

Quest[®] QoreStor[™] 6.0

Release Notes

September 2019 - Revision C for build 670

These release notes are intended to supplement the QoreStor documentation to provide last minute information available for the latest release of the QoreStor software. These release notes contain details about the latest updates and resolutions, known issues, resolutions, and other information.

i | **NOTE:** Please check for the latest versions of the QoreStor documentation available at support.quest.com/qorestor.

About this release

QoreStor is a software-defined secondary storage platform based on Quest's proven DR Series Appliance's resilient deduplication and replication technologies. With QoreStor, you can break free of backup appliances and accelerate backup performance, reduce storage requirements and costs, and replicate safer and faster to the cloud for data archiving, disaster recovery and business continuity.

QoreStor supports all of the major backup software applications in use today and can lower your backup storage costs to as little as \$.16/GB while reducing your total cost of ownership. (For a complete list of supported backup software, see the *QoreStor Interoperability Guide*). QoreStor achieves these results using patented Rapid Data Access (RDA) technology as well as built-in, variable block-based deduplication and compression.

QoreStor helps you to:

- Reduce on-premises and cloud storage costs with industry-leading deduplication and compression.
- Accelerate backup completion with protocol accelerators and dedupe.
- Shrink replication time by transmitting only changed data.
- Improve data security and comply with FIPS 140-2.
- Maximize return on investment for existing data protection technologies.
- Lower total cost of ownership through all-inclusive licensing.

QoreStor 6.0.0.670 is a hotfix release of QoreStor with defect resolutions and minor enhancements. See [New features and enhancements](#) for more information. See [Resolved issues](#) for information on issues resolved in this version.

New features and enhancements

Enhancements in QoreStor 6.0 build 670 include:

- Added configuration options for Wasabi S3 cloud tiers as well as for S3 Compatible cloud providers.
- Improved cloud tier configuration dialogs.
- QoreStor Menu changes for application updates and other improvements.
- UI improvements related to graphing and reporting.
- Added support for Veeam Fast Clone backups

Build 6.0.0.670 also includes the enhancements in QoreStor 6.0 build 589 and 585, as listed below:

- Improvements to reliability and performance of DR Series to QoreStor migrations.
- UI improvements related to graphing and Fibre Channel information.
- Multiple UI improvements in Cloud Tier pages and wizards.
- UI improvements with graphing and data display
- DR Series appliance update and migration image required to migrate a DR Series to a QoreStor server. Refer to **Migrating a DR Series appliance to QoreStor** in the *QoreStor Installation Guide*.

Upgrade notes

This topic contains important information for users who are upgrading from a previous QoreStor release.

- During the upgrade, the QoreStor installation script will verify that the Repository and Metadata filesystems are mounted with the **noatime** and **dirsync** mount options. If not, the installation script will prompt the user to allow the script to make the necessary changes in */etc/fstab* and prompt you to reboot the system and re-run the QoreStor installation process.

i | **NOTE:** The above process does not occur when installing QoreStor in Demo mode.

- To ensure proper authentication of network shares, after upgrading to QoreStor 6.0, remove the QoreStor server from the domain and re-add it to the domain.
- QoreStor 6.0 contains support for VTL protocols. To enable VTL support, you must perform the following sequence of operations:
 - Upgrade your existing installation to QoreStor 6.0. Do not select the option to install VTL support at this point.
 - Using the steps documented in "Uninstalling QoreStor while maintaining configuration data" in the *QoreStor Installation Guide*, uninstall the newly updated QoreStor installation.

i | **IMPORTANT:** Uninstalling your existing QoreStor with the command below will preserve your data and application configurations.

```
/opt/qorestor/bin/qs_uninst
```

When running this command, you will receive the prompt:

```
To completely remove the application, user data, and configuration files, answer 'no' below,
```

```
and rerun the uninstaller with the '-a' option.
```

```
Do you wish to continue? yes\nno [no]:
```

Enter **Yes** to continue without removing your data.

- Reinstall QoreStor 6.0 with VTL support by either using the **--install-vtl** option or answering "yes" to the prompt for adding VTL support.
- When using QoreStor with VTL, upgrades to the operating system of the QoreStor server require additional configuration. Refer to "Upgrading the QoreStor Operating System" in the *QoreStor Installation Guide*.

Upgrading QoreStor instances on Microsoft Azure

For QoreStor instances running on Microsoft Azure, perform the actions below before upgrading to 6.0.

