Release Notes

Product	DXi 2.2.0.1 Software for DXi-Series (DXi6000 Family)
Supported Browsers (Remote Management Console)	Microsoft Internet Explorer 8.x or higher, Mozilla Firefox 7.x or higher
Date	November 2012

Contents

Purpose of This Release

DXi 2.2.0.1 Software is a maintenance release for DXi6000 disk backup systems and provides bug fixes (see Resolved Issues on page 8). In addition, DXi 2.2.0.1 Software includes all features introduced in DXi 2.2 Software:

- **OST Automatic Image Replication (AIR)** - If you are using Symantec NetBackup 7.1 or higher, you can configure an LSU for Automatic Image Replication. If enabled, data on an LSU is automatically replicated to a remote LSU that resides on a DXi in a different NetBackup domain.

- **Concurrent Optimized Duplication** - With Concurrent Optimized Duplication, as data is written to the storage server, it is simultaneously replicated to the target DXi. When optimized duplication or Automatic Image Replication subsequently occurs, the operation is more efficient because a portion of the required data has already been replicated to the target storage server.

- **DXi Accent Improvements** - DXi Accent supports Windows based media servers running Symantec Backup Exec or NetBackup. In addition, data sent from the media server to the DXi can be encrypted using AES (Advanced Encryption Standard) encryption methods.

- **Secure File Shred** - With Secure Shred, you can securely and permanently erase sensitive data stored on the DXi. To securely erase data, first delete files on NAS shares or storage servers, or erase tape cartridges on VTL partitions, then start secure shred. During secure shred, all residual data associated with the deleted files or cartridges is securely erased from the disk drives and is overwritten with random patterns.

- **VLAN Tagging** - You can enable VLAN tagging and Jumbo Frames for any configured network interface on the DXi.

- **Administrative Activity Log** - Use the **Activity Log** to view a record of all activities performed by administrative and service users in the past 90 days. You can view the user who performed the activity, the time the activity was performed, and other information. You can also download the activity log to an XML file.

- **Consolidated Job Scheduler** - All scheduled functions of the DXi are now managed on the **Scheduler** page, including the scheduling of replication, replication throttling, e-mail reports, healthchecks, and space reclamation.

- **Fibre Channel Port Management** - Detailed port layout diagrams make it easy to identify Fibre Channel Ports on the back of the system. Also, you can change the mode of a Fibre Channel port to initiator or target.

- **Site Map** - The **User Interface Site Map** displays a visual map of all management pages in the DXi remote management console. Use the map to quickly locate and jump to any page.

- **Space Reclamation Improvements** - Scheduled and on demand space reclamation has been tuned for increased performance, while automatic space reclamation during low space conditions provides maximum free space recovery. Also, the blockpool automatically reuses free bytes when ingesting data.

- **Bug Fixes** - For more information, see Resolved Issues on page 8.

Hardware Compatibility List

The following table provides information about hardware compatibility with DXi 2.2.0.1 Software. This information is current as of the publication date of these release notes.

Component	Description
DXi6510	• 1 base node • 1 RAID controller card • 2 x 1GbE ports • 8 TB usable capacity
DXi6520	• 1 base node • 2 RAID controller cards • 0 to 3 expansion modules (JBODs) • 6 x 1GbE ports • 8 TB to 32 TB usable capacity
DXi6530	• 1 base node • 4 RAID controller cards • 2 to 9 expansion modules (JBODs) • 6 x 1GbE ports • 24 TB to 80 TB usable capacity
DXi6540	• 1 base node • 4 RAID controller cards • 2 to 9 expansion modules (JBODs) • 6 x 1GbE ports • 2 x 8Gb Fibre Channel ports (for OST path to tape only, not ingest) • 24 TB to 80 TB usable capacity
DXi6550	• 1 base node • 4 RAID controller cards • 2 to 9 expansion modules (JBODs) • 2 x 10GbE ports plus 2 x 1GbE ports • 2 x 8Gb Fibre Channel ports (for OST path to tape only, not ingest) • 24 TB to 80 TB usable capacity

Component	Description
DXi6700	• 1 base node • 4 RAID controller cards • 2 to 6 expansion modules (JBODs) • 2 x 1GbE Ethernet ports • 4 x 8Gb Fibre Channel ports (VTL, PTT) • 24 TB to 56 TB usable capacity
DXi6701	• 1 base node • 2 or 4 RAID controller cards • 0 to 9 expansion modules (JBODs) • 6 x 1GbE Ethernet ports • 4 x 8Gb Fibre Channel ports (VTL, PTT) • 8 TB to 80 TB usable capacity
DXi6702	• 1 base node • 2 or 4 RAID controller cards • 0 to 9 expansion modules (JBODs) • 2 x 1GbE Ethernet ports • 2 x 10GbE Ethernet ports • 4 x 8Gb Fibre Channel ports (VTL, PTT) • 8 TB to 80 TB usable capacity

OST Plug-In Support

The following components are required for OST (OpenStorage) operation with the DXi-Series:

- Symantec Veritas NetBackup 6.5.2 or higher, and Backup Exec 2010 or higher (both available from Symantec).

- Quantum OST storage server (included with the Quantum DXi-Series software).

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

You must use the correct versions of all of these OST components. Refer to Table 1, Table 2, and Table 3 for version compatibility information regarding the DXi-Series OST components. The tables include compatibility information for Windows, Linux, and Solaris operating systems. This information is current as of the publication date of these release notes.

For further information concerning the OST plug-in, see the *Quantum DXi-Series NetBackup OST Configuration Guide* or the *Quantum DXi-Series Backup Exec OST Configuration Guide*, located on the documentation CD.

