

Setting up Quest® QoreStor™ as an RDA Backup Target for NetVault Backup

Technical White Paper

Quest Engineering

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Legend



WARNING: A WARNING icon indicates a potential for property damage, personal injury, or death



CAUTION: A CAUTION icon indicates potential damage to hardware or loss of data if instructions are not followed.



IMPORTANT, NOTE, TIP, MOBILE, or VIDEO: An information icon indicates supporting information.

Setting up Quest® QoreStor™ as an RDA Backup Target for NetVault Backup

Updated – June 14, 2018

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Executive Summary

This white paper provides information about how to set up QoreStor as a backup target for Netvault Backup. This document is a quick reference guide and does not include all QoreStor deployment best practices.

For additional information, see the QoreStor documentation and other data management application best practices whitepapers at:

<http://support.quest.com/qorestor>

For more information about NetVault Backup, refer to the NetVault documentation at:

<https://support.quest.com/productline/netvault>

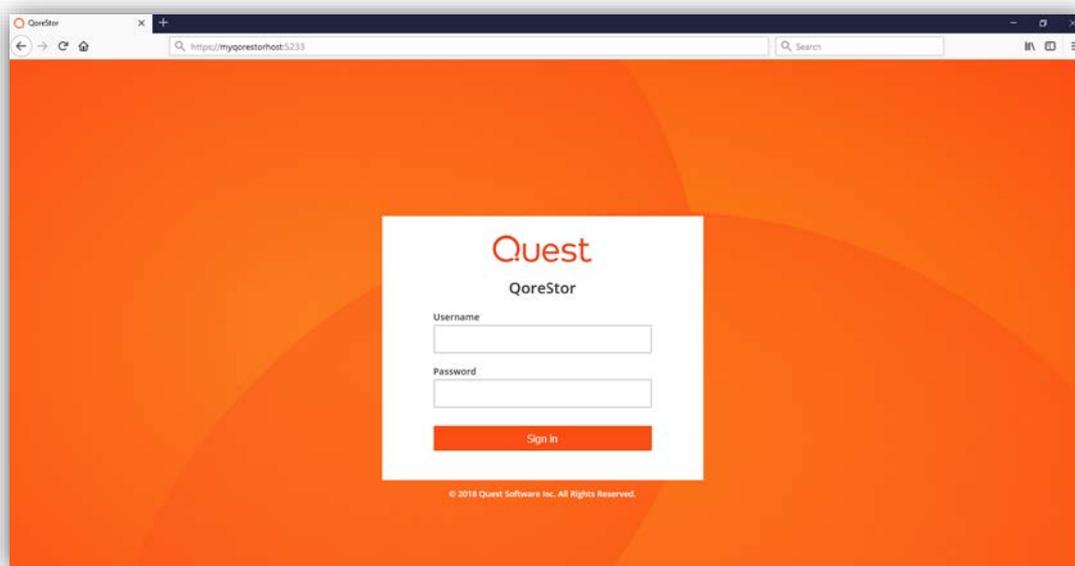


NOTE: The QoreStor and NetVault Backup screenshots used in this document might vary slightly depending on QoreStor version and NetVault Backup version you are using.

Installing and configuring QoreStor

1. Before installing QoreStor, refer to the *QoreStor Interoperability Guide* to ensure your system(s) meet the installation requirements.
2. To install QoreStor on your system(s), follow the procedures documented in the *QoreStor Installation Guide*.

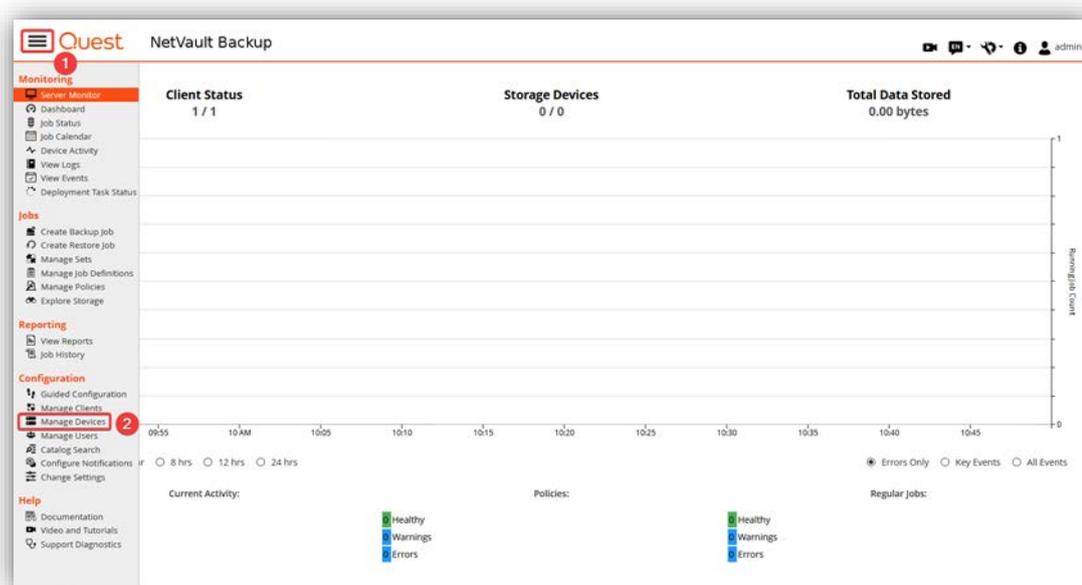
Using a supported web browser (refer to *QoreStor Interoperability Guide* for a list of supported browsers), connect to the QoreStor administrative console via https, using the host IP address/FQDN and port 5233 (<https://<hostname>:5233>). Log in with the username `admin` and password `St0r@ge!` (The “0” in the password is the numeral zero)



