



# Release Notes

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<b>Release</b>	DXi 3.4.0.3 Software
<b>Supported Product</b>	DX4700, DXi6900, DXi6900-S
<b>Date</b>	January 2019

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## Purpose of This Release

The DXi 3.4.0.3 Software is a maintenance release that supports the DXi4700, DXi6000, and DXi9000-S disk backup systems and contains important fixes.

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# Product Compatibility List

The following table provides information about hardware compatibility with DXi 3.4.0.3 Software.

Component	Description
DXi4700 - NAS	<ul style="list-style-type: none"><li>• 1 Node</li><li>• 1 or 2 RAID controller cards</li><li>• 0 to 3 Expansion modules (JBODs)</li><li>• 3 x 1 GbE ports</li><li>• (Optional) 2 x 10 GbE Ethernet ports or 2 x 10 GBase-T Ethernet ports.</li><li>• 5 TB–135 TB usable capacity</li></ul>
DXi4700 - VTL	<ul style="list-style-type: none"><li>• 1 Node</li><li>• 1 or 2 RAID controller cards</li><li>• 0 to 3 Expansion modules (JBODs)</li><li>• 3 x 1 GbE ports</li><li>• (Optional) 2 x 10 GbE Ethernet ports or 2 x 10 GBase-T Ethernet ports.</li><li>• 2 x 8Gb Fibre Channel ports (for VTL)</li><li>• 5 TB–135 TB usable capacity</li></ul>
DXi4700 - Multi-Protocol	<ul style="list-style-type: none"><li>• 1 Node</li><li>• 1 or 2 RAID controller cards</li><li>• 0 to 3 Expansion modules (JBODs)</li><li>• 3 x 1 GbE ports</li><li>• (Optional) 2 x 10 GbE Ethernet ports or 2 x 10 GBase-T Ethernet ports.</li><li>• 2 x 8Gb Fibre Channel ports (for VTL)</li><li>• 2 x 8Gb Fibre Channel ports (for PTT connections, also configurable for VTL)</li><li>• 5 TB–135 TB usable capacity</li></ul>

Component	Description
DXi6900-S	<ul style="list-style-type: none"> <li>• 1 Node</li> <li>• 1 or 2 Array modules (RBODs)</li> <li>• 0 to 6 Expansion modules (EBODs)</li> <li>• 3 x 1 GbE Ethernet ports</li> <li>• Additional network adapter providing combinations of up to 6 x 10 GbE Ethernet ports, 6 x 10 GBase-T Ethernet ports, or 6 x 16 Gb Fibre Channel ports (for VTL or PTT)</li> <li>• 34 TB-544 TB usable capacity</li> </ul>
DXi6900	<ul style="list-style-type: none"> <li>• 1 Node</li> <li>• 1 or 2 Array modules (RBODs)</li> <li>• 0 to 13 Expansion modules (EBODs)</li> <li>• 3 x 1 GbE Ethernet ports</li> <li>• 2 x 10 GbE Ethernet ports (DXi6900 G1)</li> <li>• (Optional G1 configuration) Additional network adapter providing 2 x 10 GbE Ethernet ports, 4 x 1 GbE Ethernet ports, 6 x 8 Gb Fibre Channel ports, 4 x 16Gb Fibre Channel ports, or 2 x 10 GBase-T Ethernet ports.</li> <li>• (Optional G2 configuration) Additional network adapter providing combinations of up to 6 x 10 GbE Ethernet ports, 6 x 10 GBase-T Ethernet ports, or 6 x 16 Gb Fibre Channel ports (for VTL or PTT)</li> <li>• 2 x 10 Gb Ethernet ports</li> <li>• 6 x 16 Gb Fibre Channel ports (for VTL or PTT)</li> <li>• 17 TB-510 TB usable capacity</li> </ul>

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# Supported Web Browsers

- Mozilla Firefox 36 or later.
- Google Chrome 40 or later.
- Microsoft Internet Explorer 11.

## **Additional Information**

- For correct operation of the remote management console, disable any pop-up blockers and enable JavaScript in your Web browser.
- DXi Advanced Reporting requires installation of Adobe Flash Player plug-in 10.x or higher.
- DXi Advanced Reporting 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.
- If you experience Web browser issues, update to the latest version of your web browser.

