



Release Notes

Release	4.4.1
Supported Product	Quantum Vision
Date	March 2018

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Vision 4.4.1 Release Notes

Vision 4.4.1 is a maintenance and security release.

Security Updates

Vision 4.4.1 addresses the following security vulnerabilities.

- Spectre/Meltdown.
- Linux "Stack Guard Page Circumvention" vulnerability.
- Linux vulnerability CVE-2015-7547.

Additional Quantum Product Support

Vision 4.4.1 supports the following Quantum products:

- Multiple DXi disk backup systems
- Q-Cloud Protect
- Scalar libraries, including Scalar i3 and Scalar i6
- Scalar LTFS
- vmPRO 4000 and vmPRO software

Product Features and OS Support

Vision 4.4.1 supports the following additional features and operating systems:

- Access control features in DXi 3.2 and later and Q-Cloud Protect
- ESXi 6 servers
- Windows Server 2016 Standard 64-bit
- Red Hat Enterprise Linux 6 64-bit
- Red Hat Enterprise Linux 7 64-bit
- SUSE Linux Enterprise 11 Service Pack 3
- SUSE Linux Enterprise 11 Service Pack 4

i Note: The architecture in Vision 4 is not compatible with Vision 3. You cannot import Vision 3 historical performance data into Vision 4. In addition, you cannot use both Vision 3 and Vision 4 to collect data from devices if both versions of the software are installed on the same server.

Vision Requirements

Vision supports installation and operation on both physical servers and virtual machines (VMs) functioning as servers. To properly install and use Vision on a physical or VM server, ensure the following requirements are met.

Server Requirements

Make sure that the Vision server, which hosts Vision software, meets the requirements outlined below.

Server Component	System Requirement
Processor	<ul style="list-style-type: none">• Intel or AMD server class processor• 2 CPUs for up to 50 devices• 4 CPUs for more than 50 devices
Memory	<ul style="list-style-type: none">• 4 GB for monitoring up to 50 devices• 8 GB for monitoring more than 50 devices
Available Disk Space	<ul style="list-style-type: none">• 200 GB for monitoring up to 50 devices• 400 GB for monitoring more than 50 devices
Operating System	One of the following operating systems: <ul style="list-style-type: none">• Windows Server 2003 32-bit• Windows Server 2003 R2 64-bit• Windows Server 2008 32-bit• Windows Server 2008 R2 64-bit• Windows Server 2012 Standard 64-bit• Windows Server 2016 Standard 64-bit• Red Hat Enterprise Linux 5 32-bit• Red Hat Enterprise Linux 5 64-bit• Red Hat Enterprise Linux 6 64-bit• Red Hat Enterprise Linux 7 64-bit• SUSE Linux Enterprise 11 Service Pack 3• SUSE Linux Enterprise 11 Service Pack 4

Server Component	System Requirement
Virtual Appliance	<ul style="list-style-type: none"> • Server system with at least an i7 quad-core Intel processor (or AMD equivalent) • 2 virtual CPUs for up to 50 devices • 4 virtual CPUs for more than 50 devices • At least one IP address available for use by the Vision appliance • One or more ESX4, ESXi4, ESXi5, or ESXi 6 servers • Same memory requirements as that of a physical server installation
Additional Software	(Windows only) Microsoft .NET Framework 2.0 or higher

Server Port Requirements

Before using Vision, you need to open and enable specific firewall ports on the Vision server.

For Vision to operate correctly, open the following firewall ports:

- Port 80 - Web server (http)
- Port 443 - Web server (https)
- Port 162 - SNMP

To enable monitoring of storage devices, open the following firewall ports to outgoing traffic:

- Port 80 - Web server (http)
- Port 443 - Web server (https)
- Port 22 - SSH

i Note: Ports 80 and 443 are the default web server ports. If you specified different web server ports when installing Vision software, open those ports in the firewall instead.

Browser Requirements

Before running Vision software on your system, review following browser requirements:

- Vision 4 is designed to run in any modern Web browser that supports the Adobe Flash Player plug-in.
- Vision 4.3.5 and later requires Adobe Flash Player version 11.4 or higher. Web browser software is not included with Vision. You must obtain and install it separately. To download and install Flash Player, go to <http://www.adobe.com>.
- Vision does not support the 64-bit version of the Flash Player plug-in on Linux. Instead, use the 32-bit Flash Player plug-in and a 32-bit browser. For 64-bit Linux, the Chrome browser and its built in pepper flash player are compatible with Vision.

