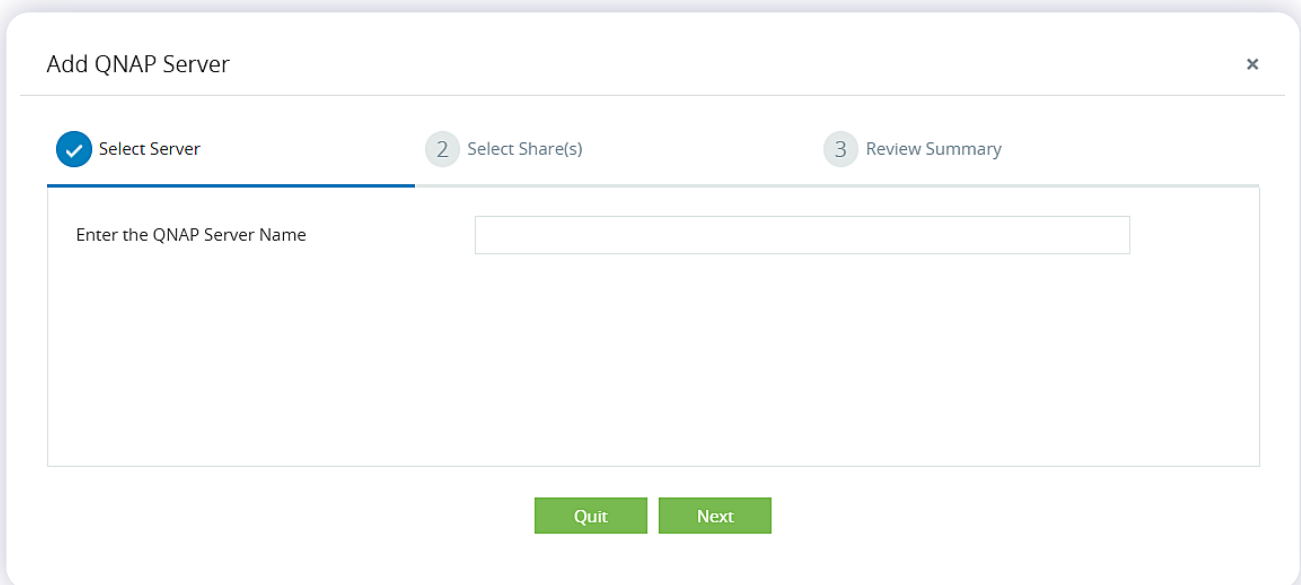3. Then, navigate to **QuLog Service > Log Sender.** Enable **Send logs to a remote QuLog Center.**
4. Click **Add Destination.** In the resulting pop-up, enter the following details:

    a. The IP address of the machine where ADAudit Plus is installed.

    b. The preferred port number, 514 by default.

    c. The transfer protocol, UDP.

    d. Select **Access Log** as the Log type.

