

# Setting up Quest<sup>®</sup> QoreStor<sup>™</sup> as an OST Backup Target for Veritas<sup>™</sup> Backup Exec<sup>™</sup>

## Technical White Paper

Quest Engineering

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## Legend



**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 OST Backup Target for Veritas™ Backup Exec™

Updated – June 14, 2018

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# Executive Summary

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This white paper provides information about how to set up QoreStor as a backup target for Veritas™ Backup Exec™. 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 Veritas Backup Exec, refer to the Backup Exec documentation at:

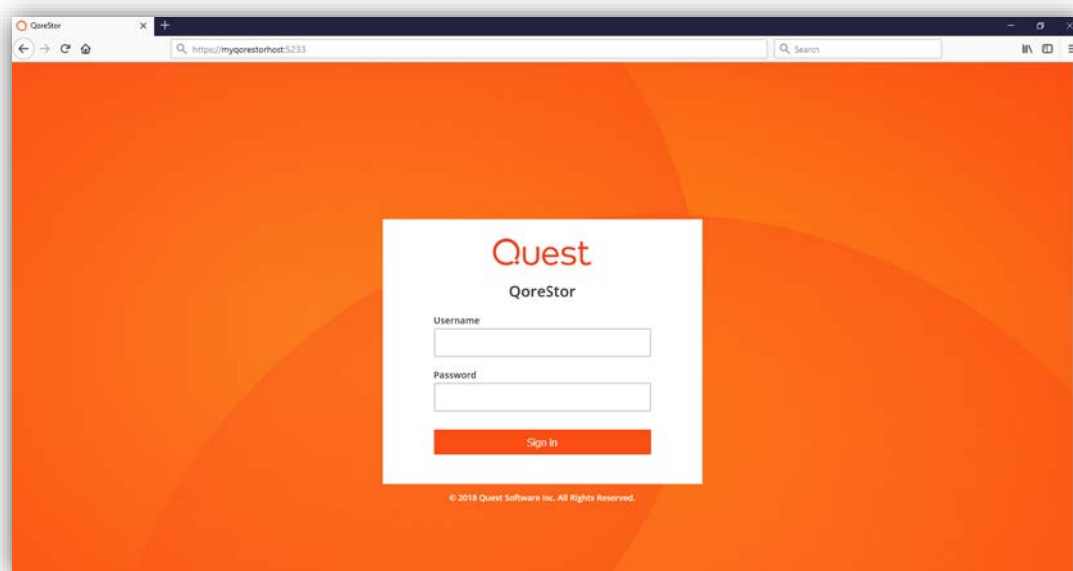
[https://www.veritas.com/support/en\\_US/BackupExec](https://www.veritas.com/support/en_US/BackupExec)



**NOTE:** The QoreStor and Veritas Backup Exec screenshots used in this document might vary slightly depending on QoreStor version and Backup Exec 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*.
- 3 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>).
- 4 Log in with the username **admin** and password **St0r@ge!** (The “0” in the password is the numeral zero).

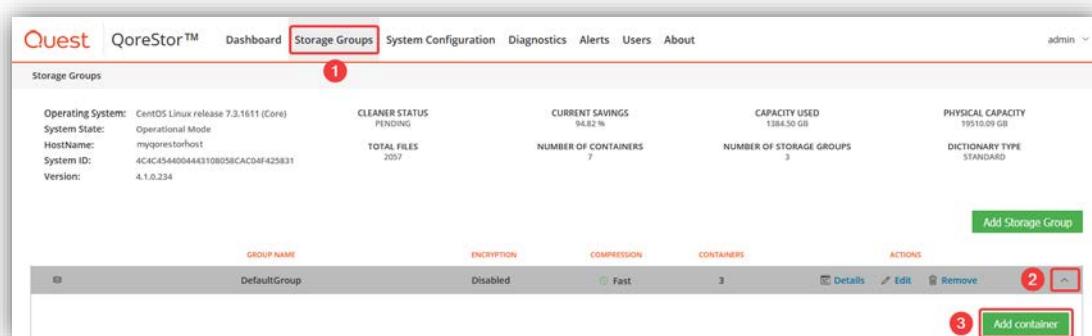


- 5 By default, QoreStor has a user with OST Role named **backup\_user** and password **St0r@ge!**. Refer to the *QoreStor User Guide* for information on changing user accounts.

# Creating an OST container for Backup Exec

In this document, we will show how to create an OST container for Backup Exec using the QoreStor administrative console. If you wish to use QoreStor CLI please refer to the *QoreStor CLI Reference Guide*.