Supported Storage Device Requirements

To discover and monitor a Quantum backup system in Vision, the system must be a Quantum-supported device. Vision supports the following devices:

DXi Devices	Scalar Devices	Virtual Devices
<ul style="list-style-type: none"> DXi8500 disk backup system DXi7500 disk backup system DXi6000 series (DXi6500, DXi6700, DXi6800, DXi6900, and DXi6900-S) disk backup systems DXi4000 series (DXi4500, DXi4600, DXi4700) disk backup systems 	<ul style="list-style-type: none"> Scalar i6000 library Scalar i2000 library Scalar i500 library Scalar i80 library Scalar i40 library Scalar LTFS Scalar i3 library Scalar i6 library 	<ul style="list-style-type: none"> Q-Cloud Protect DXi V-Series (DXi V1000, DXi V2000, and DXi V4000) virtual backup systems vmPRO 4000 (software/hardware backup solution) vmPRO virtual backup system

Q-Cloud Protect and DXi Requirements

Review the following special requirements for Q-Cloud Protect and DXi 6900.

VPC-Private Network Connection for Q-Cloud Protect

If you are using Vision to monitor Q-Cloud Protect, you *must* configure the network connection between your Q-Cloud Protect instances, your on-site DXi appliances, and your Vision server within the same VPC-private network.

Access Control

For Vision to gather replication data for Q-Cloud Protect appliances or DXi devices running software versions 3.2 or later, it needs to identify itself through an SSH key pair.

Vision generates this key pair. The private key is Vision's secure identifier. The public key is shared with the Q-Cloud Protect appliance or DXi device. Vision has authorization to gather replication data only when the private and public keys match.

Resolved Issues

The following issues have been resolved in Vision 4.4.1.

ID	Description
62862	Database issues.
64713	After upgrade, Vision stops updating data from DXi systems but the status stays Green .
64853	Linux Stack Guard Page Circumvention vulnerability.
64873	Linux vulnerability (CVE-2015-7547).
66471	Replication Namespace Summary report InProgress replication issues.
66534	Topology display does not show relationship between two DXi systems.
66917	
66972	Spectre/Meltdown security vulnerability.
66960	

Known Issues

This topic presents known issues within Quantum Vision 4.4.x.

ID	Description
60735	<p>The Vision Topology Console does not recognize source-to-target replication relationships if devices are configured with hostnames rather than IP addresses.</p> <p>Workaround</p> <p>Vision uses DXi and Q-Cloud Protect IP addresses — rather than hostnames — to determine replication relationships. It does not recognize replication relationships if the DXi or Q-Cloud Protect IP address is not supplied.</p> <p>Make sure to configure your DXi and Q-Cloud Protect replication relationships using the IP addresses rather than hostnames.</p>
51086	<p>Unable to modify the Alert Management policy to disable/delete email notifications.</p> <p>Workaround</p> <p>Delete the alert rule and re-create it.</p>

ID	Description
50925	<p>When a library or drive fails to fully load media because of the drive/media combination, Vision cannot determine the serial number and manufacturer of the media. Instead it displays indecipherable characters.</p> <p>Workaround</p> <p>See the Scalar device for its serial number and manufacturer information.</p>
48816	<p>When you select a report in the Reporting Console by double-clicking on it, the report does not display.</p> <p>Workaround</p> <p>Double-click the report again, and repeat until the report displays.</p>
42660	<p>From the Media Console if you filter using Tape Type > Cleaning, Vision displays misleading information in the Attribute column for some i500 Scalars.</p> <p>Workaround</p> <p>For i500 cleaning tapes, filter on the unique barcode assigned to this media type. Keep in mind that Vision supports wildcard searches for barcodes.</p>
40083	<p>The Scalar Device Console incorrectly reports that drives have been removed from the library.</p> <p>Workaround</p> <p>Use the native management interface for the Scalar library to see the correct information.</p>
38755	<p>The Alert Ack History report is displaying incorrect alerts for SNMP/After Reduction/Space Reclamation alert types.</p> <p>Workaround</p> <p>To view correct alerts, do one of the following:</p> <ul style="list-style-type: none"> • Display the device in question on its individual device console. • Display Acknowledged alerts on the Alerts pane of the Devices Console
38764	<p>The DXi Capacity Growth Snapshot graph is corrupted when parameters on the Series are changed.</p> <p>Workaround</p> <p>If the display becomes corrupted when viewing the DXi Capacity Growth Snapshot report as a bar chart, select the Column chart view.</p>
38435	<p>In the Analytics Console, non-zero counts disappear if you deselect the Show Zero Count check box.</p> <p>Workaround</p> <p>Leave the Show Zero Count check box selected.</p>

ID	Description
38406	Some classic reports do not report until a device status update occurs or until a Console visit is made.
49952	<p>Workaround</p> <p>Do one of the following:</p> <ul style="list-style-type: none"> • Wait for status updates. • Navigate to the device console(s) for the device(s) for which you would like a report. Return to the Reporting Console and update the report.