5. Click **Apply.**
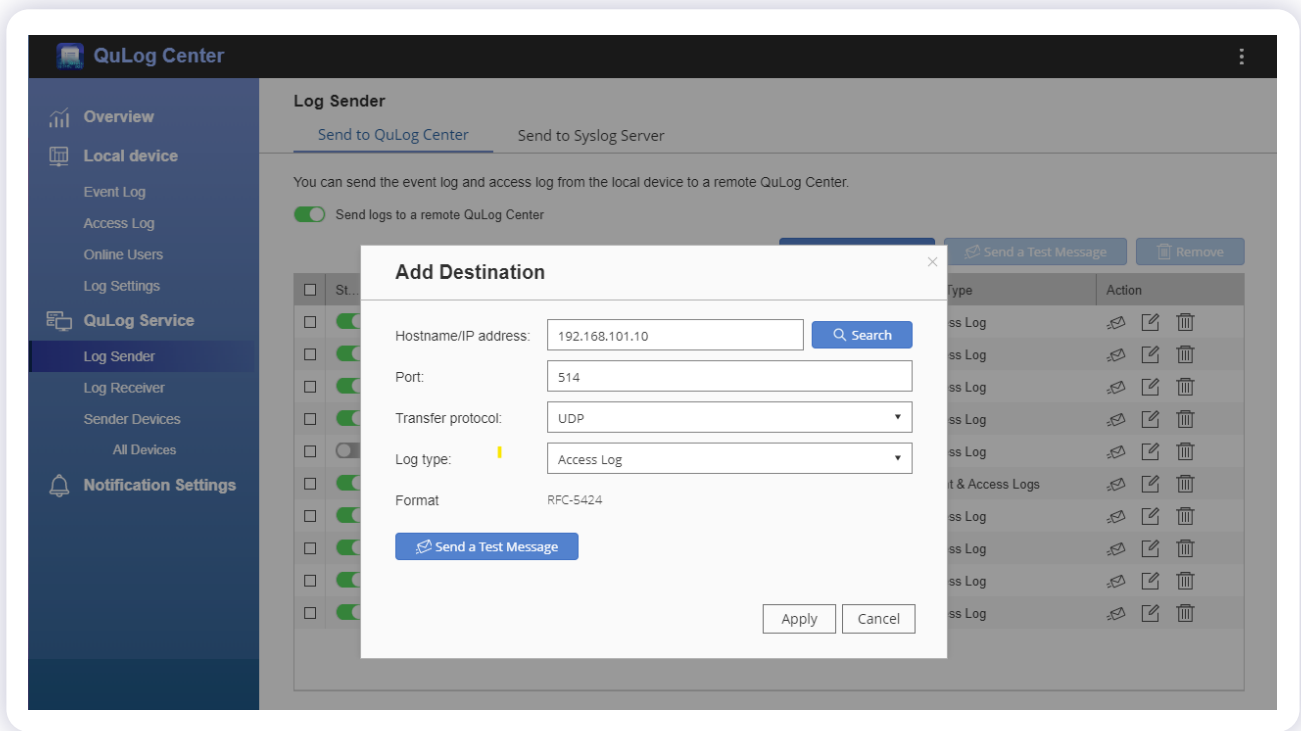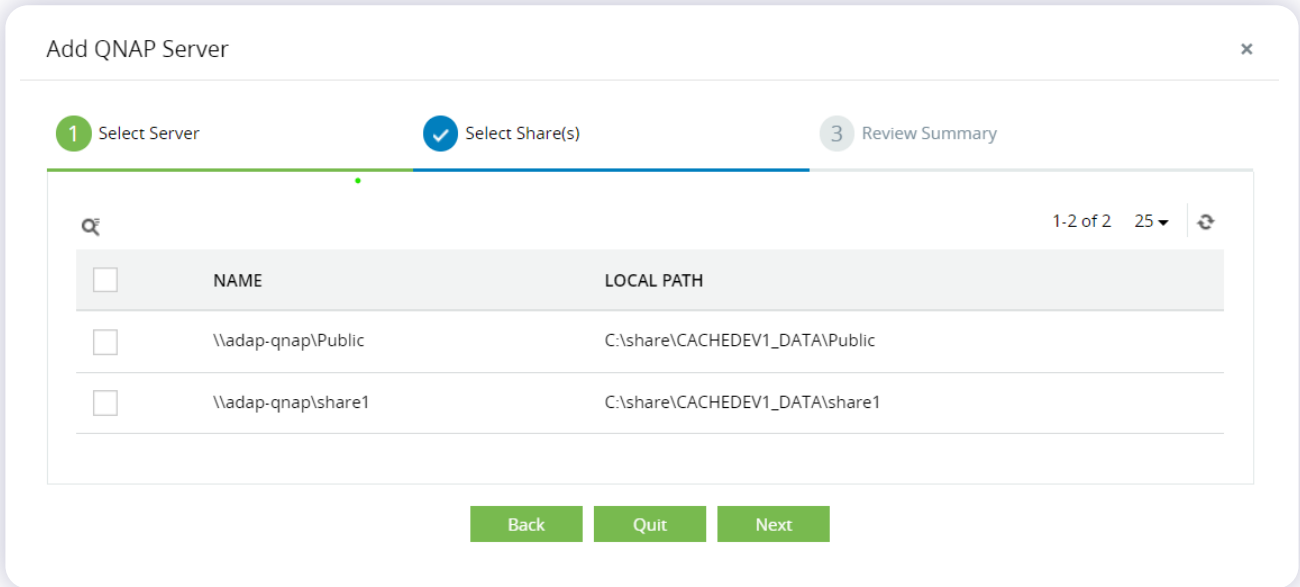
Adding QNAP NAS servers