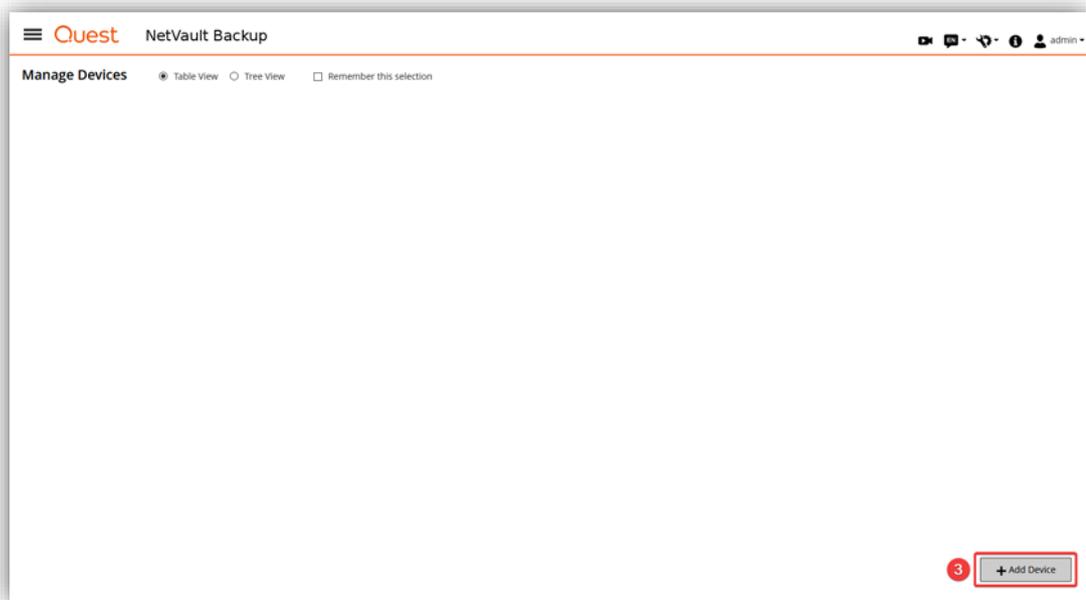
3. By default, QoreStor has a user with RDA Role named `backup_user` and password “St0r@ge!”. Refer to the *QoreStor User Guide* for information on changing user accounts.