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# OST Plug-In Support

The Quantum OST plug-ins are based on Veritas OpenStorage API specification Version 9.4.2 and 11.1.

## Required Components

- Veritas NetBackup 7.6.x or later or Backup Exec 2014 or later.
- If using the Veritas NetBackup 52xx Appliance platform, version 2.6.0.2 or later.
- Quantum OST Plug-in (downloaded separately through the remote management console or from the Quantum Service and Support Web site).
- Quantum OST storage server (included with the DXi software).

## Supported Platforms and Software Versions

OST Plug-in support is available for the DXi4700, DXi6900, and DXi6900-S operating systems:

- Windows 32-bit
- Windows 64-bit
- RedHat Linux
- SUSE
- Solaris
- HP-UX
- AIX

OST Plug-in support is also available for the Veritas NetBackup 52xx/53xx Appliances.

The latest versions of all OST Plug-ins are available for download at:

<http://www.quantum.com/serviceandsupport/softwareanddocumentationdownloads/ostclientplugin/index.aspx>

For more information on OST Plug-in installation, see the *OST Plug-in Installation Instructions*.

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# RMAN Plug-In Support

The Quantum RMAN plug-ins are based on Oracle Recovery Manager (RMAN) API specification Version 2.1.

## Required Components

- Oracle 11 or 12.
- Quantum RMAN Plug-in (downloaded separately through the remote management console or from the Quantum Service and Support Web site).

## Supported Platforms and Software Versions

Oracle RMAN Plug-ins are available for the following operating systems:

### Windows Support

- Windows 2012 64-bit (Oracle 11)
- Windows 2016 64-bit (Oracle 11)

### Linux Support

The Quantum RMAN 1.1.0 plug-in contains support for the following Linux operating systems:

- RedHat Enterprise Linux 6 x86 64-bit
- RedHat Enterprise Linux 7 x86 64-bit
- SUSE Enterprise Linux 12 x86 64-bit
- Oracle Linux 6 x86 64-bit
- Oracle Linux 7 x86 64-bit

The latest versions of all RMAN Plug-ins are available for download at:

<http://www.quantum.com/serviceandsupport/softwareanddocumentationdownloads/ostclientplugin/index.aspx>

For more information on RMAN Plug-in installation, see the *RMAN Plug-in Installation Instructions*.

# Replication Compatibility

The following DXi software releases can replicate data to the DXi appliance. DXi software releases not shown in the list are not recommended.

		DXi 2.1.3	DXi 2.2.x	DXi 2.3.x	DXi 3.0.x	DXi 3.1.x	DXi 3.2.x	DXi 3.4.x
Replication Target	DXi 2.1.3	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	DXi 2.2.x	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	DXi 2.3.x	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	DXi 3.0.x	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	DXi 3.1.x	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	DXi 3.2.x	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	DXi 4.x	No	No	Yes	Yes	Yes	Yes	Yes

**i Note:** The default number of allowed DXi replication sources is 10. If you need to change these default settings, contact Quantum Customer Support.



# Resolved Issues

The following issues were resolved in DXi 3.4.0.3 Software.

Bug Number	SR Number	Description
46046	408152 424319 443430	getsegmenttips.sh could not process any input parameters
46113	3710946 348624 376696 372366 385863 394327 380554 399039 407278 415855 432382	Replication failed due to insufficient connections, even though BPW could have freed connections. Idle connections reclaimed. BPW no longer hangs on to BFST connections.
46532	321376	RAS and Admin Alert emails now include customer contact information.
46663	313129 448734	BFST: assert, Blocklet index out of range, Function = "bp_cluster_header_move_placeholder_to_end". Line = 1791.
47727	368750 370230 371149 369959 379843 380176	Following upgrade 3.4.0, ingest via OST from Netbackup was no longer possible. Intervention as user root via command line was required to resolve issue.

