

Release Notes

Product	DXi 2.0.2.1_46 Software for DXi4601
Supported Browsers (Remote Management Console)	Microsoft Internet Explorer 7.x or higher, Mozilla Firefox 3.x or higher
Date	November 2011

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Purpose of This Release

DXi 2.0.2.1_46 is the initial software release supporting theDXi4601 disk backup system.

This software release provides the following new capabilities:

• Nominal storage capacity can be upgraded at any time after purchase in increments of 4 TB, up to a total of 12 TB.

Note: Storage capacity upgrades are enabled simply by adding a license key and rebooting the system. To purchase a storage capacity upgrade license, contact your Quantum sales representative.

Hardware Compatibility List

The following table provides information about hardware compatibility with DXi 2.0.2.1_46 Software. This information is current as of the publication date of these release notes.

Component	Description
DXi4000 - 4601	 1 system 1 RAID controller card 4 x 1GbE ports 4–12 TB nominal capacity (3.87–11.61 TB usable capacity)

OST Plug-In Support

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

- Symantec Veritas NetBackup and Backup Exec 2010 (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 <u>Table 1</u> and <u>Table 2</u> 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.

Platform	Plug-in Version	DXi Software Version
RedHat Linux x86 32-bit (NetBackup only)	2.4.0	2.0.2.1_46
SUSE Linux x86 32-bit (NetBackup only)	2.4.0	2.0.2.1_46
Solaris x86 64-bit (NetBackup only)	2.4.0	2.0.2.1_46
Solaris SPARC 32-bit (NetBackup only)	2.4.0	2.0.2.1_46
Solaris SPARC 64-bit (NetBackup only)	2.4.0	2.0.2.1_46
Windows 2003/2008 32-bit	2.4.0	2.0.2.1_46
Windows 2003/2008 64-bit	2.4.0	2.0.2.1_46

The Quantum OST Plug-in availability for NetBackup 7.0 is limited to the platforms in <u>Table 2</u>.

Platform	Plug-in Version	DXi Software Version
RedHat Linux x86 64-bit	2.4.0	2.0.2.1_46
SUSE Linux x86 64-bit	2.4.0	2.0.2.1_46
Solaris_10 64-bit	2.4.0	2.0.2.1_46
Solaris SPARC 64-bit	2.4.0	2.0.2.1_46
Windows 2003/2008 32-bit	2.4.0	2.0.2.1_46
Windows 2003/2008 64-bit	2.4.0	2.0.2.1_46

Table 1 NetBackup 6.5.2 (or later) and Backup Exec 2010 (or later) OST Plug-in Compatibility List

Table 2 NetBackup 7.0 OST Plug-in Compatibility List

Replication Compatibility

The following DXi-Series systems are capable of sending replicated data to or receiving replicated data from a DXi running DXi 2.0.2.1_46 Software:

Note: DXi4601 supports replication of NAS data only.

- DXi8500
 - Software Version: 1.4.x_85
- DXi7500 Express and DXi7500 Enterprise
 - Software Versions: 1.2, 1.2.x, 1.4, 1.4.x
- DXi6701 and DXi6702
 - Software Version: 2.0.1.1
- DXi6700
 - Software Version: 2.0.1.1
- DXi6500 Family (DXi6510, DXi6520, DXi6530, DXi6540, DXi6550)
 - Software Versions: 1.3_65, 1.3.x_65, 1.4, 1.4.x, 2.0, 2.0.0.x, 2.0.1.1
- DXi4000 Family (DXi4510, DXi4520, DXi4601)
 - Software Version: 1.3.1_45, 1.4.x, 2.0, 2.0.0.x, 2.0.1.1, 2.0.2.1_46
- DXi2500-D
 - Software Version: 1.4.x

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 2.0 or 2.0.x Software to another DXi running 2.0 or 2.0.x, that data cannot be failed back to a DXi running system software 1.x. Perform a failback to a DXi running DXi 2.0 or 2.0.x Software.

Known Issues

DXi 2.0.2.1_46 Software has the following known issues:

- <u>Replication Known Issues</u> on page 5
- <u>Space Reclamation Known Issues</u> on page 7
- <u>Network Known Issues</u> on page 8
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Replication Known Issues

Change Request 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.
12089		Scheduled replication creates errors when all shares are disabled using the Replication > Source Role > Actions > Disable GUI option.	To prevent the logging errors, remove the schedules of the share in question using Data Services > Replication > NAS . Select the share you want to disable scheduling for and then click Edit > Uncheck Enable Schedule Replication >Uncheck Enable Replication and then Click Apply .
			Do this for each NAS share that you want to remove the scheduled replication for instead of disabling all shares from replication using Replication >Source Role > Actions > Disable .
13617		If the replication target is changed while a namespace replication on a NAS share 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.