Vision CentOS 7 Upgrade

Prior to Vision 4.4.1, the Vision appliance virtual machine was built using the CentOS 6 operating system. In order to include the latest security and technical improvements in the operating system platform, the base operating system in Vision 4.4.1 is now CentOS 7.

CentOS 6 cannot be upgraded to CentOS 7. In order to upgrade the Vision appliance to the CentOS 7 based version of Vision 4.4.1, you must replace the virtual appliance..

To upgrade to CentOS 7, do the following:

1. [Upgrade the existing CentOS 6 appliance to Vision 4.4.1 below](#)
2. [Backup the database from the CentOS 6 appliance on the next page](#)
3. [Prepare and shut down the CentOS 6 appliance on the next page](#)
4. [Deploy a new Vision 4.4.1 CentOS 7 appliance on the next page](#)
5. [Configure the new appliance with network addresses on page 10](#)
6. [Restore database backup to the new appliance on page 10](#)
7. [Perform additional configurations on page 10](#)

Upgrade the existing CentOS 6 appliance to Vision 4.4.1

When backing up and restoring a Vision database, the Vision version must be the same at the time the backup is made and the time it is restored. Since you will be restoring the database to a Vision 4.4.1 system, you must first upgrade your existing Vision appliance to version 4.4.1.

To upgrade your appliance to 4.4.1:

1. Log in to the Vision appliance via the Vision GUI. If your Vision server has connectivity to Quantum via the Internet, the main page of the application should indicate that an upgrade to 4.4.1 is available.
2. Click the link to begin the upgrade.

The upgrade can also be performed via the Vision appliance command line administrative application.

1. From the appliance console terminal, log in as the **sysadmin** user.
2. Issue the `system upgrade` command. Vision software will be updated via the Linux yum update service.

Backup the database from the CentOS 6 appliance

Do the following:

1. From the appliance console terminal, log in as the **sysadmin** user.
2. Issue the `admin backup` command. Follow the prompts to send the database backup to a connected server.

i Note: Refer to the *Vision User's Guide* for more details about backing up the Vision database.

Prepare and shut down the CentOS 6 appliance

Make note of the existing Vision appliance network configuration, including:

- IP Address
- MAC Address

In order to make the transition invisible to users, the new CentOS 7 appliance will be configured with the CentOS 6 network addresses

i Note: The Vision license is tied to the appliance MAC address. You will need to set the new CentOS 7 appliance MAC address with the address of the current CentOS 6 appliance.

To find the find the current appliance MAC address:

1. Log in to Vision through the browser.
2. Go the **Configuration -> Licensing** dialog.

After recording the IP address and MAC address of the current CentOS 6 appliance, shut down the appliance:

1. From the appliance console terminal, log in as the **sysadmin** user.
2. Issue the `system shutdown` command.

Deploy a new Vision 4.4.1 CentOS 7 appliance

Do the following:

1. Download the new Vision 4.4.1 appliance from Quantum.
2. Deploy the `.ova` file into your VMware environment.

3. Power up the virtual machine after it has finished deployment.

Configure the new appliance with network addresses

Configure the new appliance with the network addresses of the old appliance:

1. From the appliance console terminal, log in as the **sysadmin** user.
2. Issue the following commands:

<code>net config static (Optional)</code>	<p>If the old appliance was configured with a static IP address, use this command to set the following for the new appliance:</p> <ul style="list-style-type: none"> • IP Address • Netmask • Network Gateway
<code>net mac</code>	Use to set the MAC address of the new appliance. This will enable the Vision license previously installed on the old appliance.

Restore database backup to the new appliance

1. From the appliance console terminal, log in as the **sysadmin** user.
2. Issue the `admin restore` command.

Follow the prompts to retrieve the database backup file and restore the database data on your new appliance.

i Note: Refer to the *Vision User's Guide* for more details about backing up the Vision database.

Perform additional configurations

The new appliance should be running and the Vision application available via the Vision GUI. Perform any additional configurations that may have previously been done on the old appliance, including but not limited to the following:

<code>admin timezone</code>	Set the timezone.
<code>admin password</code>	Set the sysadmin password.
<code>net ports</code>	Change the http/s port(s) for the Vision application
<code>net dns</code>	Configure the DNS server(s) for the appliance

Quantum Support

For further assistance, or if training is desired, contact Quantum at the following numbers:

Region	Support Contact
North America	1-800-284-5101 (toll free) +1-720-249-5700
EMEA	+800-7826-8888 (toll free) +49 6131 324 185
Asia Pacific	+800-7826-8887 (toll free) +603-7953-3010

For worldwide support:

<http://www.quantum.com/serviceandsupport/get-help/index.aspx#contact-support>