Resolved Issues

Bug Number	SR Number	Description
47889	366730 434921 438191	Many pointless cluster checkouts were observed when storing budget-limited BLOBs.
48002	376442 394327 374095 443430	Upgrade to 3.4.0.1 changed segmented network data types from selective to ALL when an interface had a route defined.
48019	376500 379827 380127 376558 393358 400400 0401768 410816 411244	service veeam_chroot shutdown times out during upgrade, smith, corrupt linter, diag
48027	381360	/opt/DXi/scripts/libvirt-guests experienced "'libvirt-guests' start timed out!" sending kill signal leading to diagnostics loop on every DXi reboot.

Resolved Issues

Bug Number	SR Number	Description
48081	381593	Could not setup bonding mode LACP if the bond has more than one IP, falls back to RoundRobin.
	376442	
	383742	
	383744	
	383746	
	383748	
	383749	
	383752	
	383754	
	383755	
	383756	
	383758	
	383760	
	383763	
	383767	
	383771	
	383799	
	383798	
	383797	
	383796	
	371671	
	371672	
	371670	
	371669	
	403189	
	440225	
48528	399226	CVE-2015-2808 SSL/TLS: "Invariance Weakness" vulnerability in RC4 stream cipher, SSH Weak Algorithms Supported.

Bug Number	SR Number	Description
48574	401917	Integrated shutdown retry logic in veeam_chroot script.
	418524	In order to ensure veeam_chroot shuts down cleanly, introduced shutdown retry logic. This logic will detect open files and kill processes that are preventing the umount process.
	418715	
	416319	
	416671	
	421619	
	423410	
	424307	
	424742	
	425617	
	428809	
	437914	
48734	416319	Deleting open files eventually leads to the commit log failing to absorb I/O.
49117	423311	int ret in qfs_llseek resulted in failed lseek in veeam usage of /Q
	433354	
	435623	
	438803	
	443023	
49174	418869	BFST- Inbound parcel header CRC check failed. Resolved in Blockpool.
49390	437894	At least 10 replication source connections from a replication source on top of full ingest , now allowed to connect even when BPW or OST have consumed the total connection allocation for ingest. New Vserver group hierarchy created in blockpool config file.
	434921	
49564	443430	getsegmenttips.sh now understands Segments.Segment = ALL, was preventing source from ability to configure a replication target, leading to misleading errors on the source.
49634	448869	Impending NetApp drive failure RAS ticket emails for a degraded volume did not contain controller inventory details similar to the Dell Failed drive RAS ticket emails new to 3.4.0.
49644	448970	Limit sudo-io logging within chroot.
	471962	

## Resolved Issues

Bug Number	SR Number	Description
49651	401917	Sudo rpm was updated to support Veeam in 3.4.0.3.
	410352	
	416671	
	418524	
	418715	
	423410	
	424307	
	424742	
	425617	
	428809	
	432018	
	437914	
	443023	
	442201	
	442202	
	443312	
	443943	
	444392	
	445270	
	445718	
	447620	
	449425	
49796	448273	DXi total data loss due to adl:32246, exposed by manual intervention, where target and source disagreed on TLS settings, per svn-galaxy:62072.

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# Known Issues

DXi 3.4.0.3 Software has the following known issues:

- [Replication Known Issues](#)
- [Network Known Issues](#)
- [CLI Known Issues](#)
- [GUI Known Issues](#)
- [NAS Known Issues](#)
- [RMAN Known Issues](#)
- [Veeam Known Issues](#)
- [Installation and Upgrade Known Issues](#)
- [Miscellaneous Known Issues](#)
- [DXi Advanced Reporting Known Issues](#)

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**i Note:** The Scheduler command line interface (CLI) commands are deprecated in DXi 3.4.0.3 Software. These commands continue to function in DXi 3.4.0.3 Software but will be removed in a future software release. To schedule events, use the **Configuration > Scheduler** page in the remote management console instead.