- 1 Open the **QoreStor administrative Console**.
- 2 Select **Storage Groups** in the top navigation area of the QoreStor administrative console ❶.
- 3 Click on the drop-down arrow for the Storage Group you will be adding a container to ❷.
- 4 Click on **Add container** ❸.



**NOTE:** Refer to the *QoreStor User Guide* for information on creating a new Storage Group

- 5 Enter a **Name** for the container ❹.
- 6 Select **OST** from the **Protocol** drop down menu ❺.

- 7 Choose between **Unlimited** or **Quota** (specify Quota Capacity [GB]) for LSU Capacity ⑥.
- 8 Click the **Add** button ⑦.

The screenshot shows a dialog box titled "Add container" with a close button (X) in the top right corner. The dialog contains the following elements:

- Name:** A text input field containing "OST\_Container", highlighted with a red box and a red circle with the number 4.
- Protocol:** A dropdown menu showing "OST", highlighted with a red box and a red circle with the number 5.
- LSU Capacity:** A section containing two radio buttons: "Unlimited" (unchecked) and "Quota" (checked). The "Quota" option is highlighted with a red box and a red circle with the number 6.
- Quota Capacity [GB]:** A text input field with a spinner icon on the right, located below the "Quota" option.
- Buttons:** At the bottom, there are two buttons: "Cancel" (highlighted with a red box and a red circle with the number 7) and "Add" (highlighted with a red box).

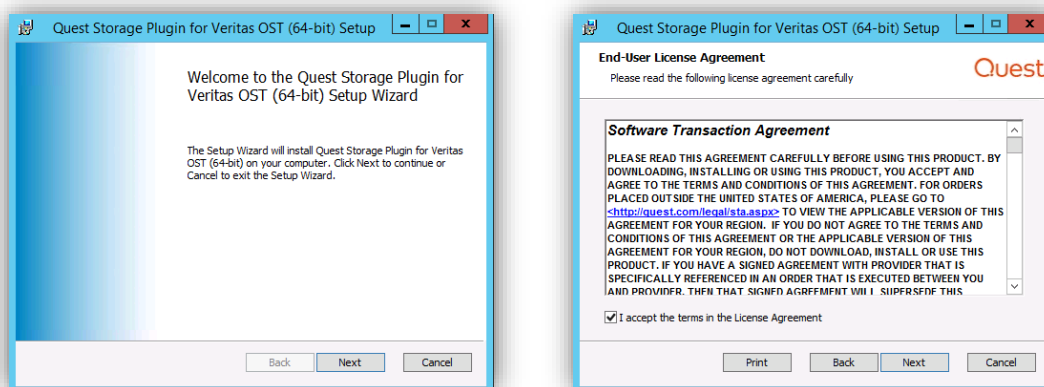
# Installing the Quest OST Plugin

In order to enable Backup Exec to use QoreStor, the Quest OST Plugin must be installed in the Backup Exec Media Server(s).

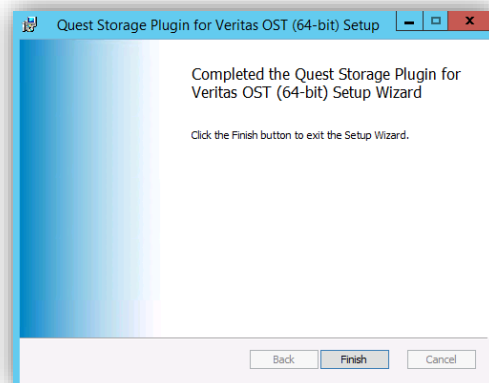
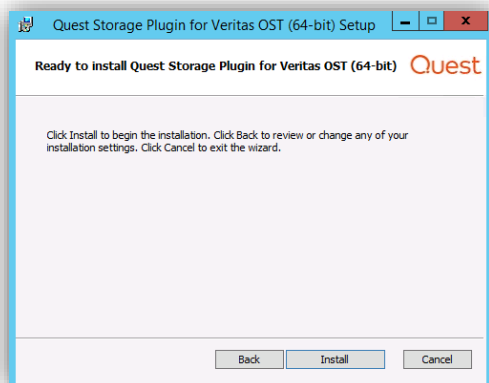
Before proceeding, refer to the *QoreStor Interoperability Guide* for a list of supported Operating Systems, Backup Exec and OST Plugin versions. Once identified, download the OST Plugin at <https://support.quest.com/qorestor/>.

