



Release Notes

Release	DXi 3.1.1 Software (with DXi Advanced Reporting 3.1.0)
Supported Products	DXi4700
Date	February 2015

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Purpose of This Release

DXi 3.1.1 Software supports the DXi4700 disk backup system and provides important bug fixes (see [Resolved Issues](#) on page 6).

What's New

Symantec NetBackup Accelerator

DXi 3.1.1 Software contains support for **Symantec NetBackup Accelerator**. NetBackup Accelerator reduces network bandwidth requirements while also reducing I/O at the DXi. It achieves these reductions by identifying changed blocks of data on the client machine, and then sending only the changed data from the client to the DXi. The DXi then synthesizes the changed data with existing blocks of data.

NetBackup Accelerator is supported in the following configuration:

- DXi4700-NAS, DXi4700 Multi-Protocol, DXi6902 only
- DXi Software 3.1.x
- OST Plug-in 3.0 or above
- NetBackup 7.5 and 7.6
- RedHat Linux x86 64-bit and Window 2008 64-bit platforms only

For more information on using NetBackup Accelerator, see the *DXi-Series Configuration and Best Practices Guide for NetBackup from Symantec* (6-67850).

DXi Advanced Reporting

The latest version of DXi Advanced Reporting (3.1.0) is included with DXi 3.1.1 Software.

Upgrading DXi Software

To upgrade to DXi 3.1.1 Software, use one of the following methods:

- **(Recommended)** Click the **Software Upgrade** link on the **Home** page in the remote management console. The DXi must be connected to the Internet to use this method.
- Download the upgrade file from the DXi4700 support page on Quantum.com, and then upload the upgrade file using the **Utilities > Software Upgrade** page in the remote management console.

Note: For more information about DXi4700 software upgrades, see the *DXi4700 User's Guide* (6-68106).

Hardware Compatibility List

The following table provides information about hardware compatibility with DXi 3.1.1 Software.

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

Supported Web Browsers

Web browser software is not included with the DXi. You must obtain and install it separately. The DXi remote management console supports the following Web browsers:

- Mozilla Firefox 17 or later
- Google Chrome 21 or later

- Microsoft Internet Explorer 9, 10, or 11

DXi Advanced Reporting requires installation of Adobe Flash Player plug-in 10.x or higher.

Note: For correct operation of the remote management console, disable any pop-up blockers and enable JavaScript in your Web browser.

Note: 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.

OST Plug-In Support

The Quantum OST 2.9 and 3.0 plug-ins are based on Symantec OpenStorage API specification Version 9.4.2 and 11.1. The following components are required for OST operation with the DXi-Series:

- Symantec NetBackup 7.1.x or later or Backup Exec 2010 R3 or later.
- Symantec NetBackup 52xx Appliance 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

The following tables list the supported platforms and software versions for the DXi-Series:

- [Table](#) - Backup Exec 2010 R3, 2012, 2014
- [Table](#) - NetBackup 7.1.x (or later), NetBackup 7.5, and NetBackup 7.6

Note: For more information about OST plug-ins, see the *OST Plug-in Installation Instructions* (6-67074).

Table 1 Backup Exec Plug-in Compatibility List

Platform	Plug-in Version	Backup Exec 2010 R3	Backup Exec 2012	Backup Exec 2014	DXi Software Version
Windows 2003 R2 32-bit	2.9	Yes	Yes	Yes	1.4 or higher
Windows 2008 R2 32-bit	2.9	Yes	Yes	Yes	1.4 or higher
Windows 2003 R2 64-bit	2.9	Yes	Yes	Yes	1.4 or higher
Windows 2008 R2 64-bit	2.9	Yes	Yes	Yes	1.4 or higher

Platform	Plug-in Version	Backup Exec 2010 R3	Backup Exec 2012	Backup Exec 2014	DXi Software Version
Windows 2012 64-bit	2.9	Not Available	No	Yes	1.4 or higher
Windows 2012 R2 64-bit	2.9	Not Available	No	Yes	1.4 or higher