# Replication Known Issues

Bug Number	SR Number	Description	Workaround
31605		On the <b>Home</b> page and the <b>Status &gt; Disk Usage</b> page, the value for <b>Data Size After Reduction</b> is larger than the value for <b>Data Size Before Reduction</b> .	<p>This issue can occur when replication is enabled for a share or partition, but replication is rarely or never run. In this case, continuously replicated data accumulates on the target system, but this data is not included in the value for <b>Data Size Before Reduction</b> until a replication job is performed and a snapshot is saved.</p> <p>To correct the issue, manually initiate replication of the share or partition on the <b>Replication &gt; Send</b> page, and allow the replication to complete.</p> <p>To avoid this issue in the future, schedule replication for the share or partition on the <b>Configuration &gt; Scheduler</b> page. Alternately, you can enable Directory/File or Cartridge Based replication for the share or partition.</p>
36811		Some chargeback reporting statistics are not maintained for failback operations.	<p>The Input Bytes for the failback operation can be viewed on the source for the failback operation. On the <b>Replication &gt; Send</b> page, hold the cursor over the job status and note the value displayed for <b>Original Data Size</b>.</p> <p><b>i Note:</b> After the failback operation is complete, chargeback reporting on the target for the failback operation will accurately report the User Data Size of the data replicated.</p>

Bug Number	SR Number	Description	Workaround
37000	A0599191	If replication is disabled and the re-enabled for a share or partition on the <b>Replication &gt; Send</b> page, previously configured Directory/File or Cartridge Based Replication settings are lost.	<p>This is expected behavior. When replication is disabled, all replication settings for the share or partition are cleared. To re-configure the share or partition for Directory/File or Cartridge Based replication, select it and click <b>Configure</b>.</p> <p><b>i Note:</b> You can disable or enable replication for all shares or partitions on the <b>Replication &gt; Actions</b> page. This method preserves replication settings for all shares or partitions.</p>

## Network Known Issues

Bug Number	SR Number	Description	Workaround
34125		On the <b>Configuration &gt; System &gt; Network</b> page, editing the <b>IP Address</b> , <b>Netmask</b> , and <b>Gateway</b> for a network interface results in the following error: <b>Destination Gateway: &lt;ip_address&gt; is not reachable by any of the current configured IP addresses.</b>	Delete the existing network interface and add a new interface with the desired <b>IP Address</b> , <b>Netmask</b> , and <b>Gateway</b> .

## CLI Known Issues

Bug Number	SR Number	Description	Workaround
35104		When using the <b>--edit emailrecipient</b> CLI command, the same e-mail address can be assigned to multiple recipients.	Use the <b>Configuration &gt; Notifications &gt; Email &gt; Recipients</b> page in the remote management console to edit e-mail recipients.



## GUI Known Issues

Bug Number	SR Number	Description	Workaround
30999		When creating or editing an event on the <b>Configuration &gt; Scheduler</b> page, all times are relative to the workstation from which the GUI is accessed, rather than the DXi.	If the DXi is in a different time zone than the workstation used to access the GUI, make sure to account for the time zone differences when scheduling events.
35426		On the <b>Configuration &gt; OST &gt; Storage Servers</b> page, if there are multiple pages of storage servers, the <b>Delete</b> button is unavailable (gray) if all storage servers on a page are selected even if all the storage servers meet the deletion criteria (no backup images or active connections).	This occurs if a storage server on another page does not meet the deletion criteria. De-select at least one storage server on the displayed page, and the <b>Delete</b> button will be available.
32609		On the <b>Configuration &gt; Scheduler &gt; Calendar</b> page, after you add or edit an event and specify recurrence <b>until</b> a date, if you hover the cursor over the event, the <b>UNTIL</b> date does not display in human readable format.	Open the event by double-clicking it to view the <b>UNTIL</b> date.
32659		If you reboot or shut down the DXi using the <b>Utilities &gt; Reboot &amp; Shutdown</b> page and leave the web browser window open, after the DXi comes up again, refreshing the open web page causes the reboot or shut down command to be sent to the DXi again.	After you reboot or shut down the DXi using the <b>Utilities &gt; Reboot &amp; Shutdown</b> page, make sure to close the browser window. In general, you should not refresh the web browser (unless instructed to do so) or copy and paste URLs between tabs.
36888		On the <b>Configuration &gt; OST &gt; Accent</b> page, after uploading certificate and key files and clicking <b>Apply</b> , a dialog box appears, but the message is truncated.	The complete dialog message is: TLS credential files were successfully installed. The system is rebooting to complete the installation. Please wait before logging in again.