## Installing the OST Plugin on Windows

- 1 Download the Quest OST Plugin onto the server you wish to install
- 2 Execute the *OST Plugin .msi* installer and follow the screen prompts







## Installing the OST Plugin on Linux

- 1 Download the Quest OST Plugin onto the server you wish to install
- 2 Extract the *.bin* file from the *.gz* package and give it executable permission
- 3 Execute the *.bin* file adding **-install** switch

```
gunzip ./QuestOSTPlugin-X.X.X.X-x86_64-RHEL/SLES.bin.gz
chmod +x ./QuestOSTPlugin-X.X.X.X-x86_64-RHEL/SLES.bin.gz
./QuestOSTPlugin-X.X.X.X-x86_64-RHEL/SLES.bin.gz -install

Starting, please wait...

OST Plugin Installation requires nbrmms service to be stopped.

Checking if nbrmms service is running...

nbrmms service is not running, proceeding with Installation...

Preparing...
QuestOSTPlugin
oca-libs

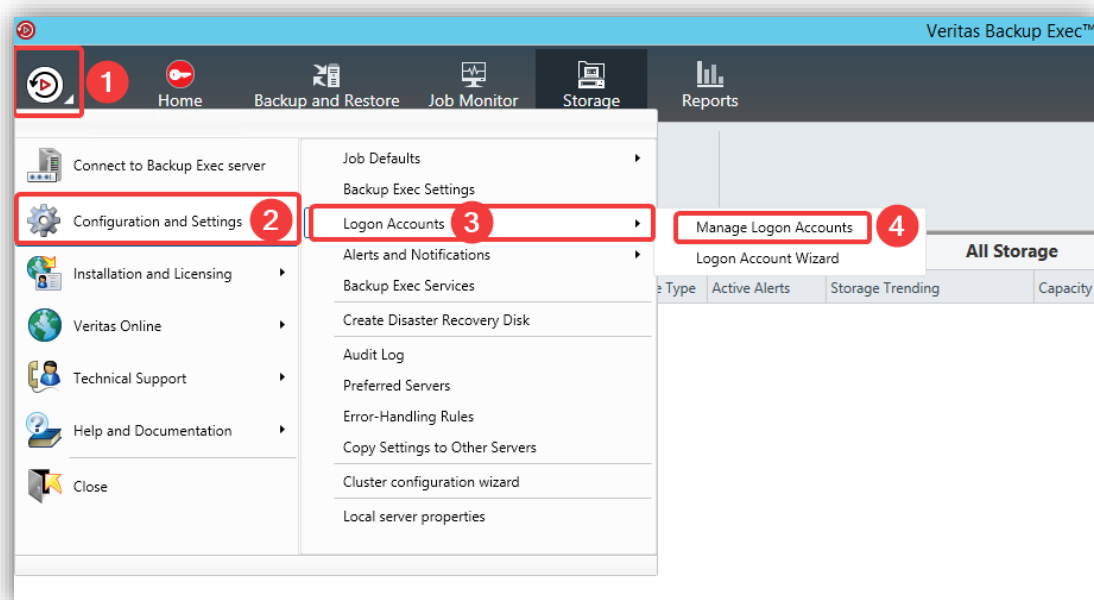
Installation successful!

Log for this operation is /var/log/libstspioca_install.log
```