Change Request Number	SR Number	Description	Workaround
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.
15975		When specifying a replication source or target, the DXi does not issue a warning if the source or target is running a system software version that is not supported for replication.	Only replicate with a DXi that is running a system software version that is supported for replication (see <u>Replication</u> <u>Compatibility</u> on page 4).
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.
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 2.0 or 2.0.x Software to another DXi running 2.0 or 2.0.x, that data cannot be failed back to a DXi running system software 1.x.	Perform a failback to a DXi running DXi 2.0 or 2.0.x Software.
20455		After aborting replication, shares in the replication queue are removed from the queue but are still replicated to the target DXi.	Disable replication for shares in the queue that you do not want to replicate. This will cause replication for those shares to fail.
20479		Enabling directory/file based (trigger) replication on a NAS share that contains a large number of files causes trigger based replication to slow down on the DXi due to a large number of trigger requests in the queue. A share might contain a large number of files if a backup job is restored to the share.	Synchronize the NAS share with the target frequently to reduce the number of trigger requests in the queue.
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.

Change Request Number	SR Number	Description	Workaround
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.
22732		After deleting a replication target or source on the Replication Send or Replication Receive page, the following admin alert occurs: Error occurred removing host <ip address=""> as allowed host for replication to this system. Resolving the IP address to a fully qualified host name failed. However, the target or source is successfully deleted.</ip>	This occurs when deleting a target or source IP address that is no longer valid. You can disregard the alert. However, you should also delete the same IP address on other target or source systems.
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.
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.	When configuring source and target shares for Directory/File Based (trigger based) replication, make sure both the source and target shares use the same protocol (NFS or CIFS).

Space Reclamation Known Issues

Change Request 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.

Network Known Issues

Change Request 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 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.
20894		If the netcfg CLI command is used to create a custom network configuration, and then the Basic Network page in the remote management console is used to change the host name or DNS IP addresses, the custom network configuration is lost.	After changing the host name or DNS IP addresses, reconfigure the custom network settings using the netcfg CLI command.
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.
23313		A Windows 7 or 2003 client is unable to access a NAS share when both the client and the DXi are joined to a Windows 2008 R2 domain.	Add the following parameter to the smb.conf.extra file: server signing = auto Then connect to the DXi using the hostname rather than 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\Curren tControlSet\Services\LanmanWorks tation\Parameters\RequireSecurit ySignature

CLI Known Issues

Change Request 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 "syscligetstatus 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.	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.

GUI Known Issues

Change Request 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.
11776		On the target system, when "Allowed Replicated source" is added as an IP Address, the replicated share can be deleted even when the share is enabled on source.	Use the hostname instead of an IP address for allowed replicated source on the target to prevent replicated shares from being deleted on the target.
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

Change Request 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:	This is normal operation. Wait until the GUI becomes responsive. Do NOT reboot the system.	
		PLEASE WAIT		
		The system is either busy with a previous request or in the process of restarting the web-based interface.		
17436		Bold text is not visible in FireFox.	This will be fixed in a future release.	
19289		When a Fully Qualified Domain Name (FQDN) is used as an NDMP host name, the NetBackup media server reads data from the DXi to a media server host and then writes the data to a tape connected to the DXi. This results in slow OST path- to-tape (PTT) performance.	Do not use a Fully Qualified Domain Name (FQDN) as an NDMP host name. In this case, the NDMP server on the DXi reads the data from disk and writes it directly to a tape connected to the DXi instead of reading it to a media server. This results in faster OST PTT performance.	
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.	
21558		On the Network page in the remote management console, if the Advanced option is selected and IP information is entered, but no bonding option is selected, an error does not occur if Apply is subsequently clicked. Instead, the DXi reboots, and basic network settings are applied.	Apply. ly i	
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.	

Change Request Number	SR Number	Description	Workaround
23165	Host Mapping page, the job status deleted. To clear the job status indicated		.
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		Dutton remains disabled. Delete. 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 System cannot create a new diagnostic Download Current button remains file, and an admin alert is generated.	

OST Known Issues

Change Request 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.

Change Request Number	SR Number	Description	Workaround
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.
21267		A storage server cannot be deleted even when it contains no LSUs and there are no active connections.	Disregard the empty storage server. Note that you cannot use the same name for the storage server, and that the empty storage server counts toward the 100 storage servers limit.
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	If the NetBackup spanning worked as expected, and if the job completed successfully, these errors may be ignored.
		ERROR - 20110526 14:53:50 11818 /pgnimage.cpp:2584 EXIT pgn_write_image: (out of space:2060031) ih=0x13c1ed00,	
		<pre>bytesWritten=0 OR ERROR - 20110414 23:27:36 20648 /pgnbfst.cpp:1153 Received error(2060031) from server, OST_RESERVE_LSUSPACE for 262144 bytes failed</pre>	

Installation and Upgrade Known Issues

Change Request 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.		
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.
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.
23375		After upgrading, information for Disk Usage , Data Reduction Statistics , and Current Activity does not display in the remote management console.	Re-install the latest version of DXi Advanced Reporting on the DXi.
23456		After upgrading, a service ticket is generated with the following error: QUANTUM software : File System component node-1-[04/26/11- 18:07:09.204] : Not responding	You can safely disregard this service ticket. No action is needed, and the system is operating as expected.
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.

