Release Notes

Release	DXi 3.2.0.1 Software
Supported Product	DXi4700, DXi6900
Date	November 2015

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Purpose of This Release

DXi 3.2.0.1 Software supports the DXi4700 and DXi6900 disk backup systems and provides important bug fixes (see Resolved Issues on page 7).

What's New in DXi 3.2.0.1 Software

Access Control	The **Access Control** page replaces the **Web & CLI** Password page under **Configuration > System > Security**. This page allows the DXi GUI Administrator to enable and disable user accounts. The GUI Administrator can also set SSH access for the ServiceLogin and CLI Administrator user accounts. Software upgrades to DXi 3.2 Software and higher disable the following user accounts: • GUI Monitor • CLI Administrator • CLI Viewer • Service GUI After the upgrade is complete, the GUI Administrator must enable these accounts and set passwords
Uploading New DXi Software	Initial DXi system installations now require that the system upgrades to the latest version of the DXi software.
Software Upgrade Times	For DXi6900 3.2.0.1 software upgrades, component firmware will be checked and updated to current levels. Depending on the DXi6900 system size and configuration, this may extend upgrade times from 1 to 5 hours

Product Compatibility List

The following table provides information about hardware compatibility with DXi 3.2.0.1 Software.

Component	Description
DXi4700 - NAS	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	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	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 connections, also configurable for VTL) 5 TB–135 TB usable capacity

Component	Description
DXi6900	1 Node 1 or 2 Array modules (RBODs) 0 to 13 Expansion modules (EBODs) 3 x 1 GbE Ethernet ports (Optional G1 configuration) Additional network adapter providing 2 x 10 GbE Ethernet ports or 4 x 1 GbE Ethernet ports. (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) 17 TB-510 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.x plug-ins are based on Symantec OpenStorage API specification Version 9.4.2 and 11.1. The following components are required for OST (OpenStorage) operation with the DXi-Series :

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

- If using the Symantec 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-NAS, DXi4700 Multi-Protocol , and DXi6900 systems.

OST Plug-ins are available for the following operating systems:

- Windows 32-bit
- Windows 64-bit
- Linux
- Solaris
- AIX
- HPUX

OST Plug-in support is also available for the Symantec NetBackup 52xx Appliance.

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* (6-67074)

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.

		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.x**	**DXi 3.2.x**
Replication Target	**DXi 1.4.4 DXi 1.5**	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	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	No	Yes	Yes	Yes	Yes	Yes	Yes
	DXi 3.2.x	No	Yes	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 were resolved in DXi 3.2.0.1 Software.

Bug Number	SR Number	Description
44149	3590546 3610838	BIOS and iDRAC auto level issues.
44317	3610322	DXi loses connectivity after software upgrade.
44352	3612630	Array module (RBOD) firmware admin alert after software upgrade.

In addition to the resolved issues above, DXi 3.2.0.1 Software includes all the issues that were resolved in DXi 3.2.0 Software.

Bug Number	SR Number	Description
28993 41972	1392716 3484152	Utilize Binary Large Object (BLOB) budget settings in the blockpool to provide a fragmentation bound.
31471	1455228	False service tickets due to use of disk space under /scratch/core.
32437	1496534 1560736 3504410 3523998	Low swap space generates service tickets.
32900	3384028 3565676	Blockpool errors on first start after an unclean system shutdown.

Bug Number	SR Number	Description
37435	3355236	Replication target system produces blockpool error.
	3369708	
	3363614	
	3408694	
	3410772	
	3440746	
	3464026	
	3479800	
	3487908	
	3490944	
	3500344	
	3507156	
	3550184	
37677	3453328	DAT file not cleaned up automatically after Binary Large Object (BLOB) tree repair
	3486230	
	3489372	
	3477646	
	3530394	
	3555660	
	3588514	
	3589466	
39100	3392750	Hardware monitor cores and restarts.
39330	3380082	Documentation does not explain interaction between Auto Export setting and Virtual Tape Libraries (VTL).
39846	3396314	GUI does not show current progress and estimated time remaining when hovering over a synchronization job status.
	3513366	
39856	3420058	Add line numbers to upgrade script output.
40006	1479360	GUI login issue for passwords with more than 15 characters.
	3388366	