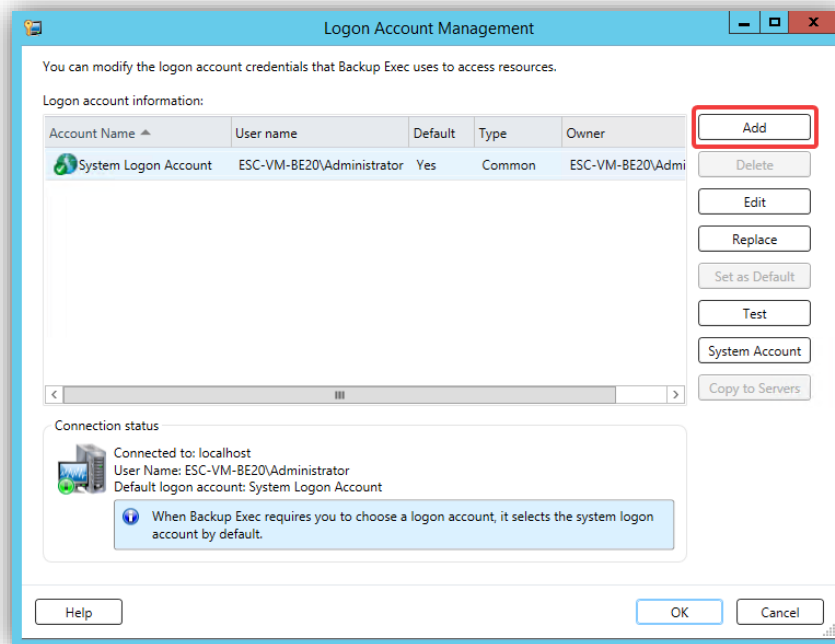
# Adding the OST Account to Backup Exec

This section provides information needed to add an existing or newly created OST account to Backup Exec. By default, QoreStor has a user with OST Role named backup\_user and password "St0r@ge!". Refer to the *QoreStor User Guide* for information on changing user accounts.

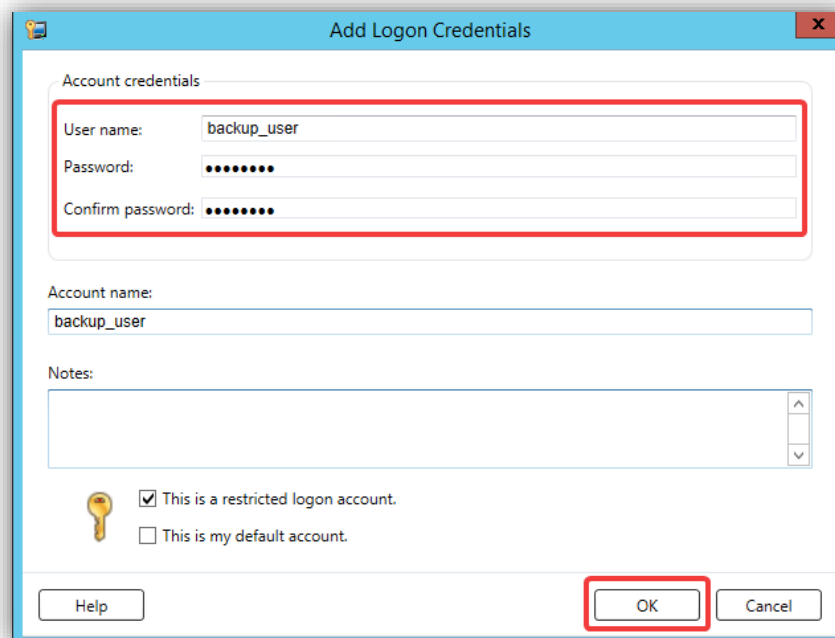
- 1 Open the Backup Exec administration console
- 2 Click the **Backup Exec** button ❶, then **Configuration and Settings** ❷, **Logon Accounts** ❸ and **Manage Logon Accounts** ❹



- 3 Click **Add** on the newly opened pop-up window



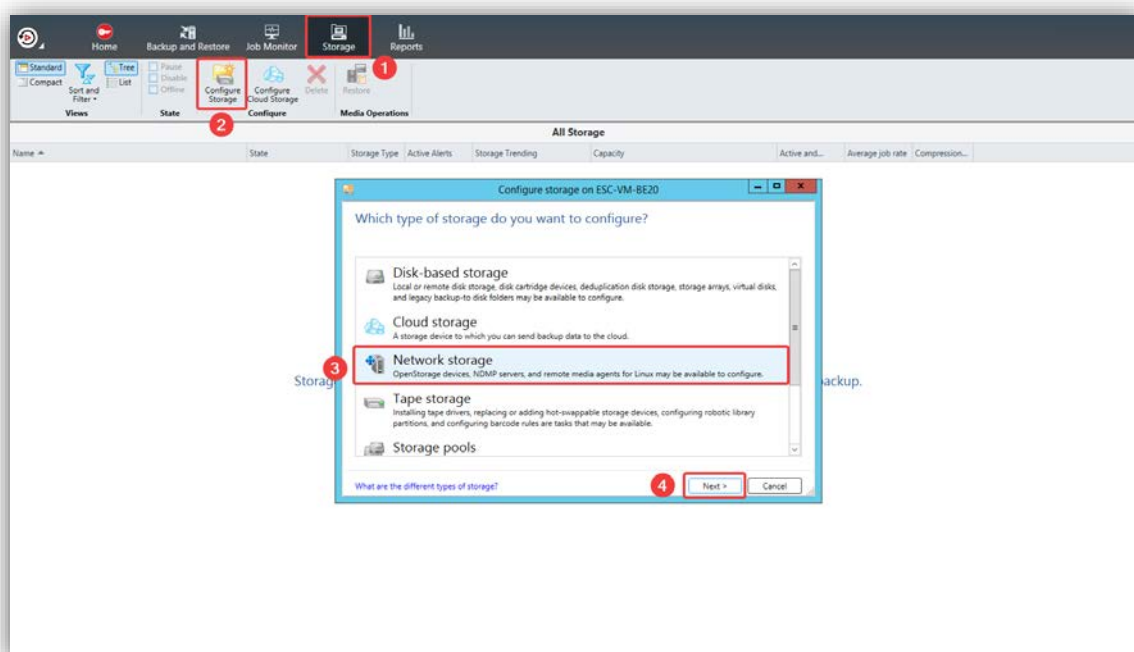
- 4 Enter the **User Name**, **Password** and **Confirm password**. Click **OK** to add the account