Change Request Number	SR Number	Description	Workaround
23503		After upgrading from 1.4.x to 2.0.x, the following errors appear in the upgrade1to2.out log.	You may safely disregard these errors. The upgrade completed successfully.
		Error 1	
		useradd: UID 62 is not unique	
		error reading information on service Upgrade: No such file or directory	
		Error 2	
		Can't open control driver /dev/ cvfsctl0, error No such file or directory (2)	
		Error 3	
		I/O warning : failed to load external entity "/snfs/common/ data/HoldTagRefsMap"	
24969		When upgrading from 1.4.x to 2.0.x, the initial stage of the upgrade process may appear to hang at the step: Found Galaxy 2.0.1 media: QTM- DXi6500-DVD-2.0.1.1-6079-42867 on /dev/cdrom	Wait for the initial stage of the upgrade process to complete. This stage can take a significant amount of time and may not provide feedback or output while in progress. After the DXi reboots, the upgrade process will continue.

Miscellaneous Known Issues

Change Request 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 <i>DXi-Series User's Guide</i> for further information.
12523		Occasionally, the NTP server cannot be contacted during the wizard setup. Change the NTP setting using the GUI Configuration > System > Date & Time option. See the <i>DXi-Series User's</i> <i>Guide</i> for further information.	
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.

Change Request Number	SR Number	Description	Workaround	
17553	running on Windows 2003 can fail due to insufficient system resources. http://support.microsoft.com/kb/2		Edit the registry settings on the client as described in the following Microsoft knowledge base article: <u>http://support.microsoft.com/kb/304101/</u> en-us	
18370 19091		Errors are received after a DSET log is generated. After retrieving a DSET log, the system status can also briefly show the system board as "failed".	Ignore these error messages.	
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.	
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	n requires investigation, as it is the root cause. The subsequent cores are	
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.	
21560		Hard links do not function on NFS shares.	es. Hard links are not supported by DXi 2.0 Software. Do not use hard links.	
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.	

Change Request Number	SR Number	Description	Workaround
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 If running a healthcheck results		If running a healthcheck results in the Contact Support status, contact Quantum Customer Support.	

Cosmetic Issues

Change Request 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.		
12092		Service Ticket: Recommended Actions: Contains information on barcode/ cartridge when a NAS share fails.	ns: 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.	
21409		Low capacity error messages and associated recommended actions still refer to file truncation.	Files are no longer truncated in DXi 2.0 Software. Disregard the references to truncation.	
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

Document Number	Document Title
6-67093	DXi4000 Site Planning Guide
6-67128	DXi4000 User Essentials
6-67092	DXi4000 User's Guide
6-67094	DXi4000 Installation and Configuration Guide
6-67079	<i>DXi-Series Symantec NetBackup OST Configuration Guide</i>
6-67080	<i>DXi-Series Symantec Backup Exec OST Configuration Guide</i>
6-67081	DXi-Series Command Line Interface (CLI) Guide

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

Supported Backup Application Filters

Backup Application	Revision
Symantec NetBackup	6.x and later
Symantec Backup Exec	12.5 and later
CommVault Galaxy / Simpana	7 and later
EMC NetWorker	7.4 and later
CA ARCserve	11.5 and later
IBM Tivoli Storage Manager	5.5.x and later
HP Data Protector	6.x and later
BakBone NetVault	7.4 and later
NetApp NDMP	DataONTAP 7.2.4, WAFL FS dump format
Oracle Secure Backup	10.2 and later
Oracle RMAN	10.x and later (Supported with Oracle OSB, CommVault SIS, and Symantec NetBackup)
Roxio Retrospect	8 and later

Backup Application

Revision

All filters support the backup application version above and also one previous version. Contact the backup application vendor for the latest software revision information.

Additional Notes

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] - [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. 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 first increase as reference counts are decremented, and then decrease as data with zero reference counts is removed from the blockpool. 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
	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, 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 hostnames 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 Management > 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.	
StorageCare Vision	You must update to the latest version of Quantum Vision (4.0.4 or later) to operate with DXi 2.0.x Software.	
StorageCare Guardian	You must update to the latest version of StorageCare Guardian (2.0.5 or later) to operate with DXi 2.0.x 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 <u>www.quantum.com/support</u>. The Service and Support Website contains a collection of information, including answers to frequently asked questions (FAQs).

United States	800-284-5101 (toll free) 949-725-2100
EMEA	00800-4-782-6886 (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 further assistance, or if training is desired, contact Quantum:

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