Bug Number	SR Number	Description
40013	3418876	Blockpool cluster body size issue.
	3571842	
40050	3373106	Email monitor collect issue.
40558	3423900	Enable consistency check on RAID controllers.
40799	3535778	Installation log issue during postgres connection.
	3541204	
40988	3451770	Root system password changed.
41335	3452754	Residual HoldLink files remain, causing fewer Binary Large Objects (BLOBs) to be deleted.
	3458230	
	3458340	
	3494292	
	3454806	
	3496712	
	3414804	
	3519592	
	3531964	
	3499284	
	3563316	
	3584066	
	3579522	
41357	3446668	GUI log contains high volume of debug information.
	3573512	
41655	3516002	Simple Network Management Protocol (SNMP) AgentX fails to register and start.
	3508592	
	3521868	
41757	3428338	Replication stream issues.
41894	3480034	Incorrect RAID Tray ID in DXi Installation and Configuration guide.
41959	3477650	Virtual Tape Library (VTL) issues with cartridges pending trigger replication.

Bug Number	SR Number	Description
42052	3477650	Collect additional trigger request queue information.
42473	3520710	File system manager generates operation failure service ticket.
	3553510	
	3559654	
42678	3530434	Add timestamps to all system logs.
42679	3530434	DXi6900 storage expansion should abort if an odd number of logical unit numbers (LUNs) is detected.
42682	3530434	Array module (RBOD) issue during storage discovery (DXi6900)
42685	3530434	Service menu storage expansion does not enforce a reboot after adding storage.
42691	3530434	Service menu expansion issues with unconfigured trays.
42698	3530434	User input not recorded in service log.
42716	3530434	DXi system SMcli -f script.scr script improvement.
42843		
42722	3530434	New log to collect all trays, pools,and volumes found on a DXi system.
42768	3471532	7zip added to logging tools.
42772	3534182	StorNext file system (SNFS) no space allocation issue.
	3533484	
	3537132	
	3537514	
42816	3408370	Replication system sources show zero data received.
42823	3530434	Updates to DXi6900 Capacity Upgrade Guide.
42826	3530434	Logging enhancements to baseos and service logs.
42856	3523852	License used count exceeds max license count.
42885	3537862	GUI issue due to UTF-8 encoding.
42888	3528798	Enhancements to Secure Shell (SSH) ciphers and media access control (MAC) algorithms.

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Bug Number	SR Number	Description
42910	3531348	Collect log cleanup.
42920	3531348 3546098 3567302 3586560	Software issue causes Virtual Tape Library (VTL) to become unresponsive.
42993	3514400	Collect log files do not contain all content.
43034	3539222	Telnet not installed on DXi4700 systems.
43061	3521868 3508592	Simple Network Management Protocol (SNMP) script issues.
43084	3525474	Hard drive disk (HDD) segmentation fault.
43202	3543898	OpenStorage (OST) statistics not updated on ingest.
43412 43424	3557252 3560756	OpenStorage (OST) issues when virtual file descriptor table is full.
43507	3535402	Configuration issues after SAS HBA card replacement.
43532	3558796	snapMD.pl fails if zipped content exceeds 4 GB.
43713	3578766 3586888	
43808	3583604	OpenStorage (OST) recovery leaves residual locked files on target storage server.
43860	3575374	Postgres sleep issues.

Known Issues

DXi 3.2.0.1 Software has the following known issues:

- Replication Known Issues

- Space Reclamation Known Issues

- Network Known Issues

- CLI Known Issues

- GUI Known Issues
- VTL Known Issues

- NAS Known Issues

- OST Known Issues

- Installation and Upgrade Known Issues

- Miscellaneous Known Issues

- DXi Advanced Reporting Known Issues

ⓘ **Note:** The Scheduler command line interface (CLI) commands are deprecated in DXi 3.2.0.1 Software. These commands continue to function in DXi 3.2.0.1 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		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**.	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. To correct the issue, manually initiate replication of the share or partition on the **Replication > Send** page, and allow the replication to complete. 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.
36811		Some chargeback reporting statistics are not maintained for failback operations.	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**. **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.
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 2.3.0.x Software to a DXi running 1.x Software.