Table 1 Backup Exec 2010 (or later) Plug-in Compatibility List

Platform	Plug-in Version	DXi Software Version
Windows 2003/2008 32-bit	2.6.0	2.2.0.1
Windows 2003/2008 64-bit	2.6.0	2.2.0.1

Table 2 NetBackup 6.5.2 (or later) Plug-in Compatibility List

Platform	Plug-in Version	DXi Software Version
RedHat Linux x86 32-bit	2.6.0	2.2.0.1
RedHat Linux x86 64-bit*	2.6.0	2.2.0.1
SUSE Linux x86 32-bit	2.6.0	2.2.0.1
Solaris 10 and Solaris 11 x86 64-bit	2.6.0	2.2.0.1
Solaris 10 and Solaris 11 SPARC 32-bit	2.6.0	2.2.0.1
Solaris 10 and Solaris 11 SPARC 64-bit*	2.6.0	2.2.0.1
HP-UX 11i v3 IA-64	2.6.0	2.2.0.1
Windows 2003/2008 32-bit	2.6.0	2.2.0.1
Windows 2003/2008 64-bit	2.6.0	2.2.0.1

Platform	Plug-in Version	DXi Software Version

* RedHat Linux x86 64-bit and Solaris SPARC 64-bit are supported, but you must use the 32-bit OST Plug-in on these platforms.

Table 3 NetBackup 7.x (or later) Plug-in Compatibility List

Platform	Plug-in Version	DXi Software Version
RedHat Linux x86 64-bit	2.6.0	2.2.0.1
SUSE Linux x86 64-bit	2.6.0	2.2.0.1
Solaris 10 and Solaris 11 x86 64-bit	2.6.0	2.2.0.1
Solaris 10 and Solaris 11 SPARC 64-bit	2.6.0	2.2.0.1
HP-UX 11i v3 IA-64	2.6.0	2.2.0.1
IBM AIX 6.1 and 7.1 Power 64-bit	2.6.0	2.2.0.1
Windows 2003/2008 32-bit	2.6.0	2.2.0.1
Windows 2003/2008 64-bit	2.6.0	2.2.0.1

* NetBackup 7.1.0.3 or later requires Quantum OST Plug-in 2.5.2 or later.

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 2.0.0.2 DXi 2.0.x	DXi 2.1.x	DXi 2.2 DXi 2.2.0.1
Replication Target	DXi 1.4.4 DXi 1.5	Yes	Yes	Yes	Yes
	DXi 2.0.0.2 DXi 2.0.1	Yes	Yes	Yes	Yes
	DXi 2.1.x	Yes	Yes	Yes	Yes
	DXi 2.2 DXi 2.2.0.1	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.

Note: If data is replicated from a DXi running DXi 2.x Software to another DXi running 2.x, that data cannot be failed back to a DXi running system software 1.x. Perform a failback to a DXi running DXi 2.x Software.

Resolved Issues

The following issues are resolved in DXi 2.2.0.1 Software.

Bug Number	SR Number	Description
29719		High memory usage by the blockpool wrapper.
31195		LSU verify/reformat and list image operations are not performed using the fastest available method.
31250		Disk usage statistics do not include blockpool logical free space.
31320	1465526	Space reclamation pauses indefinitely during stage 2.
31350		Enhancement request: Cache free disk statistics rather than querying the blockpool each time a call for statistics is made.

DXi 2.2.0.1 Software includes all issues resolved in DXi 2.2 Software. The following issues are resolved in DXi 2.2 Software.

- Replication Resolved Issues on page 9
- Space Reclamation Resolved Issues on page 10
- Network Resolved Issues on page 10
- GUI Resolved Issues on page 11
- VTL Resolved Issues on page 12
- NAS Resolved Issues on page 13
- OST Resolved Issues on page 13
- Installation and Upgrade Resolved Issues on page 14
- Miscellaneous Resolved Issues on page 14

Replication Resolved Issues

Bug Number	SR Number	Description
21593	1346114 1330470 1381850 1419284 1419294 1450144	Synchronization incorrectly affects deduplication and disk usage statistics.
26036	1342954 1340566 1371764 1415054 1415388 1403260 1421470 1437966	The event queue becomes filled when there is a very large number of trigger replication events during a low space status, leading to a system restart.
26708	1312708 1351542 1372418 1378898 1355584 1393346 1403260 1408434 1375872 1415924 1414574	Replication performance is reduced comparing 2.0.x to 1.4.x.
26767		Using the **Scheduler** page or the CLI, if a replication throttle event is deleted after it has started but before it has ended, then replication throttling mode will continue and will not stop.
27160	1366320 1391098	Replication from a 1.x system to a 2.x system fails, but the 2.x target shows success.
28313	1393346	Enhancement request: Eliminate the need to perform a manual sync after pausing replication.
28514	1400994	Trigger replication events occur during ingest on the same file rather than after the store has finished.
28515	1400994 1412234 1433080	Manual synchronization is creating and keeping a replication bundle on the target unit.
28885		A service ticket occurs stating that the DXi cannot connect to the blockpool on the replication target.

Space Reclamation Resolved Issues

Bug Number	SR Number	Description
27205 29423		Space reclamation remains at Stage 2 and does not complete even after a long period of time elapses.
30096	1409700 1447216 1410138	Enhancement request: Optimize memory usage during space reclamation.

Network Resolved Issues

Bug Number	SR Number	Description
13726	1101242 1292776	Enhancement request: Network configuration should support VLAN tagging options.
29872	1412708 1408162	Enhancement request: Support adding host routes when configuring network settings.

GUI Resolved Issues

Bug Number	SR Number	Description
23583 27483	1276646 1293848 1315198 1315176 1315198 1315284 1315220 1315234 1315242 1315160 1315252 1315260 1373350 1412386	The GUI becomes unresponsive if there are a large number of historical admin alerts or service tickets.
25543	1350900 1387132 1430992 1452592	The GUI does not show space reclamation progress when space reclamation is running.
25718	1330470 1396522	Ingest value shows number that is too high.
26259	1427832	Under heavy load, the Thrift server stops responding, causing the GUI to becoming unresponsive.
27343		On the **Configuration > Scheduler** page, if you attempt to edit an instance of a recurring event that has already started, the edit dialog box is grayed out as expected. However, if you then try to edit a future instance, the edit dialog box incorrectly remains grayed out.
27491	1410236	Enhancement request: Serialize start and end actions of a specific event type.
27534	1410236	When adding or deleting a replication throttle schedule using the CLI, various INFO and ERROR messages may display before the command completes successfully.
27906 27954	1330470 1405630	Enhancement request: Show additional statistics for **Data Size Before Reduction**.
28696	1396034	GUI allows the web admin password to contain an ampersand [&] but subsequent login fails.
29010	1412234	Enhancement request: GUI should have a Quick Tip for replication pause behavior.
29520	1358132	Enhancement request: GUI **Replication Status** and **Home** pages should include a **Warning** status for partial failure

Bug Number	SR Number	Description
30127	1432074 1443224 1447896 1450144	GUI is reporting that **Data Size Before Reduction** is less than the **Data Size After Reduction**.
31084		An **Operation failure** service ticket is generated stating that a new core file has been created for **/scratch/core/axis2_http_serv**.