Adding a QoreStor device to NetVault Backup

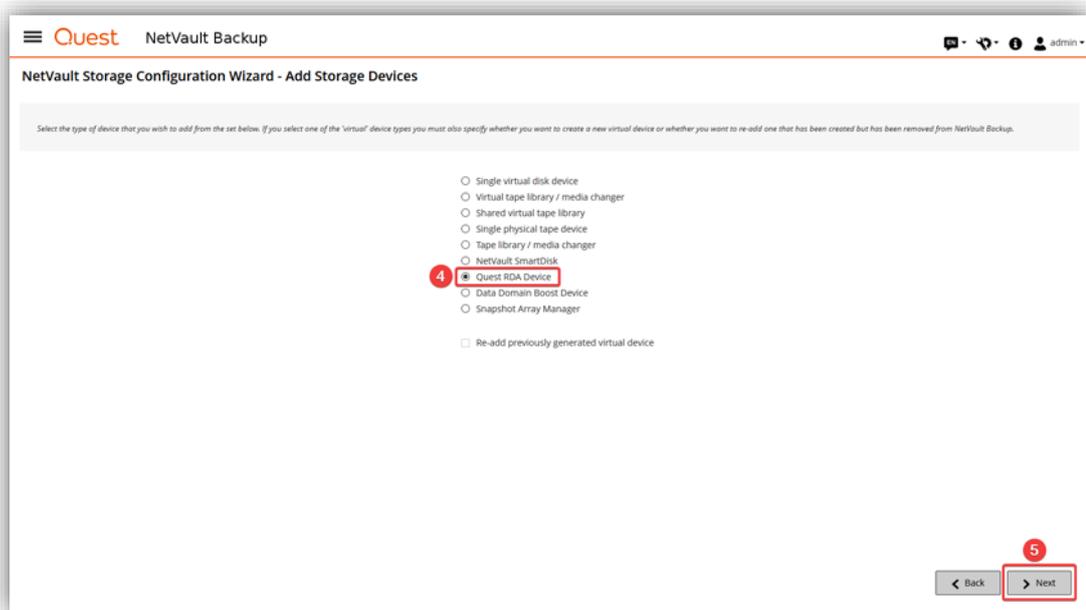
1. Open the NetVault Backup UI
2. Open the **menu drawer** ❶, and select **Manage Devices** ❷



3. Click the **Add Device** button ❸

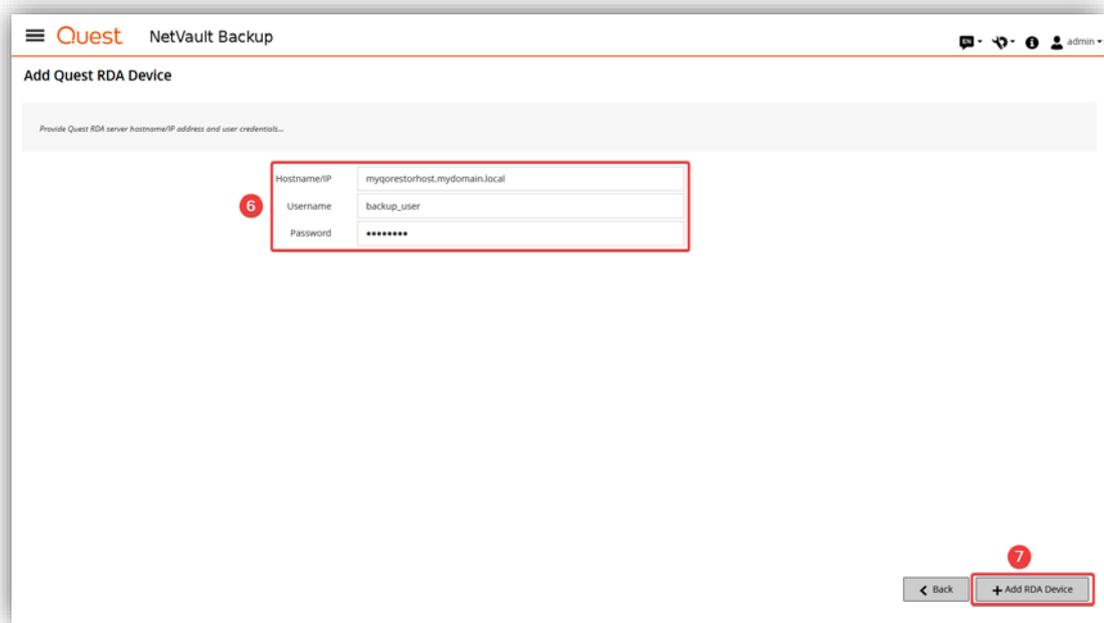


4. Select **Quest RDA Device** ④ and click the **Next** button ⑤



i **NOTE:** If using NetVault 11.4.5 select **Add Quest DR Device**.

5. Specify the:
 - IP Address or FQDN of the QoreStor host,
 - RDA Username
 - Password ⑥
6. Click the **Add RDA Device** button ⑦.