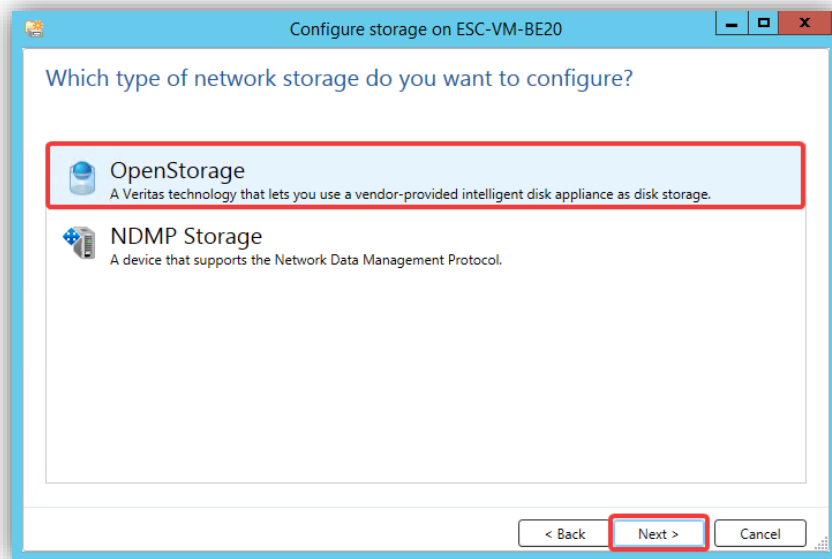
# Adding an OST container to Backup Exec

This section provides information needed to add an existing or newly created OST container to Backup Exec.

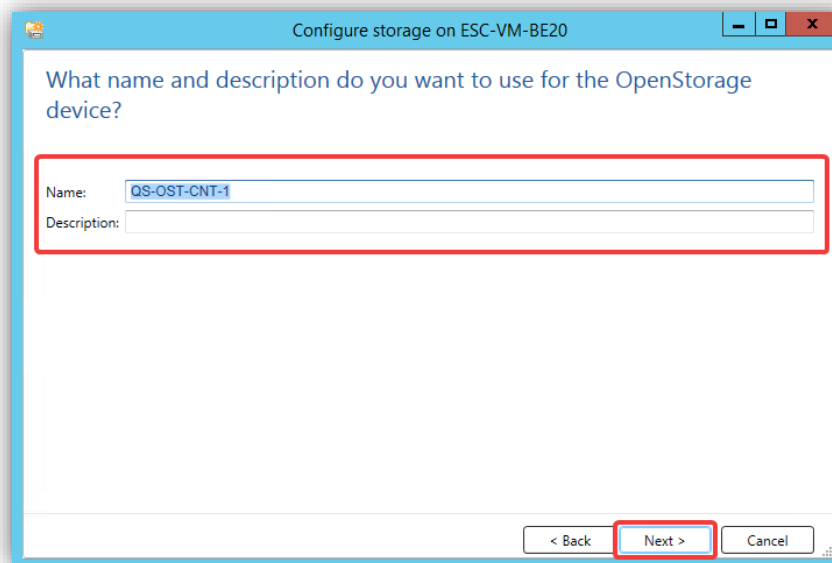
- 1 Open the Backup Exec administration console
- 2 Open the **Storage** tab ❶, click **Configure Storage** ❷, select **Network storage** ❸ and click **Next** ❹