VTL Resolved Issues

Bug Number	SR Number	Description
26545	1390728 1392558	A timeout occurs during data ingest on VTL and NAS.
27921	1372114 1381506	Enhancement request: Have multiple filers see virtual tape drives (VTDs) through different FC paths.
28337	1385634 1430578 1434156	Unclean shutdown during host access configuration leads to a blockpool verify.
28656	1406688 1409282 1452714	Unclean shutdown during path to tape configuration leads to a blockpool verify.
29726	1404930 1409348 1409696	NetApp filer does not see VTDs after a DXi reboot until the Fibre Channel link is unplugged and plugged.

NAS Resolved Issues

Bug Number	SR Number	Description
23966	1287022 1315680 1326376 1363666 1371668 1408236 1414058 1418330 1430090 1437614 1439836	Connectivity to NAS shares temporarily lost following multiple error messages in the **winbindd** logs.
24896		An NFS share can perform Directory/File Based (trigger based) synchronization to a CIFS share with the same Sync ID. This should not be allowed due to the protocol mismatch.
26044		If a mounted NFS share containing a large number of files is deleted, and then a new share with the exact same name is immediately created and mounted by clients, then files written to the new share may be lost.
30082	1434158	An assertion failure may occur when the system is shut down while NAS shares being deleted.

OST Resolved Issues

Bug Number	SR Number	Description
21267	1407336	A storage server cannot be deleted even when it contains no LSUs and there are no active connections.
28901	1442292	OST images with zero length metadata files are not correctly deleted during cleanup.
29179	1432074 1433526 1447896	Errors occur during the OST image metadata file close operation.
29687		An OST optimized duplication job fails when running concurrent OST optimized duplication jobs and no replication target is specified. This occurs only when performing optimized duplication from 2.x to 2.x systems.
30338	1439394	Enhancement request: Reduce the number of metadata file opens and closes during OST backups.

Installation and Upgrade Resolved Issues

Bug Number	SR Number	Description
23973	1350908 1406660 1406664 1406438 1420936 1445732	After a successful DXi software installation, a service ticket is generated noting a problem with the **dsm_sa_datamgrd** component.
28245	1387100 1394598	After upgrading a source DXi to 2.1.x Software, replication to the configured target DXi no longer works.
29988 30251	1432250	Unexpected reboot occurs during software upgrade due to a failure of the OST server (upgrade completed successfully after reboot).
30570	1445516 1447016 1449840	After a software upgrade, the system comes up in diagnostic mode due to a mySQL failure.

Miscellaneous Resolved Issues

Bug Number	SR Number	Description
21636	1228336	Enhancement request: Improve the performance of automatic healthchecks to match the performance of manual healthchecks.
22649	1245052 1381662	Missing data does not cause a service ticket prior to an attempt to retrieve the data.
24033	1284190 1434250	Healthcheck cannot recover missing data if the DXi replication IPs are not configured in an OST environment.
24367	1290220, 1396164, 1401472, 1414740	A service ticket is generated indicating a problem with SNMP if the syscli is used to get status for systemboard, networkport and storagearray.
24651	1303636 1323354 1367552 1384202 1383524 1401126 1454100	A service ticket is generated due to healthcheck service restarting during a healthcheck.

Bug Number	SR Number	Description
25784	1329858	Apache web server automatically restarts.
27222	1357642 1362160 1383004 1400152 1437614	Backups fail with error 1326 (Logon failure unknown user name or bad password.
27751		The DXi6700 online help and *User's Guides* incorrectly state that an underscore (_) must not be used in the name of a VTL partition.
28231	1394828	Enhancement request: Add information to documentation about additional disk space required on target DXi as compared to the source DXi.
28342	1400274	Enhancement request: Add information about VLAN tagging to the *DXi User's Guide*.
28908	1405844	Enhancement request: Generate a service ticket when a store fails due to a blockpool allocation failure.
29005	1410334	Negative blockpool statistics lead to incorrect compression ratio.
29204	1412434	During DSET log generation, the IPMI card is reset, causing a service ticket.
29190	1412914	NetBackup configurations where space characters are used in the policy/client setup are not supported.
29504	1407410	A blockpool pause timer may fire multiple times for the same event.
29710	1412938	In Backup Exec, permanently busy images get orphaned because the metadata has a stuck busy flag.
30118	1319126 1367478 1374686 1449136	Enhancement request: Do not rebuild a drive reported as bad by the controller until the drive has actually been replaced.
30479	1441794	SCSI transfers with unusual byte counts fail.

Known Issues

DXi 2.2.0.1 Software has the following known issues:

Replication Known Issues

Bug Number	SR Number	Description	Workaround
7269		Replicating a filename which begins with & in a directory caused all of the files in the entire directory to replicate to the target.	Do NOT use the & character in a filename.
7915		Aborting a synchronization job when a namespace and synchronize are queued up aborts only the synchronization and leaves the namespace replication in a queued state.	Manually abort the namespace replication.
11683		If the same user exists on both source and target systems, the user should be prompted to overwrite permissions on the target system before synchronization or Directory/File Based replication occurs.	Set the same permissions on both source and target for the same user.
13617		If the replication target is changed while a namespace replication on a NAS share or VTL is in progress (such as due to a power outage), the replication may become stuck or stay queued up.	Cancel the queued job and restart the replication or wait until the next scheduled replication to take effect.
13692		No Service alert is logged for failback jobs when the failure is due to a power outage.	Re-initiate the failback after system resumes operation.
14974	1132956	A Target system will fail a failback operation if the replication target IP (source role) is not configured.	Use an IP address on the Target system to specify the network address of the Source system.
18326		If Directory/File Based Replication is enabled for a share and then disabled at a later time, a replication report will not show any of the replication activity that occurred during the time that Directory/File Based Replication was enabled.	Re-enable Directory/File Based Replication for the share, then run the replication report again to see the historical replication activity.