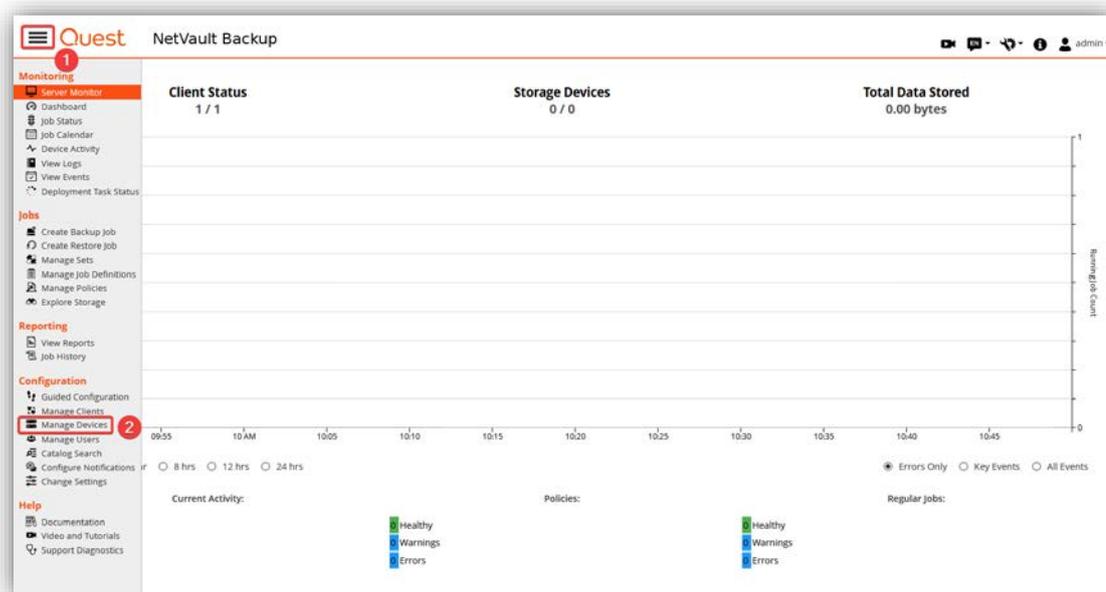


i **NOTE:** The default username is `backup_user` and the password is `St0r@ge!` (The “0” in the password is the numeral zero). If you wish to change this, please refer to the *QoreStor User Guide* for specific steps.

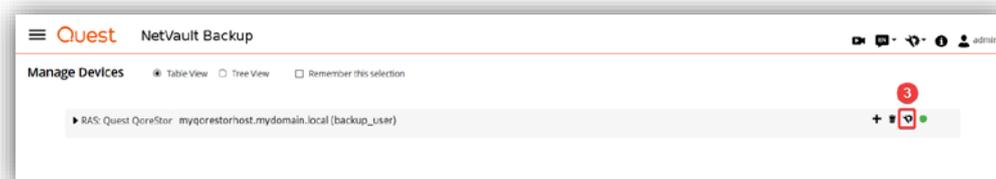
Creating an RDS container for NetVault Backup

This section provides information needed to create an RDS container for NetVault Backup using the NetVault Backup UI. If you wish to use the QoreStor administrative console or CLI, please refer to the *QoreStor User Guide* or the *QoreStor CLI Reference Guide* respectively.

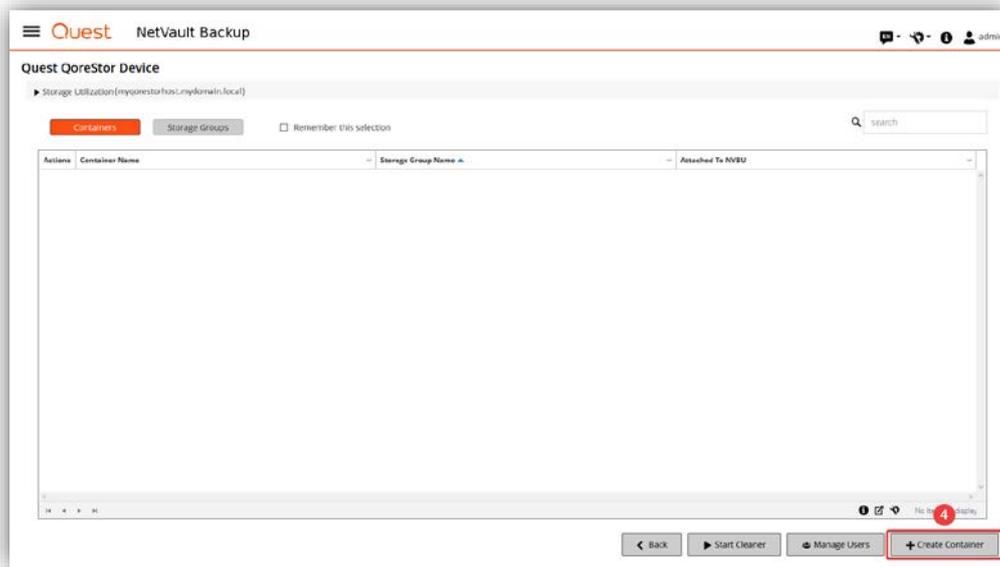
- 1 Open the NetVault Backup UI
- 2 Open the **menu drawer** ❶ and select **Manage Devices** ❷