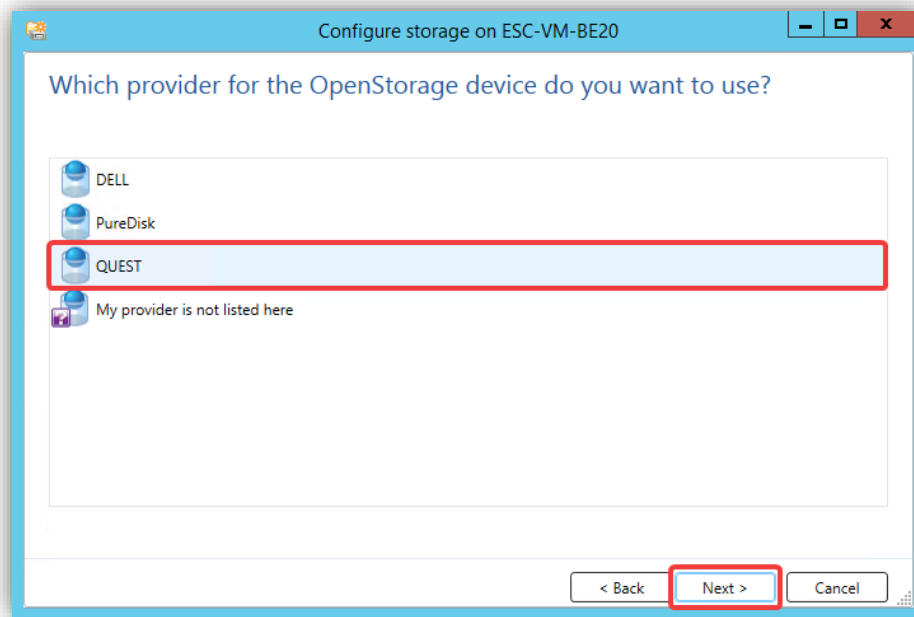
- 3 Select **OpenStorage** and click **Next**



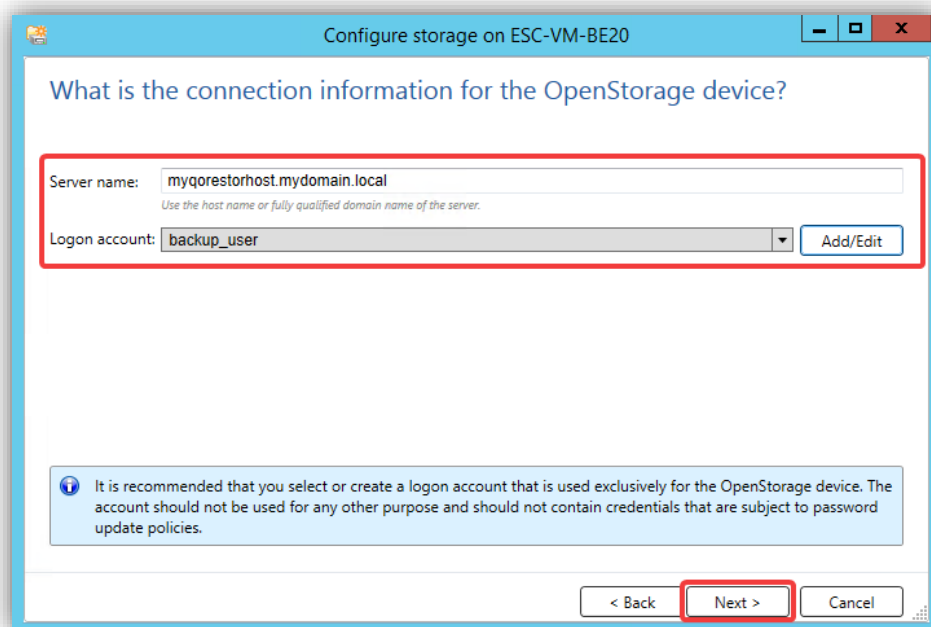
- 4 Enter the desired **Name** and **Description** (optional) for the configured OST device and click **Next**