Bug Number	SR Number	Description	Workaround
18787		A manual or scheduled replication initiated immediately after changing the replication target may fail.	Perform the replication again.
18845		An error occurs if the same DXi is configured to be a source as well as the target for replication.	Do not include the configured target DXi in the list of source DXis.
20351		If data is replicated from a DXi running DXi 2.x Software to another DXi running 2.x, that data cannot be failed back to a DXi running system software 1.x.	Perform a failback to a DXi running DXi 2.x Software.
20674		An error is returned when attempting to delete a replication source if the source was added with an invalid (cannot be resolved) host name.	Pause replication before deleting a source with an invalid host name.
21612		When recovering or failing back an NFS share, the value of the **Commit** attribute (**sync** or **async**) is not preserved.	Manually reset the **Commit** attribute for the share after it is recovered on the target, or fail back the share to the source.
24005		A missing file error occurs during replication or space reclamation. This can occur if files were deleted while replication or space reclamation was in progress.	Retry the replication or space reclamation. To avoid this issue, do not delete files while performing replication or space reclamation.
24277		If several synchronization jobs are queued, and then while the first job is in progress the other jobs are canceled, the DXi will begin synchronizing the canceled jobs after finishing the first job in the queue.	Cancel the synchronization jobs again.
23228		When attempting to recover or synchronize a VTL partition, a capacity mismatch error occurs if the target DXi does not support the library emulation and drive type used by the original partition.	When creating the source partition, make sure to use a library emulation and drive type supported by the target.
24731		If the configured replication target does not support VTL, enabling replication at the time of partition creation results in an error, and the partition is not created. If you then attempt to create the same partition again, with the same name and replication enabled, the DXi will become unresponsive and must be rebooted.	If the configured replication target does not support VTL, do not enable replication at the time of partition creation.

Bug Number	SR Number	Description	Workaround
26167		When performing a failback from a DXi running 2.1 or 2.1.x software to a DXi running software version 2.0.x or earlier, the failback fails if a valid source IP address has not been specified on the DXi running 2.1 or 2.1.x software.	On the DXi running 2.1 or 2.1.x software, specify a valid **Source IP Address** on the **Configuration > Replication > Send** page.
29341		It is possible to configure two identical replication schedules for the same share or partition.	If this is done, one of the scheduled replication jobs will succeed and the other will fail. Ignore the failed job and delete the redundant schedule.

Space Reclamation Known Issues

Bug Number	SR Number	Description	Workaround
20826		After upgrading the system software, the **Space Reclaimed** statistics are incorrect on the **Space Reclamation > General** page.	The statistics will be correct after space reclamation is run.
31396	1479064 1480084	On the **Utilities > Space Reclamation** page, the **bytes reclaimed** message for space reclamation stage 3 (deletions) displays an incorrect number of bytes.	DXi Advanced Reporting 2.1.2 provides improved statistics for space reclamation. First, install DXi Advanced Reporting 2.1.2 on the DXi. Then view the **Capacity Report - Disk Usage Graph** in DXi Advanced Reporting to see detailed statistics about reclaimable space. **Note:** Because the DXi can automatically use reclaimable space to store new deduplicated data, space reclamation statistics may be affected (appear lower) if ingest occurs at the same time as space reclamation.

Network Known Issues

Bug Number	SR Number	Description	Workaround
8628		A replication IP address should not be required to configure the network if the user does not use replication.	Enter a "dummy" IP address. This will be fixed in a future revision.
20448		If a **Domain Suffix Search List** has not been specified on the **Network** page, and the DXi is added to an Active Directory server, the DXi is added to the domain with the suffix **localdomain**. After this, the DXi cannot be managed using Active Directory.	Specify the correct domain suffix in the **Domain Suffix Search List** before adding the DXi to an Active Directory server. (If adding multiple entries to the list, make sure the correct path is first in the list.)
20572		When using Active Directory, the DXi is not automatically added to the DNS server in the parent domain after the DXi is added to a child domain.	Cross domain joining is not supported by Samba. Instead, manually add a DNS entry to the DNS server.
20574		Unable to manage DXi Local Users and Groups from the Active Directory controller after the DXi is added to a child domain.	Log off of the Active Directory controller, then log back on. Users and groups will be listed correctly.
21603		If the DXi is assigned an IP address in the 10.17.21.0 to 10.17.21.24 range, a network connection to the DXi cannot be established.	The IP addresses in this range are reserved. Configure the DXi using a different IP address.
23808		A CIFS share cannot be mapped when using Windows 2008 R2 SP1 with the **RequireSecuritySignature** registry key set to **1**.	Edit the Windows 2008 registry and set the following key to **0**: HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\LanmanWorkstation\Parameters\RequireSecuritySignature
30169 30805	1419732	Running the Network Analyzer on the **Utilities > Analyzer > Performance** page fails if NetServer is enabled on both the source (driver) DXi and the target DXi.	Only enable NetServer on the target DXi, and leave it disabled on the source (driver) DXi. To enable or disable NetServer, use the **Utilities > Analyzer > Settings** page.