Bug Number	SR Number	Description	Workaround
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**. ℹ **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.

Bug Number	SR Number	Description	Workaround
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.
36926		When adding a scheduled event on the **Scheduler** 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 **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 Notic**e 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 Exception**s. Add the DXi IP address to the exceptions box, select **Allow**, and click **Done**.
42575		Error message occurs on the **Configuration > System > Security > Data-at-Rest** page when attempting to enable Data-at-Rest encryption after a drive replacement.	After a drive replacement, wait until RAID rebuilding is complete before enabling Data-at-Rest encryption.
42779		The **PTT** 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.

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
41109		Intermittent backup failures occur with the IBM LTO-5 tape drive emulation selected.	Force disable append only mode in NetBackup: **Unix** Use the following touch file to disable append mode: `/usr/openv/netbackup/db/config/DISABLE_APPEND_MODE` **Windows** Use the following touch file to disable append mode: `%install_path%\Veritas\Netbackup\db\config\DISABLE_APPEND_MODE`

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 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 **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		When attempting to enable concurrent optimized duplication with the following CLI command: `syscli --edit storageserver --name <storage_server_name> --concurrentopdup enabled` the command appears to complete successfully, but concurrent optimized duplication is not actually enabled.	Use the **Configuration > OST > Storage Servers** page in the remote management console to enable concurrent optimized duplication.

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.

Bug Number	SR Number	Description	Workaround
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.
44146		The hard drives located in the DXi6900 G2 node are nominally 1.2 TB in size. If one of these hard drives fail the resulting service ticket will display the correct hard drive model but will display the size as 900 GB.	This issue does not impact functionality.

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.

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Bug Number	SR Number	Description	Workaround
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	*DXi4700 Site Planning Guide*
6-67967	*DXi4700 User Essentials*
6-68106	*DXi4700 User's Guide*
6-67961	*DXi4700 Installation and Configuration Guide*
6-68107	*DXi4700 Capacity Upgrade Guide*
6-68305	*DXi4700 Optional NIC Instructions*
6-68285	*DXi4700 Software Installation and Upgrade Guide*
6-68161	*DXi6900 Site Planning Guide*
6-68165	*DXi6900 User Essentials*
6-68159	*DXi6900 User's Guide*
6-68160	*DXi6900 Installation and Configuration Guide*
6-68162	*DXi6900 Capacity Upgrade Guide*
6-67765	*DXi6900 Optional NIC Instructions*
6-68286	*DXi6900 Software Installation and Upgrade 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

Supported Backup Applications

The following backup applications are supported for use with DXi 3.2.0.1 Software:

Backup Application	Revision
Symantec NetBackup	7.1.x and later
Symantec Backup Exec	2010 R3 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.

DXi Additional Notes

For additional information about DXi 3.2.0.1 Software, refer to the following sections.

- Email Reports
- 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** after upgrading to DXi 3.2.0.1 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.

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:

    System Metadata = [File System Used Space] - [Reclaimable Space] -
    [Blockpool Reduced Data Size] - [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 (4.3.3 or later) to operate with DXi 3.2.0.1 Software.

StorageCare Guardian

StorageCare Guardian - DXi4700

- The Diagnostic Collect and Storage Collect capture log features will not work for DXi 3.x software without first applying the appropriate patch. Contact Quantum Customer Support and reference TSB 00002843.

- The Diagnostic Collect and Storage Collect captures will not work with a DXi4700 running DXi 3.2 software. This is a known issue being worked by Quantum Engineering.

StorageCare Guardian - DXi6900

- To configure your DXi6900 into Guardian, contact Quantum Customer Support to install TSB 00002845.

- The Diagnostic Collect and Storage Collect capture log features will not work for DXi 3.x software without first applying the appropriate patch. Contact Quantum Customer Support and reference TSB 00002845.

- Starting with the DXi 3.2 firmware, you will need to enable the CLI Administrator user and set the password to cliadmin. This will allow Guardian to capture the Diagnostic Collect and Storage Collect log logs.

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, 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 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:

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/index.aspx