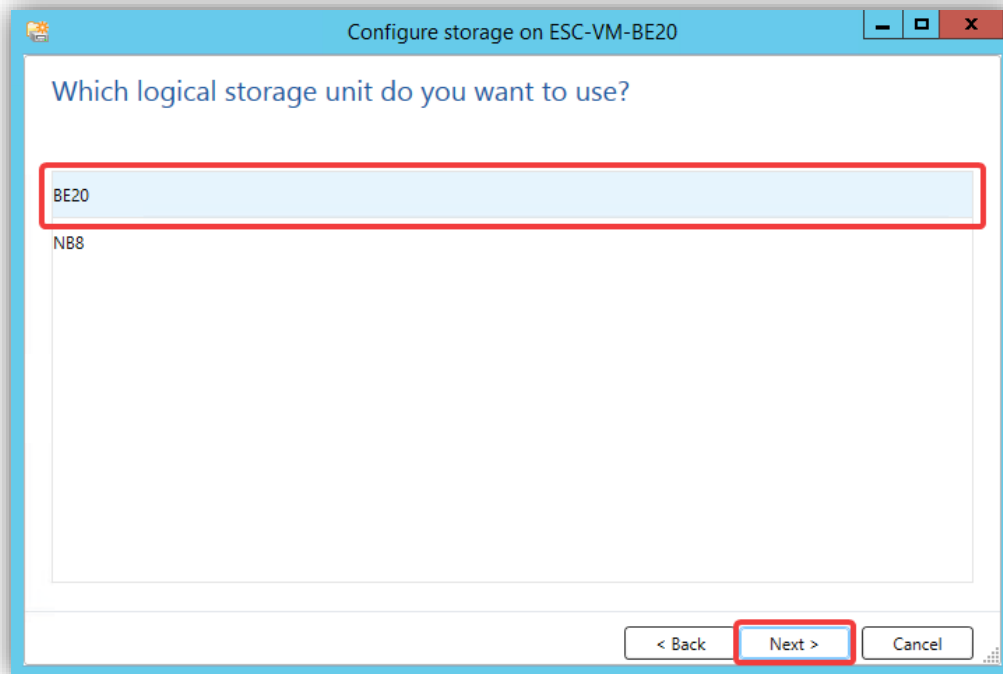
- 5 Select **QUEST** as the provider and click Next



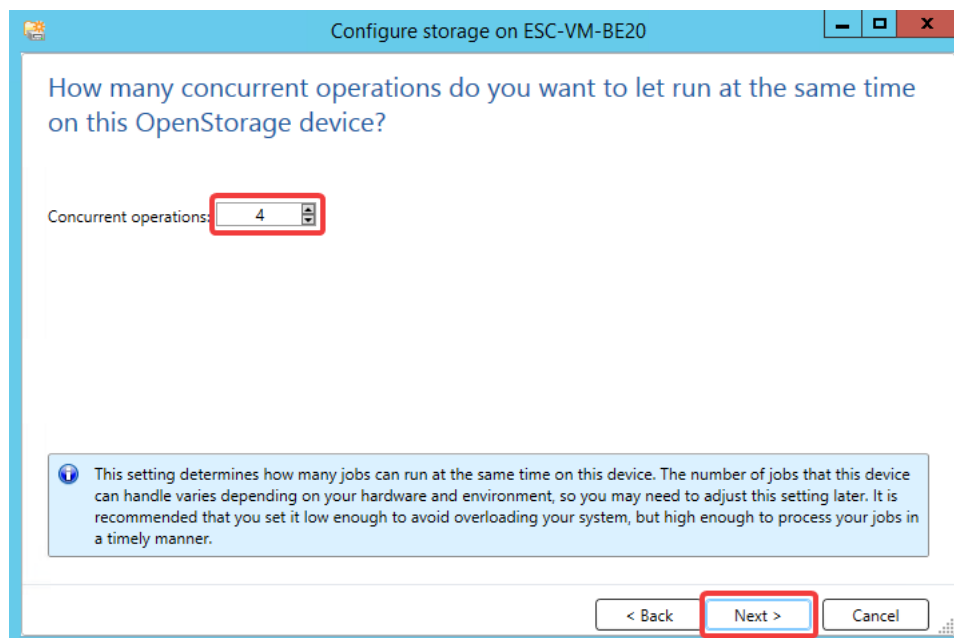
- 6 Enter the QoreStor **Server name** (IP/hostname or FQDN) and select the OST account as the **Logon account**. Click **Next**



- 7 Chose the OST container to be added from the list and click **Next**.



- 8 Enter the number of how many **Concurrent operations** can run and click **Next**.





**NOTE:** When choosing the number of concurrent operations, both the QoreStor and the hosting Hardware limits need to be taken into consideration to prevent job failures should those limits be exceeded. Refer to the *QoreStor Interoperability Guide* for more information.