CLI Known Issues

Bug Number	SR Number	Description	Workaround
13604		Enabling jumbo frames disrupts active network configurations.	Don't change the setting if I/O is running.
14032		By default the "syscli --getstatus jumbo" command displays only bonded network devices' jumbo frame status. If some network devices are not bonded (segmented) the "syscli –getstatus jumbo" will not display jumbo frame status for those devices when using the command without any option specified. **Note:** The **--getstatus jumbo command** has been deprecated.	To display all the network devices' jumbo frame status, use the "--all' option in the command (i.e. syscli –getstatus jumbo --all"). To display a single network device jumbo frame status, specify the network device using the "--dev" option in the command. For example, "syscli –getstatus **jumbo** --dev eth0" command displays ETH0 device jumbo status.
31190		When attempting to change the administrator or other password using the **syscli**, the system prompts for the old password. If the correct old password is entered, the system rejects it, and the password cannot be changed.	Specify the old password as part of the **syscli** command. Use the following syntax: **syscli --change password --name admin|monitor|cliadmin|cliviewer --oldpassword <old_password> --newpassword <new_password>**

GUI Known Issues

Bug Number	SR Number	Description	Workaround
7874		**Alert > Service Tickets > View Recommended Actions** - Quantum Support link hyperlink missing.	Manually copy and paste the hyperlink into your browser to access the Quantum Support web page.
7935		When selecting all share administrators including default domain administrator for deleting, the GUI should display an error indicating that it can not delete the default domain administrator.	The default domain administrator can NOT be deleted.
11790 11792 11954		Usernames beginning with "#" or "$" characters, or OST LSU names beginning with the "_" character are not displayed correctly.	Do not use these characters to begin usernames or OST LSU names

Bug Number	SR Number	Description	Workaround
15310		When the system is running a backup and a partition is created with > than 5000 cartridges, the GUI displays: PLEASE WAIT... The system is either busy with a previous request or in the process of restarting the web-based interface.	This is normal operation. Wait until the GUI becomes responsive. Do NOT reboot the system.
20673		On the **Email Home > On Demand** page, after viewing and saving a configuration data report, the **OK** button is disabled.	Refresh the Web browser to return enable the **OK** button.
21019		Immediately after a fresh software install, the disk capacity statistics displayed in the remote management console are incorrect.	Wait a few minutes for the disk capacity statistics to be updated.
22417		When adding an SNMP community, the following error displays: The IP Address/Network Mask pair does not imply a valid network address. This error occurs even though the pair is in fact valid.	Leave the **Network Mask** field blank when creating the community.
23165		When deleting host access groups on the **Host Mapping** page, the job status indicator does not complete.	The host access groups were successfully deleted. To clear the job status indicator, navigate to another page in the remote management console, then navigate back.
24567		In the **OST Wizard**, on **Step 3: Add LSUs**, if you sort the list of LSUs by name, and then select one or more LSUs, the **Delete** button remains disabled.	Click **Previous** to return to the previous step, then click **Next** to return to Step 3. Select the LSUs to delete, and click **Delete**.
24644		On the **Utilities > Diagnostics > System Diag File** page, after clicking **Generate New** to create a new system diagnostics file, the message No file has been generated appears, and the **Download Current** button remains disabled.	Check the **Admin Alerts** page to see if an admin alert was generated. If the **/scratch** file system is out of space, the system cannot create a new diagnostics file, and an admin alert is generated.
26174		On the **Configuration > VTL > Media > Actions**, when **Show All Media** is selected in the **Action** drop-down box, an **Unresponsive Script** error dialog box may display if there is a very large number of media.	Keep clicking **Continue** on the error dialog box until the media displays. To avoid this error, view media for a particular partition, or apply a barcode filter.

Bug Number	SR Number	Description	Workaround
26245		On the **Configuration > Scheduler** page, the horizontal scroll bar does not allow you to scroll to the right to see the entire view.	Navigate to a different page in the remote management console, and then navigate back to the **Scheduler** page.
26021		Web browser save password features (and similar third party browser add-ons) are not able to store and recall the DXi password when logging on.	To maintain proper security, enter the password manually each time you log on to the DXi.
27206		When generating a storage array diagnostics file, the operation does not appear to complete even after a long period of time elapses.	Press **F5** to refresh the page. Or navigate to another page, and then navigate back to the **Utilities > Diagnostics > Storage Array Diag File** page.
29832		When a scheduled space reclamation event is deleted on the **Scheduler** page, the **Administrative Activity Log** records the deletion but does not record the type of event that was deleted.	When looking at the **Administrative Activity Log**, if you have questions about the type of event that was deleted, note the user and time of deletion, and then consult the appropriate person.
29153		After editing an event on the **Scheduler** page, a new event cannot be added by clicking and dragging.	Refresh the browser window, and then click and drag to add a new event.
30735		On the **Scheduler** page, if a monthly or weekly event is edited and changed to a daily event, any subsequent attempts to edit a single instance of the event will fail.	Delete the recurring event and then create a new daily recurring event. You can then edit single instances of the new recurring event as needed.

VTL Known Issues

Bug Number	SR Number	Description	Workaround
21688		The following error occurs when editing a partition to reduce the number of storage slots: `Error: setting number of slots: 150. Error:-1`	To remove slots, the slots at the end of the range of slots must be empty. Export cartridges from the highest numbered slots, and then edit the partition again.

Bug Number	SR Number	Description	Workaround
22019		Media can be recycled (erased) on the Media Actions page even if it is write protected (WP).	The WP status is respected by the host but not the DXi. Do not recycle media that has data.
30808		When using the **VTL Configuration Wizard**, if you add a host group in step 5 but do not specify a host in the **Host** drop-down box, an error will occur when trying to confirm the settings in step 6.	Make sure to specify a valid host when adding a host access group.

NAS Known Issues

Bug Number	SR Number	Description	Workaround
19332		NFS recovery jobs performed with a supported backup application fail to complete.	Make sure the backup client system has a minimum of 8 GB of RAM.
19935		Attempting to delete a share while performing I/O on the share (for example, copying files to the share) results in an error. After this error occurs, the share cannot be deleted, and replication cannot be performed to the share.	Wait for I/O on a share to complete prior to deleting a share.
19936		A file/directory path with more than 244 characters cannot be accessed on a mapped NAS share.	Limit file/directory paths on a mapped NAS share to 244 characters or less.
21407		Empty files and directories can still be created on NFS shares when the DXi is in a low space condition.	Do not attempt to write files and directories to NFS shares on the DXi when it is in a low space condition. Run space reclamation to free up disk space before writing additional files.
23218		When mounting NFS shares on Solaris clients using the noac option, performance is degraded.	Do not use the noac option when mounting shares, or use a non-Solaris client.
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	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.