- At the prompt, execute the following commands:

```
curl -o azureclient.rpm https://rhui-1.microsoft.com/pulp/repos/microsoft-azure-rhel7/rhui-azure-rhel7-2.2-74.noarch.rpm
```

```
sudo rpm -U azureclient.rpm
```

```
sudo yum clean all
```

Resolved issues

The following is a list of issues addressed in this release. For convenience, defects resolved in build 6.0.0.589 and 6.0.0.585 are also listed.

Table 1: Resolved issues in build 6.0.0.670

Issue ID	Resolved Issue
QS-5835	CIFS user password does not support "." and other special characters.
QS-5975	Domain usernames with "!" are not able to be used for logins to CLI or UI
QS-3767	Updated RDCIFS certificate.

Table 2: Resolved issues in build 6.0.0.589

Issue ID	Resolved Issue
QS-3282	Improved display of Fibre Channel information in QoreStor UI.
QS-5752	NVRAM configuration setting not being retained during DR Series to QoreStor migration.
QS-5833	Custom logos are not displaying correctly.
QS-5842	Updated error message if modification to cloud-uploaded file is attempted
QS-5846	QoreStor UI displays error "Throughput: Error when getting data for graph" after DR Series to QoreStor migration.
QS-5847	Customer.env is not loading exports immediately on ocafds start.
QS-5849	Improved performance of data migration during DR Series to QoreStor migration.
QS-5854	After upgrading to QoreStor 6.0, graphs may not properly parse dates causing no data to be displayed.
QS-5858	When upgrading QoreStor, if no previous database is found the upgrade will process continually, making the UI inaccessible.

Table 3: Resolved issues in build 6.0.0.585

Issue ID	Resolved Issue
QS-4641	UI improvements related to displaying graphs and statistical data.

Issue ID	Resolved Issue
QS-5573	
QS-5180	For OST container, bytes restored field under client stats are being shown as N/A
QS-5215	During vRanger backups to QoreStor, cleanup of open images which were open at the time of connection resets caused segfault in ocafsd
QS-5393	Stats command usage failing intermittently with error "libcurl failed to execute the HTTP POST transaction"
QS-5580	Added QoreStor Menu configuration option for proxy servers
QS-5585	QoreStor will not display UI references to components not installed
QS-5586	
QS-5592	
QS-5636	Improvements to the Cloud Tier and Edit Cloud Policy pages.
QS-5710	
QS-5750	
QS-5751	
QS-5658	For some containers, logical size was not being displayed.
QS-5660	Resolved issue where diagnostics cannot be generated from UI when in maintenance mode.
QS-5689	DR to QoreStor migration may fail with "Out of memory" error.
QS-5727	When creating NAS containers in the UI, the default marker has been changed to AUTO.
QS-5733	The "Logical Throughput To The Cloud" graph is not showing the data for reads.
QS-5737	System is going to maintenance mode when replication is configured on selinux machine.
QS-5747	With a proxy configured the UI is unable to configure a cloud tier
QS-5766	The IOPS test for Add Enclosure function does not match requirements for a Large installation.

Known issues

The issues below are known to exist in this release.

Table 4: Known issues in this release

ID	Issue
QS-437 QS-438	When using multiple NetVault Backup Servers to access the same QoreStor Server, use storage group, container, and user names unique to each NetVault Backup server to avoid accidental deletions.
QS-627	After deleting a container and storage group, immediately creating a new container with the same name may fail. Workaround: This failure occurs because the old container is still in a delete_pending stage. To proceed with creating a new container, wait until the old container has been completely deleted via the QoreStor Cleaner run.
QS-1343	The Byte Ingested value for a container does not get reduced after space reclamation. This is by design as Bytes Ingested is a cumulative value
QS-1420	When executing the QoreStor uninstallation script, the script will report and continue if illegal options are entered.
QS-1446	If the QoreStor partition is not set to automount, and the QoreStor server is rebooted, the system appears to be operational but shows 0 physical capacity.
QS-1588	When running Optimized Duplication jobs in Backup Exec, the container quota is not enforced as it is for backup jobs.
QS-1670	For Linux clients, the full version number of RDA plug-ins is not displayed.
QS-1823	In some situations, the deduplication savings for a storage group shows as 100% before a backup has occurred. Once a backup has occurred, the deduplication savings will be displayed accurately.
QS-1980	When deleting a storage group, the Storage Group page will display timestamp data where the storage group entry used to appear. This occurs because the storage group is still in a delete_pending stage. Once the delete is completed and the UI refreshes, the timestamp will not longer appear.
QS-2236	When installing QoreStor, if a required port is unavailable the installation will continue and be considered successful, yet QoreStor will start in Maintenance Mode. Workaround:

ID	Issue
	Ensure that all required ports are available to QoreStor.
QS-2242	When installing QoreStor, the filesystem selected for the QoreStor repository should not contain data from other application or users. QoreStor must have exclusive access to the repository filesystem.
QS-2604	If unregistered clients access QoreStor CIFS shares by mounting the share, the <code>/var/log/messages</code> will contain numerous host name/mismatch errors. Workaround: Unregistered clients need to be updated in DNS server manually.
QS-2617	Due to corrections in the way that CPU and memory usage is captured and charted, CPU and memory usage will appear to increase after an upgrade to QoreStor 5.0.1. Actual resource usage is unaffected.
QS-2694	When the system time on the QoreStor server is synchronized with the domain time, this may cause the system time to adjust backwards. If this occurs, system statistics (like read/write throughput statistics) will appear to be hung for an amount of time equal to the time adjustment.
QS-2699	The QoreStor installation process requires that the Repository and Metadata file systems are mounted with noatime and dirsync mount options. If necessary, the QoreStor installer will make the required changes to <code>/etc/fstab</code> and reboot the QoreStor server.
QS-3766	Customers using Fibre Channel VTL on QoreStor 5.1.0 who then upgrade to QoreStor 5.1.0.670 will need to reconfigure FC VTL connections with the new target WWPN shown in the output of the fc --show command.
QS-3779	When using Secure Connect with NetVault Backup in a multiple-machine configuration (NetVault server, NetVault client, QoreStor server), Secure Connect can respond to errors only for connections between the NetVault server and QoreStor or the NetVault client and QoreStor. Secure Connect does not address connections between the NetVault server and NetVault client.
QS-4169	When using the Linux exports http_proxy or https_proxy , no_proxy is also required for the watcher service to function correctly. Refer to "Accessing QoreStor" in the <i>QoreStor User Guide</i> .
QS-4218	In situations where the QoreStor system time and the time on your cloud provider platform are out of sync, cloud authentication may fail with correct credentials. Workaround Ensure that QoreStor system time is not out of sync with your cloud provider.
QS-5105	Changes to a Cloud Tier Policy for inclusions or exclusions will not take effect until the QoreStor service has been restarted.
QS-5438	After performing a DR to QoreStor migration, network settings are reset to default.
QS-5627	The current error output of "rda --limit" without any argument incorrect suggests limits are enforced via Mbps (megabits per second) when the limit is actually in MBps (megabytes per second).
QS-5629	When configuring a custom graph, if you select a period for which there is no data, the graph will be blank and display "No Data Available"

ID	Issue
QS-5781	The DR to QoreStor migration is only possible for DR Series appliances that contain 63 or less containers in any storage Group. Storage Groups with 64 containers cannot be migrated.
QS-5826	When performing a DR to QoreStor migration, bonding modes and MTU settings are not
QS-5891	Rapid CIFS is not supported on Windows Server 2016 with secure boot enabled.

Product Licensing

QoreStor offers a backend capacity licensing model to allow for simple integration with other Quest Data Protection products.

- **Standalone license** - QoreStor is licensed by the amount of backend capacity required. Standalone licenses are available as either **perpetual** licenses (with no expiration), or **term** licenses, which expire after a specified period of time.

- **i** | **NOTE:** Term licenses are intended for specific customer use cases, i.e., licensing according to yearly billing cycles. A perpetual license is appropriate for most customers.

QoreStor licenses are additive, meaning that if you purchase a 5TB license now, and a 10TB license in the future, you will have 15TB total capacity.

- **i** | **NOTE:** Licenses for QoreStor are specific to the QoreStor server. When installing a license, the System ID for your QoreStor server is required. You can obtain the System ID with the command **system --show | grep "System ID"**

Evaluating QoreStor

QoreStor offers two methods for evaluation:

- **Default installation** - If no license is installed, QoreStor defaults to a no-cost, 1TB capacity installation supported by the QoreStor Community. This option requires no license and does not expire.
 - If a license is applied to a server running in this mode, the free 1TB is **not** added to the purchased license capacity.
 - When installed in Demo mode, the capacity is limited to 100GB.
- **Full capacity trial** - available on the Quest Software Trial site, which provides a 30-day evaluation license for up to 360TB and access to Quest Support. After the evaluation period has expired, the QoreStor server will operate in Manual Intervention mode until a license is applied. To use QoreStor beyond that time frame, you will need to purchase a perpetual standalone license.
 - If installed in Demo mode, the capacity is limited to 100GB
 - If a longer trial period is required, please contact Quest Sales.

If you have purchased a standalone license, you can install it using the **system --license** command, as described in the *QoreStor Command Line Reference Guide*.