To add your target servers to the ADAudit Plus console for auditing, follow these steps:
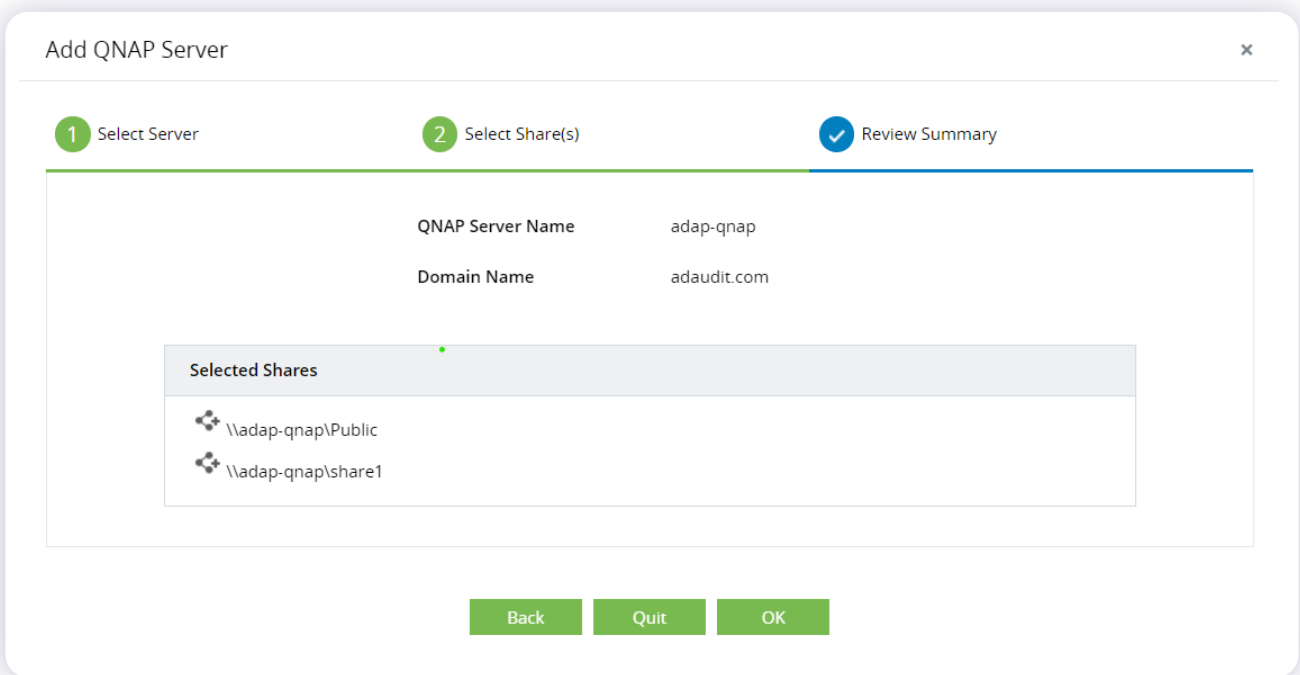
1. Log in to the ADAudit Plus web console with admin credentials.

2. Navigate to the tab **File Audit > Configured Server(s) > QNAP NAS** and click **Add Server** in the top-right corner.

3. In the Add QNAP Server pop-up, enter the name of the target server. Click **Next.**

4. Select the shares you wish to audit and click **Next**.

Add QNAP Server ✕

① Select Server ✓ Select Share(s) ③ Review Summary

	NAME	LOCAL PATH
☐	\\adap-qnap\Public	C:\share\CACHEDEV1_DATA\Public
☐	\\adap-qnap\share1	C:\share\CACHEDEV1_DATA\share1

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Back   Quit   Next

5. Review your selection and click **OK**.

Add QNAP Server ✕

① Select Server ② Select Share(s) ✓ Review Summary

QNAP Server Name   adap-qnap

**Domain Name**   adaudit.com

Selected Shares

\\adap-qnap\Public

\\adap-qnap\share1

Back   Quit   OK

Exclude Configuration

Files/folders can be excluded based on File/folder local path, file type, process name, and user name by using the **Exclude Configuration** setting.