OST Known Issues

Bug Number	SR Number	Description	Workaround
10041	1423609 1066048 1236048	Subsequent Optimized Duplication jobs may fail or become stuck when running jobs are canceled or stopped.	Restart the NetBackup services.
13795	1913763	Unable to delete undiscovered OST devices from Backup Exec 2010.	Reestablish connection from the Backup Exec OST device and the DXi system. The connection can be reestablished by re-starting Backup Exec services or rebooting the DXi system. Once the connection is established, the device will be discovered, and the you will be able to delete it. Alternately, upgrade to Backup Exec 2010 R2, which contains a fix for this bug.
15286		New OpenStorage Devices added to Backup Exec 2010 initially show as "Undiscovered".	Press Refresh in the Backup Exec View pull-down menu until the device show as discovered.
15322		Optimized Duplication Succeeds, but the following error is shown: V-79-8192-4881 - The count of Files and Directories processed is not available for this operation. The File and Directory count might be displayed as zero.	This is expected behavior. You are able to restore using the duplicated image with no issues.
20587		On a NetBackup media server, temporary files created during backups are not removed.	This issue is resolved. To remove any temporary files that were created by previous versions, delete all files in the /**tmp/dm/shadow** directory on the NetBackup media server.
23109		(DXi6700 only) There is a small chance of observing a discrepancy in the aggregate statistics for DXi Accent and the statistics for individual media servers.	Navigate to another page in the remote management console, then navigate back.

Bug Number	SR Number	Description	Workaround

23253		If a storage server is configured to use multiple LSUs, and if LSU spanning is configured, when one LSU gets full and NetBackup is handling a disk full condition, the following errors are logged in OST Plug-in log:
		
		`ERROR    - 20110526 14:53:50 11818 /pgnimage.cpp:2500 Write to image failed.  dm_error: -812, STS Error: 2060031`
		
		`ERROR    - 20110526 14:53:50 11818 /pgnimage.cpp:2584 EXIT pgn_write_image: (out of space:2060031) ih=0x13c1ed00, bytesWritten=0`
		
		OR
		
		`ERROR    - 20110414 23:27:36 20648 /pgnbfst.cpp:1153 Received error(2060031) from server, OST_RESERVE_LSUSPACE for 262144 bytes failed`
			If the NetBackup spanning worked as expected, and if the job completed successfully, these errors may be ignored.

24628 26580		When DXi Accent is enabled, a maximum number of jobs (backups, restores, and/or optimized duplications) can be run against the DXi. The maximum is 10 total jobs for DXi4500 and DXi6510 and 20 total jobs for all other DXi models.
		
		When the limit is reached, the following error is logged to the OST Plug-in log:
		
		`VServer "hybrid-dedupe-no-encrypt" limit reached (limit 20).`
		
		Also, the following error is logged in the NetBackup progress log:
		
		`Critical bpdm (pid=12515) image open failed: error 2060020: storage server connection limit exceeded`
			If the connection limit is reached on the DXi, the OST Plug-in retries for 300 seconds by default. If the connection cannot be established within 300 seconds, the connection times out and an error is returned.
			
			The default connection timeout is 300 seconds. The timeout value can be increased using the following setting in **/usr/Quantum/QuantumPlugin.conf**.
			
			`DATA_CONNECTION_BUSY_TIMEOUT`

Bug Number	SR Number	Description	Workaround

26627		When attempting to perform an optimized synthetic full backup using NetBackup running on a Windows-based media server, a normal synthetic full backup occurs instead. During a normal synthetic full backup, all data is read back to the media server, resulting in a longer backup window.
		
		Note: This issue usually occurs with existing storage servers and disk pools.
			Make sure the storage server and disk pools are correctly configured for optimized synthetic full backups. To do this, run the following commands on the media server:
			
			`nbdevconfig -changests -stype Quantum -storage_server <ss_name> -setattribute`
			
			`nbdevconfig -changedp -stype Quantum -dp <dp_name> -setattribute OptimizedImage`
			
			To verify the configuration, run the following commands and make sure they return the flag **OptimizedImage**:
			
			`nbdevquery -liststs -U`
			
			`nbdevquery -listdp -U`
			
			For more information, see the following Symantec online support article: http://www.symantec.com/business/support/index?page=content&id=TECH77767

26147		When using OST with a media server configured with RedHat Linux and a Chelsio 10GbE card, restore operations take significantly longer to complete than backup operations.	Use the **perftune.sh** and **ifup-local** scripts (provided by Chelsio) to correctly set kernel parameters on the media server. To do this, you must copy the **perftune.sh** and **ifup-local** scripts to **/sbin** on the media server. For more information, refer to the Chelsio driver installation instructions (in the **ReadMe** file included with the driver).
29854		In NetBackup 7.5, when you click **Refresh** on the **Change Disk Pool** dialog box, the following error displays: The snapshot property of one or more volumes in the disk pool has changed. This property cannot be changed after initial configuration.	To resolve this issue, refer to the following Symantec support article: http://www.symantec.com/docs/HOWTO67378
30134		In NetBackup 7.5, when attempting to change a **Replication** operation to a **Duplication** operation on the **Storage Lifecycle Policy Editing Window**, the storage unit is not updated and remains blank.	Make the change a second time. On the second attempt, the storage unit is correctly updated.