3. Click on the **Manage Device** button ❸

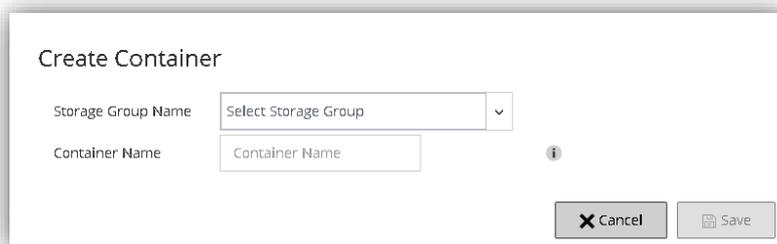


4. Click the **Create Container** button ❹



5. On the pop-up dialog:

- a Select the **Storage Group Name*** from the drop-down arrow
- b Enter a Container Name
- c Click the **Save** button.



* By default, the QoreStor host has a storage group created, *DefaultGroup*. If you wish to create a new storage group, please refer to Appendix C on this guide.

i **NOTE:** If using NetVault 11.4.5, after clicking the **Manage Device** button, open the **menu drawer** under **Actions** and select **Explore** for the chosen Storage Group; then click the **Add LSU** button and enter the name for the Container you wish to create under **Add LSU Name**.

Adding a RDS container to NetVault Backup

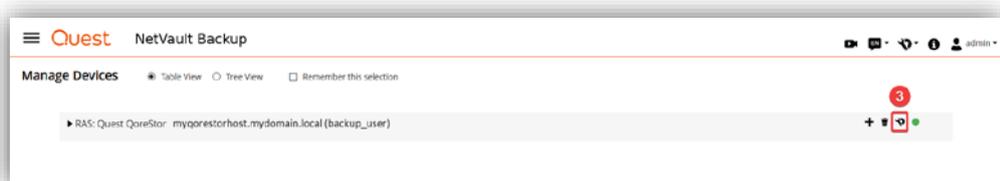
Backup

This section provides information needed to add an existing or newly created RDS container to NetVault Backup. The steps below assume that the QoreStor Device has been added to the NetVault Backup configuration. If not, please refer to [Adding a QoreStor Device to NetVault Backup](#) in this document.

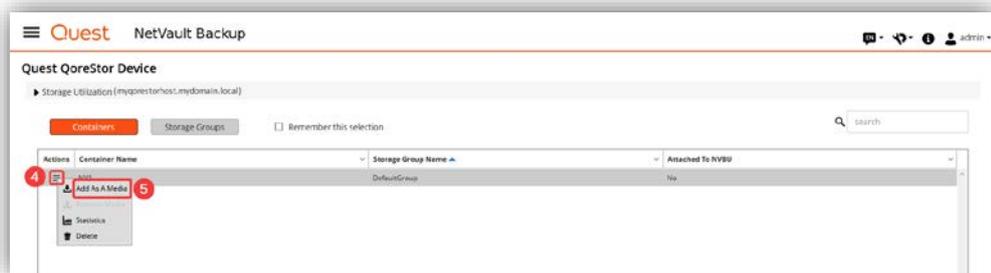
1. Open the NetVault Backup UI
 - a. Open the **menu drawer** ❶ and select **Manage Devices** ❷



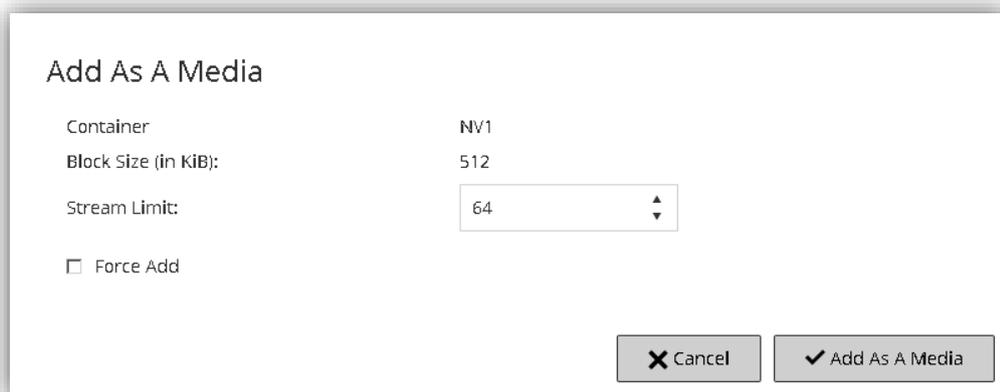
- b. Click on the **Manage Device** button ❸



- c. For the container you wish to add, click the **Actions menu drawer** ❹ and select **Add As A Media** ❺



d On the pop-up dialog, chose the **Stream Limit** and click on **Add As A Media** button.



i **NOTE:** QoreStor supports a maximum of 64 streams per connection with a maximum of 64 connections.