Bug Number	SR Number	Description	Workaround
36926		When adding a scheduled event on the <b>Scheduler</b> page, the message Saving, please wait displays, the but the save action does not complete, and the schedule is not set.	Refresh the browser window, and add the scheduled event again.
39135		If a very long security notice is specified on the <b>Configuration &gt; System &gt; Security &gt; Security Notice</b> page, the end of the message may be truncated in the <b>Security Notice</b> dialog box that displays after logging on.	Specify a shorter message on the <b>Configuration &gt; System &gt; Security &gt; Security Notice</b> page.
39824		On the <b>Status &gt; Hardware &gt; Details &gt; Storage Arrays</b> page, an <b>Attention</b> link displays next to <b>Controllers</b> and <b>Volumes</b> , but clicking the link displays an empty list of non-normal controllers or volumes.	Even though the <b>Attention</b> link displays, drives that are rebuilding are considered normal by the system. Click the <b>Controllers</b> or <b>Volumes</b> link to see a list of all drives.
42779		The <b>PTT</b> page allows any number concurrent PTT backup jobs to be configured. When more concurrent backup jobs are started than the PTT license allows (3), the additional jobs fail.	Do not configure more than 3 concurrent PTT backup jobs.

## NAS Known Issues

Bug Number	SR Number	Description	Workaround
27908	1387940 1408612 1465392 1493203	Files copied to exported NFS and CIFS shares do not retain their original creation time.	To determine the creation time, examine the original file rather than the copy on the share.
37651		If a workgroup user is deleted using the <b>syscli --del user</b> command while a CIFS share is mounted, a user with the same username cannot be later added.	Use a different username when adding a workgroup user. To avoid this issue, make sure to unmount any CIFS shares before deleting the associated workgroup users.

## RMAN Known Issues

Bug Number	SR Number	Description	Workaround
45854		<p>Incorrect pop-up failure message appears when attempting to configure an RMAN share replication to a target that does not support RMAN shares.</p> <p>Depending on the target configuration, the following error messages appear:</p> <p>"Source and Target Share Type's are not matching. Source share type is cifs and Target share type is nfs"</p> <p>"Source and Target Share Type's are not matching. Source share type is cifs and Target share type is cifs"</p>	<p>If this error message appears, you are attempting to replicate to a target that does not support RMAN shares. Replicate to a target that supports RMAN shares.</p>

## Veeam Known Issues

Bug Number	SR Number	Description	Workaround
47806		Veeam cannot be enabled if a "veeam" account is defined on a connected or disconnected windows workgroup.	Delete the "veeam" account from the windows workgroup.

## Installation and Upgrade Known Issues

Bug Number	SR Number	Description	Workaround
36686		If the <b>Software Upgrade Utility</b> dialog box is open, and the session logs out due to inactivity, the <b>Login</b> window does not automatically display, and the <b>Software Upgrade Utility</b> remains open. Clicking the <b>Check Now</b> button results displays the following error: <b>PollUpgradeJob not authenticated</b> .	Close the <b>Software Upgrade Utility</b> , log back on to the system, and then access the <b>Software Upgrade Utility</b> . Clicking <b>Check Now</b> will now work as expected.

## Miscellaneous Known Issues

Bug Number	SR Number	Description	Workaround
26610	1349564	Spectra Logic T120 and greater libraries cannot be discovered on the <b>Configuration &gt; PTT &gt; Physical Device Discovery</b> page.	Before attempting to discover the Spectra Logic, place the library into STK L700 emulation mode. Data partitions must be individually configured to use the Sun/StorageTek L700 emulation mode. Only data partitions configured to use the STK L700 emulation mode are recognized by the DXi.