Table 2 NetBackup Plug-in Compatibility List

Platform	Plug-in Version	NetBackup 7.1+	NetBackup 7.5	NetBackup 7.6	DXi Software Version
RedHat Linux 5 x86 64-bit	2.9	Yes	Yes	Yes	1.4 or higher
RedHat Linux 6 x86 64-bit***	3.0	No	Yes	Yes	2.1.3 or higher
SUSE10 Linux x86 SP2 64-bit*	2.9	Yes	Yes	Yes	1.4 or higher
SUSE11 Linux x86 64-bit	2.9	Yes	Yes	Yes	1.4 or higher
Solaris 10 and Solaris 11 x86 64-bit	2.9	Yes	Yes	Yes	1.4 or higher
Solaris 10 and Solaris 11 SPARC 64-bit	2.9	Yes	Yes	Yes	1.4 or higher
HP-UX 11i v3 IA-64**	2.9	Yes	Yes	Yes	1.4 or higher
IBM AIX 6.1 and 7.1 Power 64-bit	2.9	Yes	Yes	Yes	1.4 or higher
Symantec NetBackup 52xx Appliance (2.6.0.2 or later).	2.9	Not Available	Not Available	Yes	1.4 or higher
Windows 2003 R2 32-bit	2.9	Yes	Yes	Not Available	1.4 or higher
Windows 2003 R2 64-bit	2.9	Yes	Yes	Yes	1.4 or higher
Windows 2008 R2 64-bit***	3.0	No	Yes	Yes	2.1.3 or higher
Windows 2012 64-bit	2.9	No	No	Yes	1.4 or higher
Windows 2012 R2 64-bit	2.9	No	No	Yes	1.4 or higher

* DXi Accent not supported.

** PA-RISC not supported.

*** NetBackup Accelerator supported in the following configurations: DXi6902, DXi4700-NAS, or DXi4700 Multi-Protocol systems, DXi 3.1.x and above Software, NetBackup 7.5 or higher.

Replication Compatibility

The following table indicates the DXi software levels that can replicate data to one another. Combinations not shown in the table are not supported.

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

		Replication Source					
		DXi 1.4.4 DXi 1.5	DXi 2.1.3	DXi 2.2.x	DXi 2.3.x	DXi 3.0.x	DXi 3.1.0
Replication Target	DXi 1.4.4 DXi 1.5	Yes	Yes	Yes	Yes	Yes	No
	DXi 2.1.3	Yes	Yes	Yes	Yes	Yes	Yes
	DXi 2.2.x	Yes	Yes	Yes	Yes	Yes	Yes
	DXi 2.3.x	Yes	Yes	Yes	Yes	Yes	Yes
	DXi 3.0.x	Yes	Yes	Yes	Yes	Yes	Yes
	DXi 3.1.0	No	Yes	Yes	Yes	Yes	Yes

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 are resolved in DXi 3.1.1 Software.

Bug Number	SR Number	Description
41814	3468964	DXi4700 User Guide CIFS/NFS description implies DXi should be used for storage.

Known Issues

DXi 3.1.1 Software has the following known issues:

- [Replication Known Issues](#) on page 8
- [Space Reclamation Known Issues](#) on page 9
- [Network Known Issues](#) on page 9
- [CLI Known Issues](#) on page 10
- [GUI Known Issues](#) on page 10
- [VTL Known Issues](#) on page 11
- [NAS Known Issues](#) on page 12
- [OST Known Issues](#) on page 13
- [Installation and Upgrade Known Issues](#) on page 14
- [Miscellaneous Known Issues](#) on page 14
- [DXi Advanced Reporting Known Issues](#) on page 15

