

Setting up Quest® QoreStor™ as an RDA Backup Target for vRanger™ Backup & Replication

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.

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Executive summary

This white paper provides information about how to set up QoreStor as a backup target for vRanger Backup & Replication (vRanger). 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>

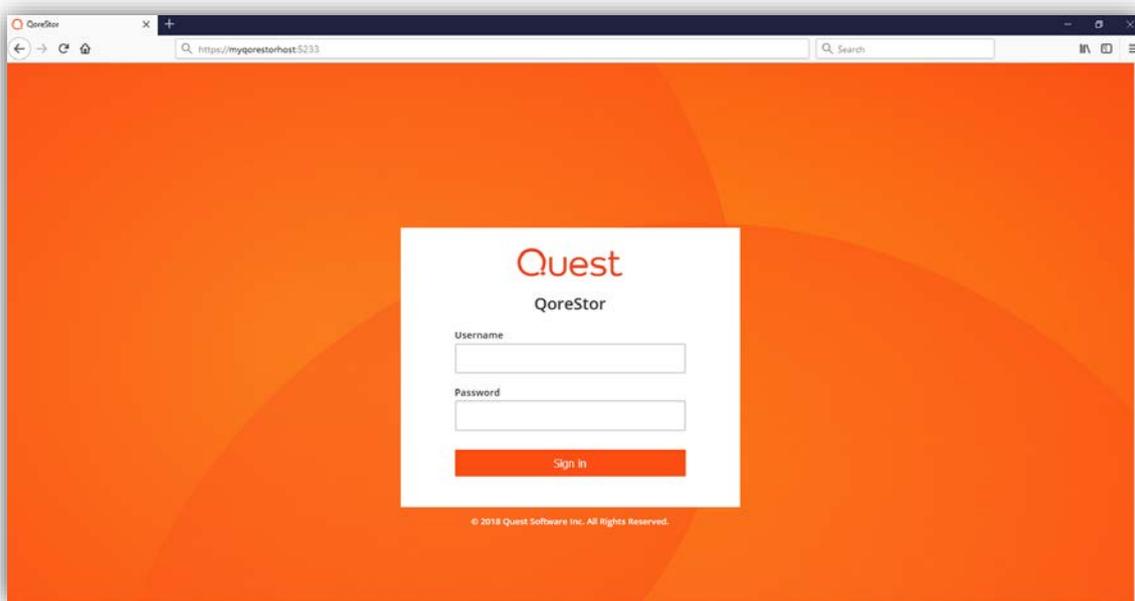
For more information about vRanger Backup & Replication, refer to the vRanger documentation at:

<https://support.quest.com/vranger>

i **NOTE:** The QoreStor and vRanger Backup & Replication screenshots used in this document might vary slightly, depending on QoreStor version and vRanger 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 RDA Role named **backup_user** and password **St0r@ge!**. Refer to the *QoreStor User Guide* for information on changing user accounts.

Creating an RDS container for vRanger

In this document, we will show how to create a RDS container for vRanger 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.

Quest QoreStor™ Dashboard **Storage Groups** System Configuration Diagnostics Alerts Users About admin

Storage Groups

Operating System: CentOS Linux release 7.3.1611 (Core)
 System State: Operational Mode
 HostName: myqoresstorhost
 System ID: 4C4C4541006443108058CAC04F422831
 Version: 4.1.0.234

CLEANER STATUS: PENDING
 TOTAL FILES: 2057

CURRENT SAVINGS: 94.82 %
 NUMBER OF CONTAINERS: 7

CAPACITY USED: 1384.30 GB
 NUMBER OF STORAGE GROUPS: 3

PHYSICAL CAPACITY: 19510.09 GB
 DICTIONARY TYPE: STANDARD

GROUP NAME: DefaultGroup
 ENCRYPTION: Disabled
 COMPRESSION: Fast
 CONTAINERS: 3
 ACTIONS: Details Edit Remove

Add Storage Group

Add container

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

5. Enter a Name for the container ④
6. Select RDS from the Protocol drop down menu ⑤
7. Click the Add button ⑥.

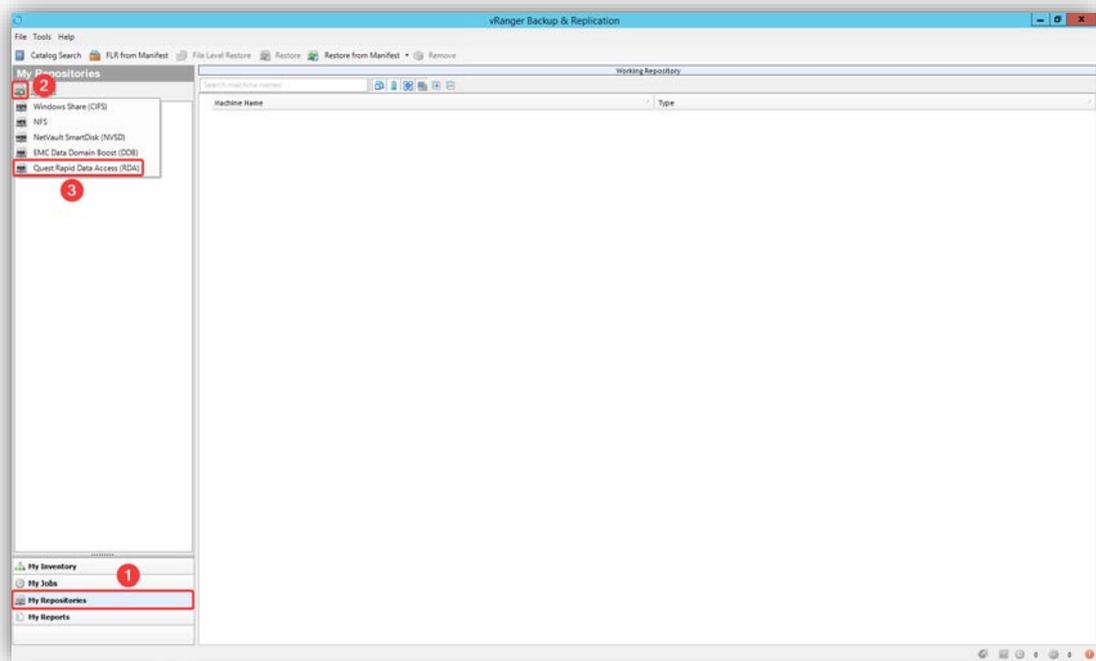
The image shows a dialog box titled "Add container" with a close button (X) in the top right corner. The dialog contains the following elements:

- Name:** A text input field containing "RDA_Container". A red circle with the number "4" is positioned to the right of the field.
- Protocol:** A dropdown menu showing "RDS". A red circle with the number "5" is positioned to the right of the dropdown.
- LSU Capacity:** A section with a checked checkbox and the text "Unlimited". A red circle with the number "6" is positioned to the right of this section.
- Buttons:** Two buttons at the bottom: "Cancel" (light blue) and "Add" (green). A red circle with the number "6" is positioned above the "Add" button, and a red box highlights the "Add" button.

Adding a RDS container to vRanger

This section provides information needed to add an existing or newly created RDS container to vRanger.

1. Open the vRanger Backup & Replication console.
2. Navigate to the My Repositories page ❶, click the Add button ❷ and click **Quest Rapid Access (RDA)** ❸.



3. Enter the following:
 - a. Repository Name
 - b. Description (optional);
 - c. The QoreStor host DNS Name or IP,
 - d. The RDA username and RDA Password (the default username is **backup_user** and the default password is **St0r@ge!** (The "0" in the password is the numeral zero).
 - e. The container name you wish to add in **Logical Storage Unit**.
4. Click the **OK** button to proceed.

Add Quest Rapid Data Access Repository

Quest Rapid Data Access Repository Details

Provide Quest Rapid Data Access details for the repository.

Repository Name	QS1
Description	RDS Container
DNS Name or IP	myqorestorehost.mydomain.local
RDA Username	backup_user
RDA Password	*****
Logical Storage Unit	VR1

Free Space

Encrypt all backups to this repository

Password

Confirm

Encryption is not supported on this repository type.

OK Cancel

5. The added repository will show under **My Repositories**.

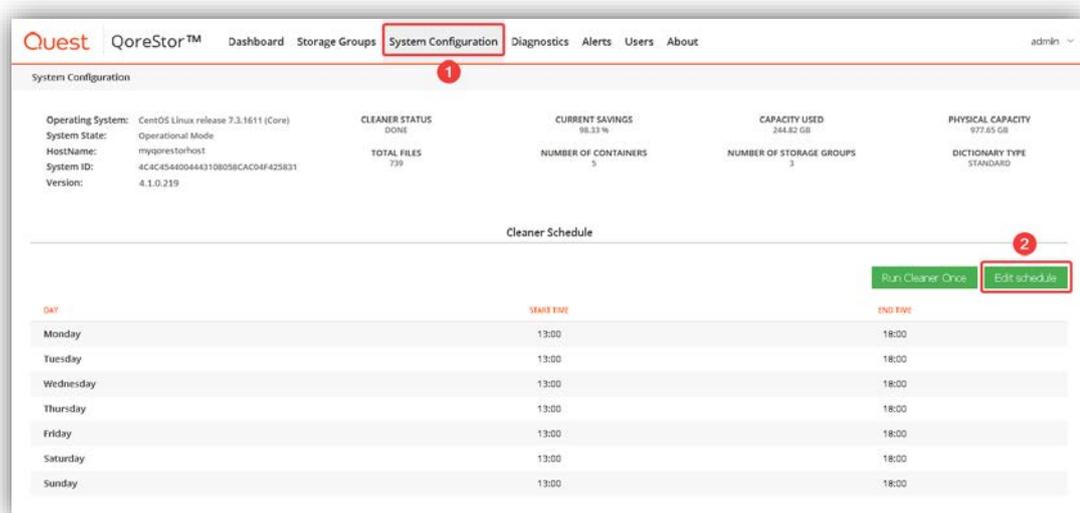


Setting up the QoreStor system cleaner

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.



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

ACTION	DAY	START TIME	END TIME
<input type="radio"/> Remove	Monday	13:00	18:00
<input type="radio"/> Remove	Tuesday	13:00	18:00
<input type="radio"/> Remove	Wednesday	13:00	18:00
<input type="radio"/> Remove	Thursday	13:00	18:00
<input type="radio"/> Remove	Friday	13:00	18:00
<input type="radio"/> Remove	Saturday	13:00	18:00
<input type="radio"/> Remove	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

Operating System:	CLEANER STATUS	CURRENT SAVINGS	CAPACITY USED	PHYSICAL CAPACITY
CentOS Linux release 7.3.1611 (Core)	DONE	98.33 %	244.82 GB	977.65 GB
System State:	TOTAL FILES	NUMBER OF CONTAINERS	NUMBER OF STORAGE GROUPS	DICTIONARY TYPE
Operational Mode	729	5	3	STANDARD
HostName: myqorestorhost				
System ID: 4C4C4544004443108058CAC04F425831				
Version: 4.1.0.219				

Figure 2: QoreStor CLI

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

Monitoring deduplication, compression and performance 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.