Bug Number	SR Number	Description	Workaround
30180		OST path to tape traffic is not routed directly from the DXi to the physical tape library, and instead is routed through the NetBackup media server, when the operation is initiated by a Storage Lifecycle Policy.	To resolve this issue, refer to the following Symantec support articles: http://www.symantec.com/business/support/index?page=content&id=TECH193964 http://www.symantec.com/business/support/index?page=content&id=TECH184142
30429		If an LSU that is enabled for Automatic Image Replication (AIR) belongs to a disk pool for which spanning is enabled, when an opportunity for spanning occurs, the LSU is not spanned, and NetBackup fails the backup with the following or similar error: `Critical bptm (pid=24097) backups created for eventual duplication to remote master servers cannot span multiple volumes.`	LSUs that are enabled for Automatic Image Replication cannot be spanned. If an LSU is configured for AIR, make sure spanning is disabled for the disk pool it belongs to. **Note:** When an LSU is configured for AIR, it can take up to five minutes for the change to be visible in NetBackup.
30515		Automatic Image Replication (AIR) jobs run between a UNIX media server and a Windows media server fail.	NetBackup does not support image replication between different operating systems. Always perform Automatic Image Replication between media servers that use the same operating system.

Bug Number	SR Number	Description	Workaround
31095		NetBackup 7.5 and 7.6 may have problems recognizing or accepting the DXi replication topology configured for Automatic Image Replication (AIR). This occurs because Quantum's implementation of Automatic Image Replication does not correctly publish storage server names to NetBackup such that NetBackup can correctly distinguish between storage server names. Note: Quantum OST is unique among OST implementations in that it separates the DXi appliance from the OST storage server. In other implementations, the appliance is the storage server. On the DXi, the storage server is a logical construct which allows the DXi to have multiple storage servers.	When configuring AIR, use storage server names that are unique among the DXi systems involved in an AIR configuration.
31166		If you are using DXi Accent for backups and the **TLS with AES 256** encryption option for Accent is enabled, the following conditions may occur: • In NetBackup, backup jobs start but remain in active state and do not complete. • In Backup Exec, the discovery process does not complete.	At this time, Quantum recommends that you do not use the TLS encryption option for DXi Accent. Instead, select a different encryption option on the **Configuration > OST > Accent** page: • **None** • **Default AES 128** • **Default AES 256**

Installation and Upgrade Known Issues

Bug Number	SR Number	Description	Workaround
13711		If a power cycle occurs while uploading the software image, the system displays only an "Activation Error Occurred!" message.	Do not power cycle in middle of an upgrade. Begin the upgrade again.
13366		The system goes into diagnostic mode if a SAS cable is pulled during storage expansion upgrade.	Don't pull cables during storage capacity upgrade.

Bug Number	SR Number	Description	Workaround
15362		During installation, warnings appear that the **Inode Expand Min**, **Inode Expand Max**, and **Inode Expand Inc** configuration variables are deprecated.	These warnings do not affect installation and can be ignored.
21270		When upgrading to DXi 2.0 Software, the 1.4.x diagnostic files are deleted.	Before upgrading to 2.0, save copies of the 1.4.x collect logs to a location that is not on the DXi.
24366	1293264	(DXi4500 only) When upgrading to 2.x Software, the following service ticket is generated: `fs 'vol0':FSS on host 127.0.0.1 not currently accessible`	This is expected behavior during a successful upgrade. You may safely close the service ticket.
24372		After upgrading from 1.4.x to 2.0.x, the following error appears in the **upgrade1to2.out** log. `*** Speedy VMC_MEDIA_TYPE_GENERIC table upload` `*** Error of appending row 9` `Loarel: (903) duplicate value for primary or unique key` `Loarel: system error: 0` `Loarel: (903) duplicate value for primary or unique key in adding row number 1`	You may safely disregard this error. The upgrade completed successfully.
26455	1329228	A custom setting for MI thread count in the **/etc/init.d/ost** file is lost when upgrading and is reset to the default value (20 threads).	Prior to upgrading, note the value for MI threads in the **/etc/init.d/ost** file, and then reset the value following the upgrade. **Note:** In general, in DXi 2.1.x Software, it is no longer necessary to alter the MI thread setting to optimize performance.
28397	1395064	If a DXi that is configured with DNS entries is disconnected from the network prior to a software upgrade, the upgrade will not succeed.	If the DXi must be disconnected from the network during an upgrade, remove any DNS entries on the **Configuration > System > Network** page prior to the upgrade.

Bug Number	SR Number	Description	Workaround
29410		During a software upgrade, if the DXi is booted from the software DVD before the firmware (.fw) file is uploaded and activated, the following error occurs upon a subsequent attempt to activate the firmware image: The firmware file is not present.	Despite the error, the upgrade will succeed after the firmware image is activated. In the future, to avoid this issue, do not boot from the software DVD before activating the firmware image. Note that the software DVD is *not* required for 2.x to 2.x upgrades.
30829		After upgrading to 2.1 Software or later, the Integrity healthcheck is disabled.	The Integrity healthcheck is currently not supported in 2.1 or later software. Run the De-Duplication healthcheck instead.

Miscellaneous Known Issues

Bug Number	SR Number	Description	Workaround
12454		If a single file is replicated using the Command Line Interface (CLI), the ACL for that file will be lost.	Use Synchronize option from the GUI. See the *DXi-Series User's Guide* for further information.
12523		Occasionally, the NTP server cannot be contacted, resulting in the following admin alert: WARNING: Unable to access NTP server/pool.	Check the NTP settings on the **Configuration > System > Date & Time** page and change if necessary. Before a valid NTP Server can be configured by hostname or selected from an **NTP Server Pool** on the **Configuration > System > Date & Time** page, a Primary DNS server must be configured on the **Configuration > System > Network** page. When updating the NTP settings through the **Getting Started Wizard**, configure the Primary DNS Server in the **Network** step prior to configuring the NTP server in the **Date & Time** step.
13621		NTP server error and Admin Alert are produced after changing from NTP 24-hr to 12-hr NTP format.	Verify time format has changed. If the time format has changed, ignore the alert.
15848		Backups jobs running to a DXi6550 with the optical option via a Dell 8024f switch may not complete or will complete with very slow performance.	Change the Dell 8024f settings from **RSTP** to **Classic STP**. Refer to the Dell switch documentation for more information.