Configuring transport modes for NetVault Backup

There are two transport modes for backing up data over RDA: **Optimized/Dedupe** and **Passthrough**. Optimized backup does source-side deduplication on the NetVault Backup clients. The Passthrough mode does target-side deduplication on the QoreStor host.

The default mode for each client is decided based on the number of CPU cores in the client machine and whether the architecture is 32-bit or 64-bit. In general, there is no need to change the mode. In the event you want to change the mode, proceed by setting the RDA mode in the QoreStor using the following CLI command:

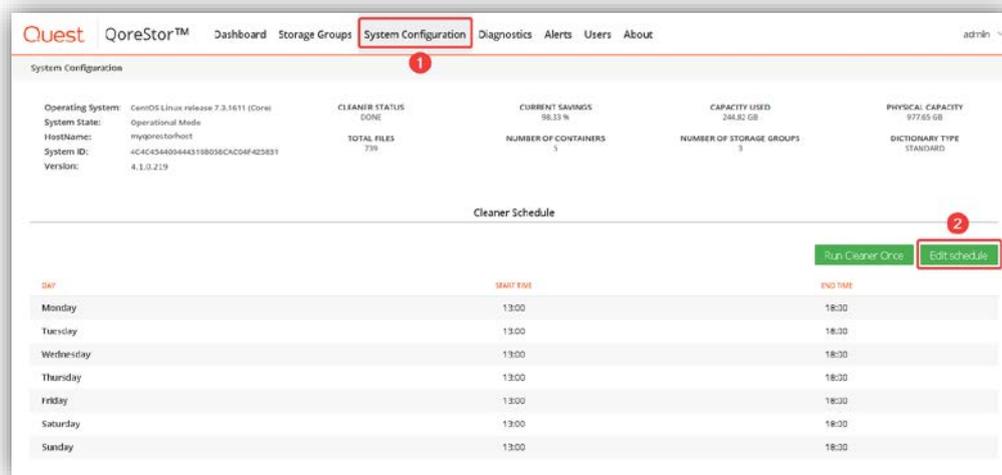
```
rda --update_client --name <RDA Client Hostname> --mode <auto|passthrough|dedupe>
```

Setting up the QoreStor system cleaner

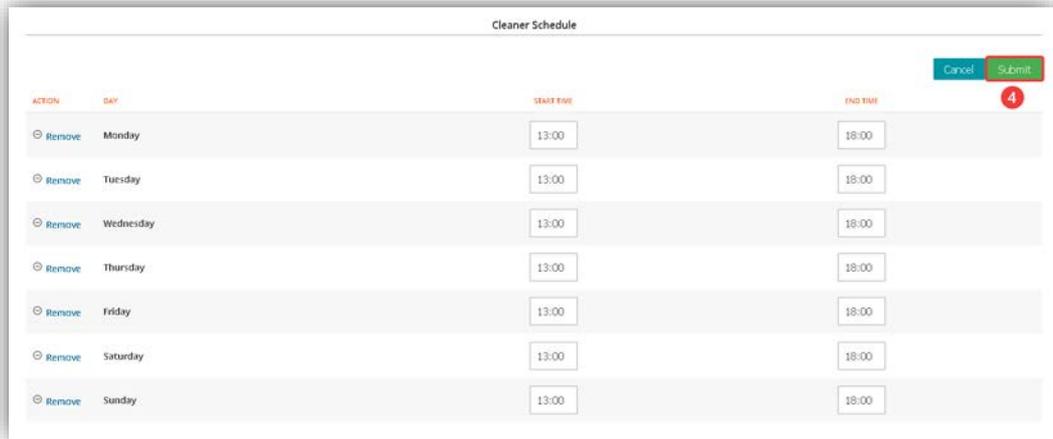
Performing scheduled disk space reclamation operations is needed as a method for recovering disk space from system containers in which files were deleted as a result of deduplication. Ideally, the QoreStor cleaner should complete a full cycle at least once a week. This will be accomplished in most cases by the predefined QoreStor cleaner schedule. The cleaner also runs during idle time.

To change the predefined cleaner schedule times, perform the following steps:

1. Open the QoreStor administrative console
2. Select **System Configuration** in the top navigation area ①
3. Click **Edit Schedule**. ②



4. Define the schedule and click **Submit** ④.



If necessary, you can also perform a full cleaner cycle manually using either the QoreStor Administrative Console, QoreStor CLI or the NetVault Backup UI.