Note: The Scheduler command line interface (CLI) commands are deprecated in DXi 3.1.1 Software. These commands continue to function in DXi 3.1.1 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		<p>On the Home page and the Status > Disk Usage page, the value for Data Size After Reduction is larger than the value for Data Size Before Reduction.</p>	<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 Data Size Before Reduction 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 Replication > Send 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 Configuration > Scheduler page. Alternately, you can enable Directory/File or Cartridge Based replication for the share or partition.</p>
36811		<p>Some chargeback reporting statistics are not maintained for failback operations.</p>	<p>The Input Bytes for the failback operation can be viewed on the source for the failback operation. On the Replication > Send page, hold the cursor over the job status and note the value displayed for Original Data Size.</p> <p>Note: 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
36999		Replication performance is slower than expected when replicating to a DXi running software version 1.x and encryption is set to None . (This can also cause system log files to become large.)	Select a different encryption setting for the target (128-bit) when replicating from a DXi running 3.x Software to a DXi running 1.x Software.
37000		If replication is disabled and the re-enabled for a share or partition on the Replication > Send page, previously configured Directory/File or Cartridge Based Replication settings are lost.	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 Configure . Note: You can disable or enable replication for all shares or partitions on the Replication > Actions page. This method preserves replication settings for all shares or partitions.

Space Reclamation Known Issues

Bug Number	SR Number	Description	Workaround
34571	1568062 1560808 1602614	After an unexpected stop and restart of the blockpool, space reclamation does not occur as expected.	Reboot the DXi.

Network Known Issues

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

CLI Known Issues

Bug Number	SR Number	Description	Workaround
35104		When using the --edit emailrecipient CLI command, the same e-mail address can be assigned to multiple recipients.	Use the Configuration > Notifications > Email > Recipients 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 Configuration > Scheduler 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 Configuration > OST > Storage Servers page, if there are multiple pages of storage servers, the Delete 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 Delete button will be available.
32609		On the Configuration > Scheduler > Calendar page, after you add or edit an event and specify recurrence until a date, if you hover the cursor over the event, the UNTIL date does not display in human readable format.	Open the event by double-clicking it to view the UNTIL date.
32659		If you reboot or shut down the DXi using the Utilities > Reboot & Shutdown 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 Utilities > Reboot & Shutdown 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 Configuration > OST > Accent page, after uploading certificate and key files and clicking Apply , 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 Scheduler page, the message Saving, please wait displays, 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 Configuration > System > Security > Security Notice page, the end of the message may be truncated in the Security Notice dialog box that displays after logging on.	Specify a shorter message on the Configuration > System > Security > Security Notice page.
39824		On the Status > Hardware > Details > Storage Arrays page, an Attention link displays next to Controllers and Volumes , but clicking the link displays an empty list of non-normal controllers or volumes.	Even though the Attention link displays, drives that are rebuilding are considered normal by the system. Click the Controllers or Volumes link to see a list of all drives.
41378		In a Google Chrome browser, DXi Remote Management help files may not appear when Help is selected.	In Chrome, select Settings > Show Advanced Setting > Privacy > Content Settings > Pop-ups > Manage Exceptions . Add the DXi IP address to the exceptions box, select Allow , and click Done .

VTL Known Issues

Bug Number	SR Number	Description	Workaround
39734		NDMP path to tape (PTT) backup jobs are slow or fail with status 23 or 86.	NDMP backup jobs can take longer or fail altogether if media and tape drives are not in optimal condition. Replace old media and clean the tape drives in the attached library.
41109		Intermittent backup failures occur with the IBM LTO-5 tape drive emulation selected.	When creating a VTL partition, select HP LTO-5 tape drive emulation instead of IBM LTO-5.

NAS Known Issues

Bug Number	SR Number	Description	Workaround
29705		Backup failures occur due to timeouts under heavy, concurrent VTL and NAS ingest.	Use the following CLI command to configure NFS shares for asynchronous mode: syscli --nfscommit async [--share <sharename>]
27908	1387940 1408612 1465392 1493202	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 syscli --del user 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.