Bug Number	SR Number	Description	Workaround
17553		Long backups on a NetBackup client running on Windows 2003 can fail due to insufficient system resources.	Edit the registry settings on the client as described in the following Microsoft knowledge base article: http://support.microsoft.com/kb/304101/en-us
18370 19091 27478		Errors are received after a DSET log is generated on the **Utilities > DSET** page. After retrieving a DSET log, the system status can also briefly show the system board as "failed".	You may ignore these error messages, and download the DSET log as usual.
20336		When FC port 9 is pulled or down, a correct RAS ticket is generated, but Admin Alerts incorrectly reports that the wrong HBA FC port numbers (FC0, FC1, FC2, FC3, FC4, and FC5) are down.	Although the FC port numbering is incorrect, the Admin Alert is a valid alert indicating that a customer-facing FC link is down. This alert will be fixed in a future release.
20707		If one of the processes in the DataPath cores, this can cause other processes in the DataPath to core as well. Process cores will results in RAS alerts. DataPath consists of the following processes: bpwd, bpwapid, qfsd, ost, ndmp, nas_control, nfslock, smb, nfs	If a core occurs, only the first core requires investigation, as it is the root cause. The subsequent cores are expected and can be disregarded.
23372		After a reboot, the DXi comes up in diagnostic mode, and attempting to retrieve a collect log does not proceed past the step **Collecting -FC scst-**.	Reboot the DXi again using the remote management console or the CLI.
24495		The online help content for the **Utilities > Diagnostics > Healthchecks > General** page does not include **Contact Support** in the list of possible healthcheck statuses.	If running a healthcheck results in the **Contact Support** status, contact Quantum Customer Support.
26066		When using Quantum Vision to view status and reporting data for a DXi, data is not collected from the DXi at the frequency specified in Vision.	Upgrade to Quantum Vision 4.1 or later.
26248		When a good drive is removed from a storage array, the resulting service ticket incorrectly states that the drive has failed.	Drive status is correctly report on the **Status > Hardware > Details > Storage Arrays** page.

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.
28699		When running a Retina Security scan, the following security event is reported: `OpenSSH X11 Port Forwarding Session Hijack Vulnerability`.	This is a false positive result and can be safely ignored. The version of **OpenSSH** included with DXi 2.1.x Software already includes the required security fixes.
29959		DXi Advanced Reporting cannot be accessed on a DXi with critically low or no free space.	Delete data and run space reclamation to free up space on the DXi.

Cosmetic Issues

Bug Number	SR Number	Description	Workaround
11800		Although all NAS shares are deleted, if there is at least 1 OST share, the target will still have value and display grayed out.	This issue can be ignored and does not impact functionality.
11803		On the Ethernet performance page, the "average" drop-down menu reflects "all" ports and not just the "active" ports.	When viewing the Ethernet performance "average," be aware that the calculation is affected by potentially inactive ports, including one of the service ports.
12092		Service Ticket: Recommended Actions: Contains information on barcode/cartridge when a NAS share fails.	This issue can be ignored and does not impact functionality. This will be fixed in a future release.
20505		If you have used the Configuration Wizards to configure the system, after the DXi reboots, the green check marks on the **Wizards** menu that indicate a wizard was completed no longer display.	This is cosmetic only. All settings made using the Configuration Wizards are retained after a reboot.
21497		The first time an NFS share is modified after a CIFS share is modified, a message appears incorrectly stating that the CIFS service was started successful.	Click **OK** to dismiss the message.

Documentation

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

Document Number	Document Title
6-67084	*DXi6500 Site Planning Guide*
6-67200	*DXi6700 Site Planning Guide*
6-67120	*DXi6500 User Essentials*
6-67193	*DXi6700 User Essentials*
6-67083	*DXi6500 User's Guide*
6-67199	*DXi6700 User's Guide*
6-67085 6-67086 6-67087 6-67088 6-67089	*DXi6500 Installation and Configuration Guides* • *DXi6510* • *DXi6520* • *DXi6530* • *DXi6540* • *DXi6550*
6-67201 6-67196	*DXi6700 Installation and Configuration Guides* • *DXi6700* • *DXi6701 and DXi6702*
6-67090	*DXi6500 and DXi6700 Expansion Module Upgrade Instructions*
6-67079	*DXi-Series NetBackup and Backup Exec OST Configuration Guide*
6-67081	*DXi-Series Command Line Interface (CLI) Guide*
6-67082	*DXi-Series SNMP Reference Guide*

Supported Backup Applications

The following backup applications are supported for use with DXi 2.2.0.1 Software:

Backup Application	Revision
Symantec NetBackup	6.5 and later
Symantec Backup Exec	2010 R3 and later
EMC NetWorker	7.4 and later
CommVault Simpana	7.0 and later
CA ARCserve	12.5 and later
Oracle Secure Backup	10.2 and later
IBM Tivoli Storage Manager	5.5.4 and later
HP Data Protector	6.0 and later
Quest NetVault	8.x 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.

Additional Notes

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.

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.

Space Reclamation

The **Space Reclaimed** value displayed on the **Space Reclamation > General** tab displays the amount of physical disk space that will be reclaimed as a result of deleting deduplicated data. However, the actual amount of physical disk space may be less than the value indicated because of fixed overhead of the deduplication module. Since the disk space usage in the system is also dynamic, other activities in the system may impact the accuracy of the **Space Reclaimed** value.

Quantum Vision

You must update to the latest version of Quantum Vision (4.0.4 or later) to operate with DXi 2.2.0.1 Software.

StorageCare Guardian

You must update to the latest version of StorageCare Guardian (2.0.5 or later) to operate with DXi 2.2.0.1 Software.

OST NetBackup Version

You must use NetBackup version 6.5.3 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.

Contacting Quantum

More information about this product is available on the Service and Support website at www.quantum.com/support. The Service and Support Website contains a collection of information, including answers to frequently asked questions (FAQs).

For further assistance, or if training is desired, contact Quantum:

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 additional contact information:	www.quantum.com/support
To open a Service Request:	www.quantum.com/osr

For the most updated information on Quantum Global Services, please visit: www.quantum.com/support