Figure 1: Using the QoreStor Administrative Console

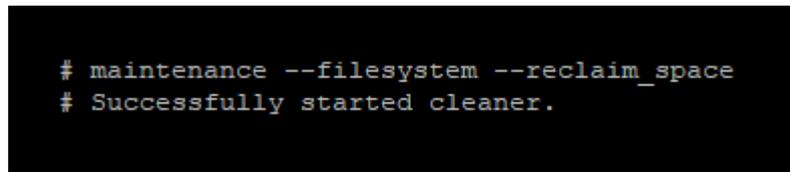


Figure 2: Using the QoreStor CLI

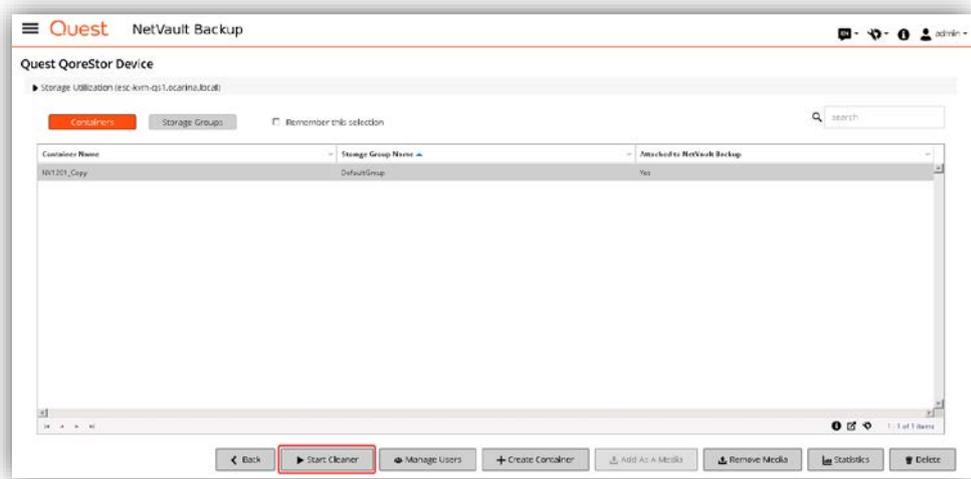


Figure 3: Using the NetVault Backup UI

Monitoring deduplication, compression and performance

After backup jobs have run, QoreStor tracks capacity, storage savings, and throughput. The historical representation of these values is shown in the dashboard of the QoreStor administrative console. This information is valuable in understanding the benefits of QoreStor.

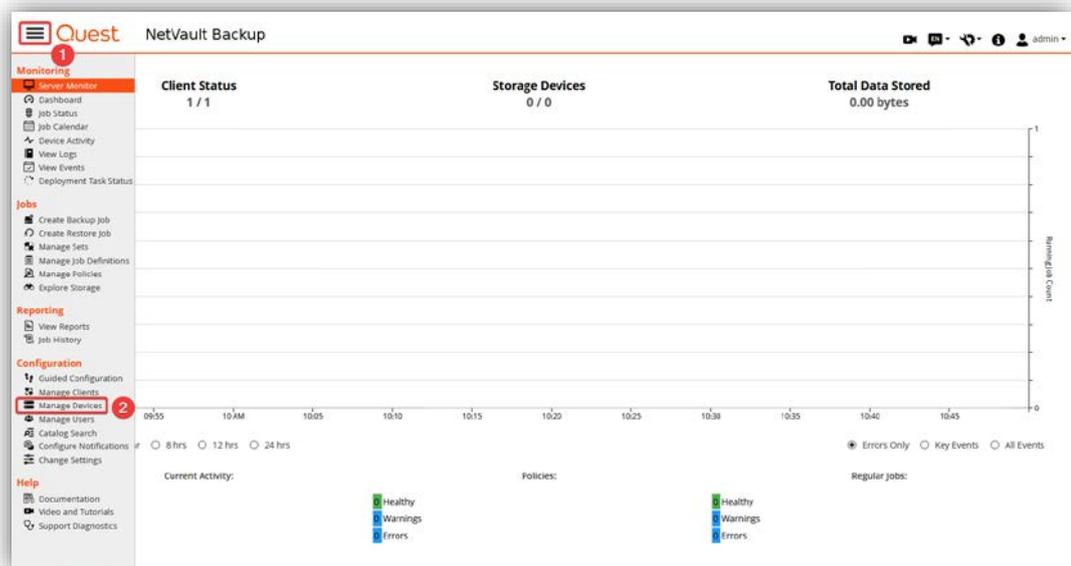


i **NOTE:** Deduplication ratios increase over time. It is not uncommon to see a 2-4x reduction (25-50% total savings) on the initial backup. As additional full backup jobs are completed, the ratios will increase. Backup jobs with a 12-week retention will average a 15x ratio in most cases.