- 9 Review the **Storage configuration summary** and click **Finish**

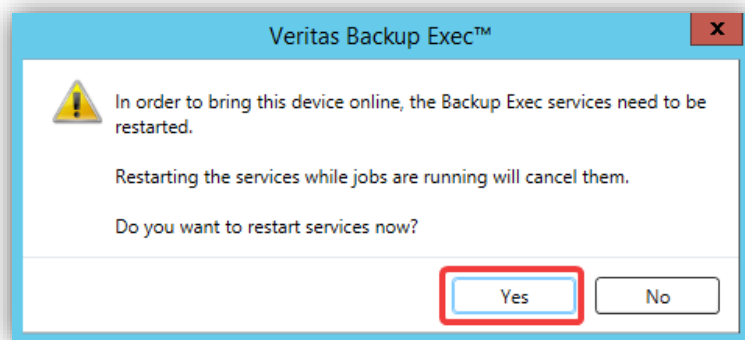
The screenshot shows a window titled "Configure storage on ESC-VM-BE20". Inside, there is a section titled "Storage configuration summary" with several expandable sections:

- Storage category:** Network storage
- Storage type:** OpenStorage
- Name and description for the OpenStorage device:**
  - Name: QS-OST-CNT-1
  - Description:
- Provider name:** OpenStorage provider name: QUEST
- Connection information:**
  - Server name: myqorestorhost.mydomain.local
  - Logon account: backup\_user
- Logical storage unit:** Storage location: BE20
- Number of concurrent operations allowed:** Concurrent operations: 4

At the bottom right, there are three buttons: "< Back", "Finish", and "Cancel".

- 10 Click **Yes** to restart the Backup Exec Services and bring the newly added device online





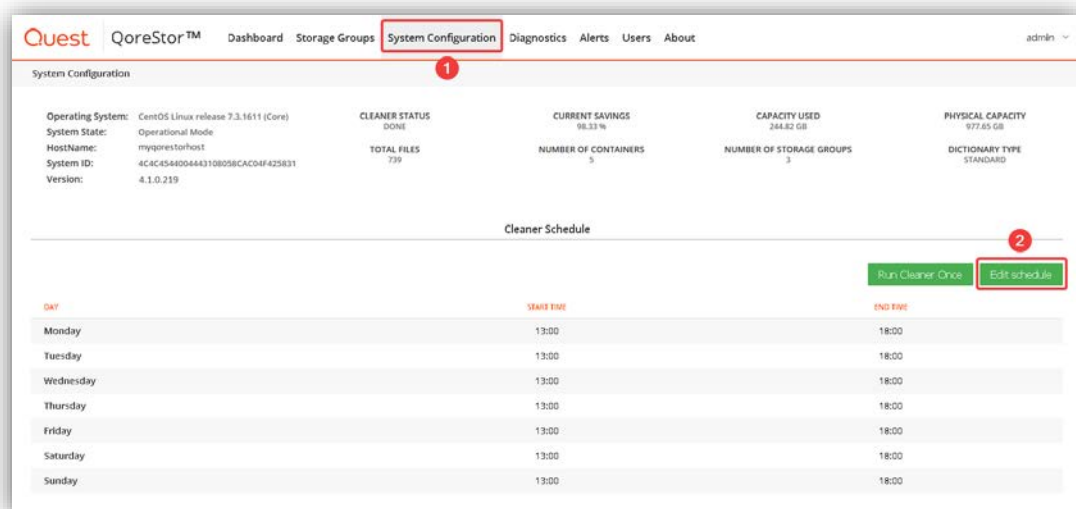
# Appendix A

## 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.

In case you wish 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 ❶.
3. Click **Edit Schedule** ❷.



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

ACTION	DAY	START TIME	END TIME
<a href="#">Remove</a>	Monday	13:00	18:00
<a href="#">Remove</a>	Tuesday	13:00	18:00
<a href="#">Remove</a>	Wednesday	13:00	18:00
<a href="#">Remove</a>	Thursday	13:00	18:00
<a href="#">Remove</a>	Friday	13:00	18:00
<a href="#">Remove</a>	Saturday	13:00	18:00
<a href="#">Remove</a>	Sunday	13:00	18:00

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

Figure 1: QoreStor Administrative Console

Figure 2: QoreStor CLI

```
# maintenance --filesystem --reclaim_space
# Successfully started cleaner.
```

# Appendix B

## Monitoring deduplication, compression and performance

After backup jobs have run, QoreStor tracks capacity, storage savings, and throughput. To view 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.



**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.