## DXi Advanced Reporting Known Issues

Bug Number	SR Number	Description	Workaround
30001		Exporting a graph to a JPEG or PNG graphic image in Internet Explorer 9 version 9.0.0.8112.16241 causes the browser to stop responding.	Using a newer version of Internet Explorer 9 or another supported browser.
35537		<b>Used Disk Space</b> may appear as unknown or NaN (not a number) if the selected time range begins before the installation date of the DXi.	Select a time range that begins after the installation of the DXi.
36969		After the time zone is changed on the DXi, DXi Advanced Reporting does not log Ethernet or Fibre Channel I/O activity. This issue only occurs if the new time zone is west of the previous time zone. <b>i Note:</b> This also affects ingest statistics displayed on the Home page in the remote management console.	Ethernet and Fibre Channel I/O logging will resume after a number of hours equal to the difference in time zones. For example, if the new time zone is 8 hours west of the old time zone, logging will resume in 8 hours.
37013		The <b>Replication Ingest &gt; Total per Replication</b> report displays a blank screen.	When no replication ingest has occurred on the DXi, the database will be empty; therefore, the <b>Replication Ingest &gt; Total per Replication report</b> will display a blank screen. This is normal behavior.
39487		On the <b>Replication Ingest</b> report, data for small replication jobs is not graphed accurately, especially when longer time ranges are selected.	See the exported CSV file ( <b>Reports &gt; Replication Ingest &gt; Export Replication Chargeback</b> ) for the correct data.

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# Documentation

The following documents are currently available for the DXi system:

Document Number	Document Title
6-68106	DXi4701 User's Guide
6-67079	DXi-Series NetBackup and Backup Exec OST Configuration Guide
6-67081	DXi-Series Command Line Interface (CLI) Guide
6-67211	DXi-Series Backup Application Specific Path to Tape (PTT) Configuration Guide
6-67082	DXi-Series SNMP Reference Guide
6-67353	DXi Advanced Reporting User's Guide

For the most up-to-date documentation for the DXi-Series, go to:

<http://www.quantum.com/ServiceandSupport/Index.aspx>

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# Supported Backup Applications

The following backup applications are supported for use with DXi 3.4.0.3 Software:

Backup Application	Revision
Veritas NetBackup	7.6.x and later
Veritas Backup Exec	2014 and later
CommVault Simpana	9 and later
Quantum vmPRO	3.2 and later
Veeam Backup & Replication	6.5 and later
EMC NetWorker	7.6.5 and later
IBM Tivoli Storage Manager	6.3.3 and later
HP Data Protector	7.1 and later
CA ARCserve	16.5 and later
Dell NetVault	9.0.x and later
Microsoft Data Protection Manager	2010 and later
Oracle Secure Backup	10.2 and later
ASG-Time Navigator	4.2 and later
Syncsort Backup Express	3.1.x and later

 **Note:** Contact the backup application vendor for the latest software revision information.

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# DXi Additional Notes

For additional information about DXi 3.4.0.3 Software, refer to the following sections.

- [Email Reports](#)
- [System Metadata](#)
- [Date & Time Configuration](#)
- [Network Hostname Restrictions](#)
- [Internet Explorer Security Level](#)
- [Changing the Number of Allowed Sources](#)
- [Quantum Vision](#)
- [StorageCare Guardian](#)
- [Running Healthchecks](#)

## Email Reports

Quantum recommends enabling **Email Reports** after upgrading to DXi 3.4.0.3 Software (if not already enabled). When enabled, **Email Reports** periodically sends system configuration and status information to Quantum, including any software upgrades you have installed using the new **Software Upgrade Utility**. Quantum Support can use this information to provide a better support experience in the future.

To configure **Email Reports**:

1. Make sure a valid outgoing e-mail server is specified on the **Configuration > Notifications > Email > Server** page.
2. (Optional) Specify any additional recipients to receive the reports on the **Configuration > Notifications > Email > Email Reports > Recipients** page.
3. Make sure a weekly **Email Reports** schedule is configured on the **Configuration > Scheduler** page. Configure two weekly recurring events: one for **Status** reports and one for **Configuration** reports.

## System Metadata

The **System Metadata** statistic appears in two locations in the DXi remote management console:

- On the **Home** page, under **Disk Usage > Show More**.
- On the **Status > Disk Usage** page, under **Used**.