Log in to ADAudit Plus' web console ➝ Go to the **File Audit** tab, navigate to the left pane, click on Configuration and then on **Exclude Configuration** ➝ Choose to exclude by **File/Folder** local path, **File Type, Process Name**, or Users ➝ Click on '+', and configure the necessary settings.
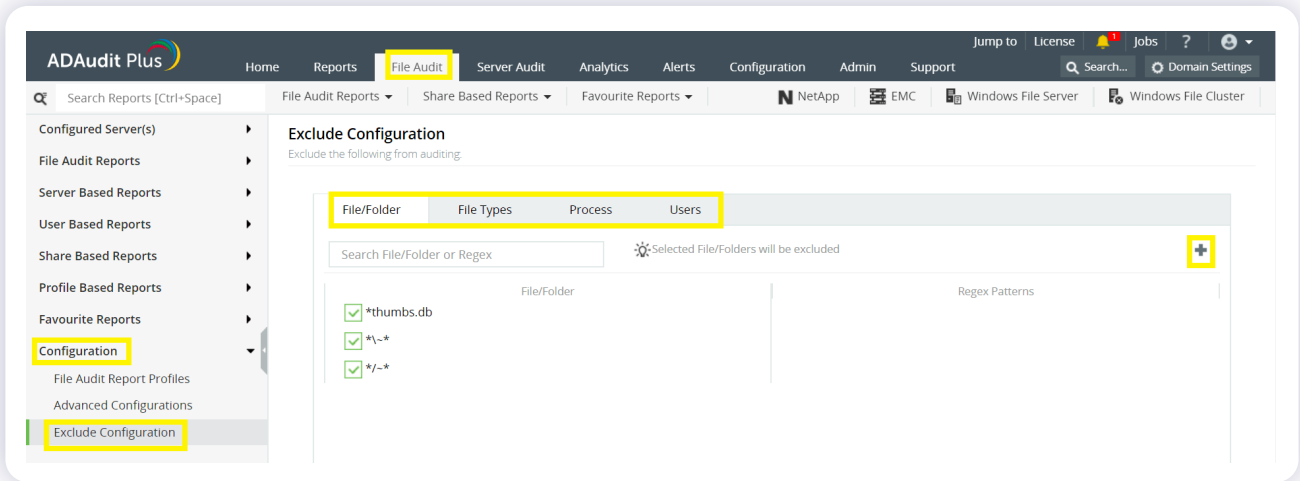
Example scenarios, to exclude by File/Folder local path:

Objective	To exclude a folder and all of its subfolders and files	
Share configured	Share path	Local path
	\\SERVER_NAME\share_name	C:\sharefolder
Path of folder that is to be excluded	C:\sharefolder\excludefolder	
File/Folder or Regex Patterns	File/Folder Patterns	
Syntax	C:\sharefolder\excludefolder C:\sharefolder\excludefolder*	
What will get excluded	C:\sharefolder\excludefolder C:\sharefolder\excludefolder\folder C:\sharefolder\excludefolder\files.txt C:\sharefolder\excludefolder\folder\files.txt	

What won't get excluded	–
Objective	To exclude "AppData" folder for every user profile
Share and folder path	\\SERVER_NAME\Users C:\Users
Path of folder that is to be excluded	C:\Users\user1\AppData
File/Folder or Regex Patterns	Regex Patterns
Syntax	C:\\Users\\[^\\]*\\AppData
What will get excluded	C:\Users\user1\AppData C:\Users\user2\AppData C:\Users\user1\AppData\subfolder C:\Users\user2\AppData\subfolder
What won't get excluded	C:\Users\user1\subfolder\AppData C:\Users\user2\subfolder\AppData

Objective	**To exclude files from a specific folder but audit all subfolders and its contents**
Share configured	\\SERVER_NAME\share_name C:\sharefolder
Path of folder that is to be excluded	C:\sharefolder\excludefolder
File/Folder or Regex Patterns	Regex Patterns
Syntax	^C:\\sharefolder\\excludefolder\\[^\\]*\.[^\\]*$
What will get excluded	C:\sharefolder\excludefolder\file.txt C:\sharefolder\excludefolder\folder.withDot
What will get excluded	C:\sharefolder\excludefolder C:\sharefolder\excludefolder\folderWithoutDot C:\sharefolder\excludefolder\folderWithoutDot\subfolder C:\sharefolder\excludefolder\folderWithoutDot\testfile.txt C:\sharefolder\excludefolder\folder.withDot\subfolder C:\sharefolder\excludefolder\folder.withDot\testfile.txt

Troubleshooting QNAP NAS auditing

Understand and resolve some common issues you might face while auditing your QNAP network attached storage (NAS) servers using ADAudit Plus.

1. **"Yet to fetch event data" / "The timestamp is not updated" / "No data is received"**

   Ensure that the IP address of the ADAudit Plus server is configured in the QuLog Center in order to receive forwarded logs.

2. **"Error in getting shares" / "Access is denied"**

   Ensure that the user configured under Domain Settings has permission to read the target shares from the MMC snap-in.

3. **"Error - Syslog Listening stopped"**

   On the ADAudit Plus web console, navigate to **Admin > General Settings > Connection > General.** Set Current Syslog Status to **On.**