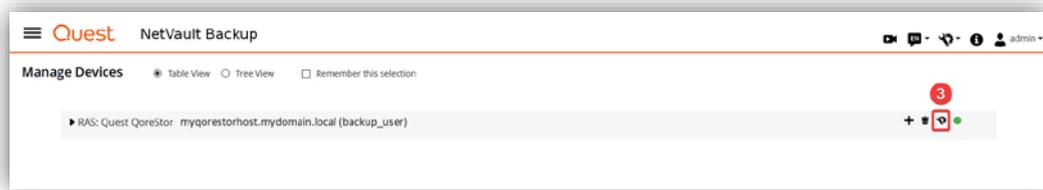
Creating a QoreStor storage group

If you wish to create a QoreStor storage group, you can use the QoreStor Administrative Console, QoreStor CLI or the NetVault Backup UI. In this document we will show how to do it using the NetVault Backup UI.

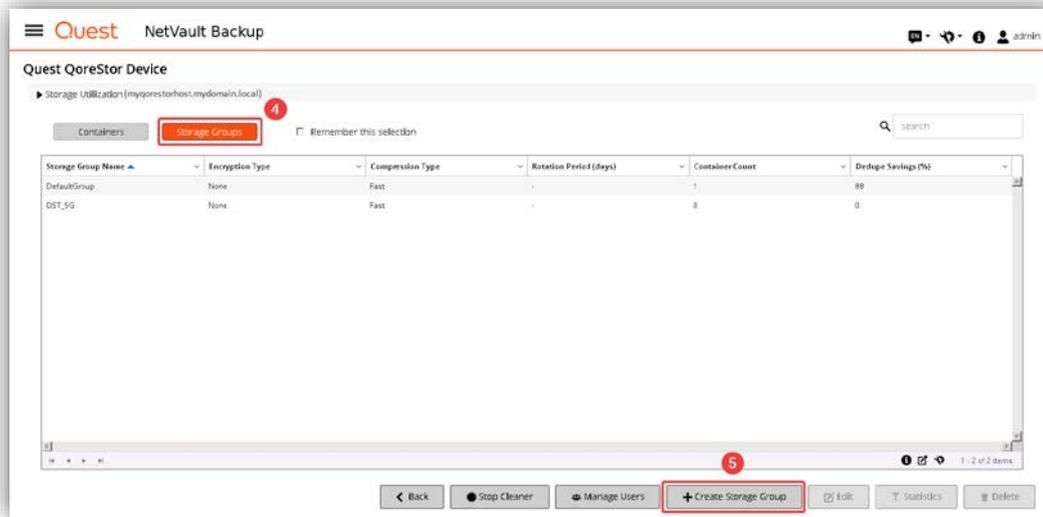
1. Open the NetVault Backup UI
2. Open the **menu drawer** ❶ and select **Manage Devices** ❷



3. Click on the **Manage Device** button ③



4. Click the **Storage Groups** button ④
5. Click the **Create Storage Group** button ⑤



6. On the pop-up dialog:
 - a Enter the Storage Group Name
 - b Select the desired **Compression Type** using the dropdown arrow
 - c Select the desired **Encryption Type** using the dropdown arrow if you wish to use encryption
If you select Internal, chose a Passphrase, Confirm passphrase and Rotation Period
 - d Click the **Save** button

The screenshot shows a 'Create Storage Group' dialog box with the following fields and options:

- Storage Group Name:** Text input field with placeholder 'Storage Group Name' and an information icon (i).
- Compression Type:** Dropdown menu with 'Fast' selected and an information icon (i).
- Encryption Type:** Dropdown menu with 'None' selected and an information icon (i).
- Passphrase:** Text input field with placeholder 'Passphrase' and an information icon (i).
- Confirm passphrase:** Text input field with placeholder 'Confirm passphrase' and an information icon (i).
- Rotation Period:** Spin box with '30' and 'Days' and an information icon (i).

Buttons at the bottom right: **Cancel** and **Save**.

i **NOTE:** If using NetVault 11.4.5, after clicking the **Manage Device** button, open the **menu drawer** under **Actions** and select **Explore** for the chosen Storage Group; then click the **Add LSU** button and enter the name for the Container you wish to create under **Add LSU Name**.