The **System Metadata** statistic represents all internal usage of disk space on the DXi . This statistic is calculated using the following formula:

$$\text{System Metadata} = [\text{File System Used Space}] - [\text{Reclaimable Space}] - [\text{Blockpool Reduced Data Size}] - [\text{Non-Deduplicated Data Size}]$$

The following values are used in this formula:

- **File System Used Space** - All space used by all parts of the system. This includes temporary files (such as those used by replication, space reclamation, and healthchecks), as well as cached files that have not yet been truncated.
- **Reclaimable Space** - The disk space that can be used for new deduplicated data. The DXi will automatically compact reclaimable space to create more free space as needed.
- **Blockpool Reduced Data Size** - The amount of deduplicated data in the blockpool that has non-zero reference counts (that is, data that is not a candidate for space reclamation). During space reclamation, this value will decrease as reference counts are decremented.
- **Non-Deduplicated Data Size** - The size of data stored on shares that do not have data deduplication enabled. This value increases or decreases as data is added to or removed from these shares.

Because **System Metadata** is affected by many values and represents the internal operations of the system, you might not always be able to easily correlate changes in this statistic to your typical usage patterns.

## Date & Time Configuration

The date and time settings are configured using either the **Getting Started Wizard** at installation or the **Configuration > System > Date & Time** page in the remote management console.

Although you may specify the date and time manually for your system, we highly recommend that you configure your system to use NTP (Network Time Protocol) to maintain accurate date and time settings.

If you have configured at least one DNS (Domain Name Server) IP address during network configuration, then you should select one of the Timeserver Pools. The Timeserver Pool most appropriate for your system will depend upon your geographical location. For example, if you are located in the United States we recommend you select **us.pool.ntp.org**.

If you have not configured your system to utilize at least one DNS IP address, then you cannot use a timeserver pool and must specify an NTP timeserver IP address, directly. The **Date & Time** page will provide a recommended default timeserver address of **208.66.174.71**; however, it is possible that the default timeserver may occasionally fail to respond to an NTP query. In this case you may receive an error message attempting to apply NTP settings using the default timeserver address. If you experience an issue with the default timeserver, we recommend that you try an alternate timeserver address (such as **192.43.244.18**) or select another timeserver address from the NTP support Web site at:

<http://support.ntp.org>

## Network Hostname Restrictions

The network hostname must not exceed 64 characters.

## Internet Explorer Security Level

The remote management console has been designed to function with Internet Explorer's default security level. If you happen to experience problems logging into the remote management console, then you can view/set your browser's security level by clicking on Internet Explorer's **Tools** menu, selecting the **Internet Options** menu item, and clicking on the **Security** tab in the new window that opens.

## Changing the Number of Allowed Sources

The default number of allowed DXi replication sources is 10. If you need to change these default settings, contact Quantum Customer Support.

## Quantum Vision

You must update to the latest version of Quantum Vision (4.3.3 or later) to operate with DXi 3.4.0.3 Software.

## StorageCare Guardian

You must update to the latest version of StorageCare Guardian (2.0.7 or later) to operate with DXi 3.4.0.3 Software.

## Running Healthchecks

Quantum recommends running the **Healthcheck** utility (**Utilities > Diagnostics > Healthchecks**) daily to ensure data integrity.

# DXi Advanced Reporting Additional Notes

For additional information about DXi Advanced Reporting, refer to the following sections.

- [Logging On to Advanced Reporting](#)
- [Decrease in Before Reduction Data](#)

## Logging On to DXi Advanced Reporting

If you cannot access the DXi Advanced Reporting Login window, launch a supported Web browser on a workstation that has network access to the DXi system for which you want to view reports, and in the browser address box, type **http://<IP\_address>/reports/index.html** where <IP\_address> is the IP address of the system, and then press **Enter**.

## Decrease in Before Reduction Data

Backup expiration by your backup application causes the Before Reduction data to decrease immediately in graphs like Data Volume Overview. In earlier versions of the software, backup expiration was not reflected in Before Reduction data until space reclamation was run. The effect of this change is an immediate drop in Before Reduction data any time you expire backups.

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# Contacting Quantum

More information about this product is available on the Service and Support website at <http://www.quantum.com/serviceandsupport/get-help/index.aspx>. The Service and Support Website contains a collection of information, including answers to frequently asked questions (FAQs). You can also access software, firmware, and drivers through this site.

For further assistance, or if training is desired, contact the Quantum Customer Support Center:

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>

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