OST Known Issues

Bug Number	SR Number	Description	Workaround
36868		<p>When attempting to enable concurrent optimized duplication with the following CLI command:</p> <pre>syscli --edit storageserver -- name <storage_server_name> -- concurrenttopdup enabled</pre> <p>the command appears to complete successfully, but concurrent optimized duplication is not actually enabled.</p>	<p>Use the Configuration > OST > Storage Servers page in the remote management console to enable concurrent optimized duplication.</p>
41987		<p>DXi System generates "Slow BFST Operation" administrative alerts during OST optimized duplication.</p>	<p>Change the ADMIN_ALERT_TIME variable in the OST configuration file.</p> <p>Linux Configuration File</p> <ol style="list-style-type: none"> 1. Go to /usr/Quantum/Quantum-Plugin.conf 2. Modify ADMIN_ALERT_TIME variable from 300 to 600. <p>Windows Configuration File</p> <ol style="list-style-type: none"> 1. Go to C:\\Windows\\libstspiQuantum.ini 2. Modify ADMIN_ALERT_TIME variable from 300 to 600. <p>Once the OST configuration variable has been modified, restart ISV application services on the client.</p>

Installation and Upgrade Known Issues

Bug Number	SR Number	Description	Workaround
36686		If the Software Upgrade Utility dialog box is open, and the session logs out due to inactivity, the Login window does not automatically display, and the Software Upgrade Utility remains open. Clicking the Check Now button results displays the following error: PollUpgradeJob not authenticated .	Close the Software Upgrade Utility , log back on to the system, and then access the Software Upgrade Utility . Clicking Check Now will now work as expected.
38264		If a Fibre Channel HBA on the backup host sends a write command with more than 2048 bytes of data in a single frame, write status is not returned to the host and the backup job fails.	The Fibre Channel HBAs used on the DXi, have a maximum data payload size per frame of 2048 bytes. The Fibre Channel specification allows a maximum data payload size of 2112 bytes per frame. Fibre Channel HBAs used on backup hosts should be configured to use a maximum data payload size of 2048 bytes per frame. Failure to match the backup host maximum data payload size to the DXi maximum data payload size may result in stalled data transfers.

Miscellaneous Known Issues

Bug Number	SR Number	Description	Workaround
26610	1349564	Spectra Logic T120 and greater libraries cannot be discovered on the Configuration > PTT > Physical Device Discovery 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.
37163		The LCD front panel and the system banner display Attention , and a service ticket is generated referring to a problem with omcliproxy .	This issue can be ignored and does not impact functionality. Delete the unneeded RAS ticket.

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		Used Disk Space 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. Note: 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 Replication Ingest > Total per Replication report displays a blank screen.	When no replication ingest has occurred on the DXi, the database will be empty; therefore, the Replication Ingest > Total per Replication report will display a blank screen. This is normal behavior.
39487		On the Replication Ingest report, data for small replication jobs is not graphed accurately, especially when longer time ranges are selected.	See the exported CSV file (Reports > Replication Ingest > Export Replication Chargeback) for the correct data.

Documentation

The following documents are currently available for the DXi-Series:

Document Number	Document Title
6-67960	<i>DXi4700 Site Planning Guide</i>
6-67967	<i>DXi4700 User Essentials</i>
6-68106	<i>DXi4700 User's Guide</i>
6-67961	<i>DXi4700 Installation and Configuration Guide</i>
6-68107	<i>DXi4700 Capacity Upgrade Guide</i>
6-67079	<i>DXi-Series NetBackup and Backup Exec OST Configuration Guide</i>
6-67081	<i>DXi-Series Command Line Interface (CLI) Guide</i>
6-67211	<i>DXi-Series Backup Application Specific Path to Tape (PTT) Configuration Guide</i>
6-67082	<i>DXi-Series SNMP Reference Guide</i>
6-67353	<i>DXi Advanced Reporting User's Guide</i>

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

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

Supported Backup Applications

The following backup applications are supported for use with DXi 3.1.1 Software:

Backup Application	Revision
Symantec NetBackup	7.1.x 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
Symantec Backup Exec	2012 and later
Quantum vmPRO	3.2 and later
CommVault Simpana	9 and later
Veeam Backup & Replication	6.5 and later
Dell NetVault	9.0.x and later
ASG-Time Navigator	4.2 and later
CA ARCserve	16.5 and later
Microsoft Data Protection Manager	2010 and later
Oracle Secure Backup	10.2 and later
Syncsort Backup Express	3.1.x and later
Note: Contact the backup application vendor for the latest software revision information.	