- **i** | **NOTE:** When ordering a license, the System ID for your QoreStor server is required. You can obtain the System ID with the command **system --show | grep "System ID"**

Supported software and hardware

For a complete list of the supported hardware and software for QoreStor, see the *QoreStor Interoperability Guide*. You can download this guide by visiting: <http://support.quest.com/qorestor> and selecting your specific QoreStor version, which opens the product support page to view product documentation for your system.

Other information you may need

The following table lists the documentation available for QoreStor. The documents listed in this table are available on the Quest support website by selecting your specific QoreStor version at:

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

Table 5: QoreStor documentation

Document	Description
QoreStor Installation Guide	Provides information on installation and operation requirements, supported platforms as well as procedures for installing QoreStor.
QoreStor User Guide	Provides information on configuring and using QoreStor.
QoreStor Release Notes	Provides the latest information about new features and known issues with a specific product release.
QoreStor Command Line Reference Guide	Provides information about managing QoreStor data backup and replication operations using the QoreStor command line interface (CLI).
QoreStor Interoperability Guide	Provides information on supported infrastructure components.
QoreStor Virtual Machine Deployment Guide	Provides information on deploying the QoreStor virtual machine on VMware ESX or Microsoft Hyper-V.
Additional whitepapers	Instructions and best practices for configuring additional Quest and third-party applications to work with QoreStor.

i **NOTE:** Check for the latest documentation updates and release notes at <http://support.quest.com/qorestor>. Read the release notes first because they contain the most recently documented information about known issues with a specific product release.

Information on compatible products

QoreStor offers direct integration with Quest Software's NetVault® Backup and vRanger®, as well as Veritas NetBackup and Backup Exec. For more information on those products refer to the documents below.

Table 6: Quest NetVault Backup documentation

Document	Description
NetVault Backup Installation	Provides information about installing and upgrading the NetVault Backup server and client software.

Document	Description
Guide	
NetVault Backup Administration Guide	Describes how to configure and use NetVault Backup to protect your data. This document also provides information on configuring QoreStor repositories and migrating NetVault SmartDisk data to the new QoreStor repository.
NetVault Backup Release Notes	Provides the latest information about new features and known issues with a specific product release.

i NOTE: See the complete NetVault Backup documentation at <https://support.quest.com/netvault-backup>.

Table 7: Quest vRanger documentation

Document	Description
vRanger Installation/Upgrade Guide	This document provides information on supported platforms, system requirements, and instructions on installing and upgrading vRanger.
vRanger User Guide	This document provides information and procedures on configuring and using vRanger to protect virtual and physical environments.
vRanger Release Notes	This document details the issues resolved in this release, the known issues as of this release, and the third party components in vRanger.

i NOTE: See the complete vRanger documentation at <https://support.quest.com/vranger>.

Table 8: Veritas documentation

Document	Description
Veritas NetBackup	For information on Veritas NetBackup, refer to the NetBackup product documentation .
Veritas Backup Exec	For information on Veritas Backup Exec, refer to the Backup Exec product documentation .

About us

Quest provides software solutions for the rapidly-changing world of enterprise IT. We help simplify the challenges caused by data explosion, cloud expansion, hybrid datacenters, security threats, and regulatory requirements. We are a global provider to 130,000 companies across 100 countries, including 95% of the Fortune 500 and 90% of the Global 1000. Since 1987, we have built a portfolio of solutions that now includes database management, data protection, identity and access management, Microsoft platform management, and unified endpoint management. With Quest, organizations spend less time on IT administration and more time on business innovation. For more information, visit www.quest.com.

Contacting Quest

For sales or other inquiries, visit www.quest.com/contact.

Technical support resources

Technical support is available to Quest customers with a valid maintenance contract and customers who have trial versions. You can access the Quest Support Portal at <https://support.quest.com>.

The Support Portal provides self-help tools you can use to solve problems quickly and independently, 24 hours a day, 365 days a year. The Support Portal enables you to:

- Submit and manage a Service Request
- View Knowledge Base articles
- Sign up for product notifications
- Download software and technical documentation
- View how-to-videos
- Engage in community discussions
- Chat with support engineers online
- View services to assist you with your product

Third party components

This product contains the following third-party components. For third-party license information, and copies of third party licenses not reproduced below, go to <https://www.quest.com/legal/license-agreements.aspx>.

Source code for components marked with an asterisk (*) is available at <https://opensource.quest.com/>.

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libxml2 2.9.3	MIT	Copyright (C) 1998-2012 Daniel Veillard. All Rights Reserved. A copy of the license can be found at The MIT License (MIT)
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