DXi Additional Notes

For additional information about DXi 3.1.1 Software, refer to the following sections.

- [Email Reports](#)
- [Configuring a Constant Replication Bandwidth Throttle](#)
- [Making Multiple Changes to a Recurring Scheduled Event](#)
- [Free Space](#)
- [System Metadata](#)
- [Date & Time Configuration](#)
- [Network Hostname Restrictions](#)
- [Internet Explorer Security Level](#)
- [Changing the Number of Allowed Sources](#)
- [Quantum Vision](#)
- [StorageCare Guardian](#)
- [OST NetBackup Version](#)
- [Running Healthchecks](#)

Email Reports

Quantum recommends enabling **Email Reports**. When enabled, **Email Reports** periodically sends system configuration and status information to Quantum, including any software upgrades you have installed using the **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. Also make sure to select the **Enable automatic emails to Quantum** check box on this 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.

Configuring a Constant Replication Bandwidth Throttle

The **Configuration > Scheduler** page can be used to create a recurring series of replication throttle events. However, if you want a replication throttle bandwidth to always be in effect at all times, you need to configure a constant replication throttle bandwidth. To configure a constant replication throttle bandwidth, do not use the **Scheduler** page to schedule the throttle event. Instead, use the following CLI command:

```
syscli --add throttle --service REP --bw <bandwidth><K|M>
```

For example, to enforce a constant replication throttle of 32KB/s at all times:

```
syscli --add throttle --service REP --bw 32K
```

Note: For more information about using CLI commands, see the *DXi-Series Command Line Interface (CLI) Guide* (6-67081).

Making Multiple Changes to a Recurring Scheduled Event

This section describes the expected result when making multiple changes to a recurring scheduled event in DXi 2.1 Software and later. This information applies only when a DXi administrator has performed *all* of the following steps in the order listed:

- 1 Create a recurring event having two or more instances in the series.
- 2 Edit one or more instances within the series, creating exception instances, using one or both of the following methods:
 - a Deleting (one or more instances within the series).
 - b Changing the start time (of one or more instances within the series).
- 3 Finally, change the base start time of the entire recurring event series.

The change in step 3 will cause the system to fill in the holes in the series that were left by the instances that were deleted or moved in step 2. This is the expected behavior.

If the instances that were moved in step 2b are no longer needed after step 3, they should be manually deleted. Similarly, if the new instances filled in by step 3 are not needed, then they should be manually deleted.

Free Space

The free space available on the DXi is the sum of free space in the file system and the free space available for ingest data in the deduplication engine. The presentation layers (OST/NFS/CIFS) looking for available free space on the DXi can only present the free space in the file system. This may make it look like the DXi is low on space. The free space in the deduplication engine is available for ingest and will be used for ingest automatically by the system.

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 DXi, 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 (4.2 or later) to operate with DXi 3.1.1 Software.

StorageCare Guardian

You must update to the latest version of StorageCare Guardian (2.0.7 or later) to operate with DXi 3.1.1 Software.

OST NetBackup Version

You must use NetBackup version 7.1.x or higher to resolve the following known issue in older versions of NetBackup:

- Subsequent Optimized Duplication jobs may fail or become stuck when running jobs are canceled or stopped.

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 3.1.0, refer to the following sections.

- [Replication Reports Are Not Supported](#)
- [Logging On to DXi Advanced Reporting](#)
- [Decrease in Before Reduction Data](#)

Replication Reports Are Not Supported

The replication reports are not supported in this release.

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 DXi, 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.

Contacting Quantum

More information about this product is available on the Service and Support website at <http://www.quantum.com/ServiceandSupport/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:

United States	1-800-284-5101 (toll free) +1-720-249-5700
EMEA	+800-7826-8888 (toll free) +49-6131-3241-1164
APAC	+800-7826-8887 (toll free) +603-7953-3010

For worldwide support:

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