# Release Notes

| Release | DXi 3.0.1_69 Software (with DXi Advanced Reporting 3.0.0) |
|---------|----------------------------------------------------------|
| **Supported Products** | DXi6902 |
| **Date** | August 2014 |

# Contents

# Purpose of This Release

DXi 3.0.1_69 Software is a maintenance release supporting the DXi6902 disk backup system and provides important bug fixes (see Resolved Issues on page 5). In addition, DXi 3.0.1_69 Software includes the following new features and improvements introduced in DXi 3.0.0_69 Software:

- **StorNext 5 File System** - The StorNext 5 file system provides the foundation for DXi 3.0 Software. Completely re-designed for low-latency and high throughput, StorNext File System 5 delivers rapid file access in heterogeneous environments. Learn more about StorNext 5 at: http://www.stornext.com

- **CentOS 6 Base Operating System** - DXi 3.0 Software runs on the widely-adopted, enterprise-class CentOS 6 operating system. With numerous enhancements, CentOS 6 provides a platform for future DXi hardware and software innovation.

**Note:** The latest version of DXi Advanced Reporting (version 3.0.0) is included with DXi 3.0.1_69 Software.

# Upgrading DXi Software

To upgrade to DXi 3.0.1_69 Software, use one of the following methods:

- **(Recommended)** Click the **Software Upgrade** link on the **Home** page in the remote management console. The DXi must be connected to the Internet to use this method.

- Download the upgrade file from the DXi6902 support page on Quantum.com, and then upload the upgrade file using the **Utilities > Software Upgrade** page in the remote management console.

**Note:** For more information about DXi6902 software upgrades, see the DXi6902 User's Guide (6-68159).

# Hardware Compatibility List

The following table provides information about hardware compatibility with DXi 3.0.1_69 Software.

| Component | Description |
| --- | --- |
| DXi6902 | • 1 Node<br>• 1 or 2 Array modules (RBODs)<br>• 0 to 13 Expansion modules (EBODs)<br>• 3 x 1GbE Ethernet ports<br>• 2 x 10GbE Ethernet ports<br>• (Optional) Additional network adapter providing 2 x 10 GbE Ethernet ports or 4 x 1GbE Ethernet ports<br>• 4 x 8Gb Fibre Channel ports (VTL)<br>• 2 x 8Gb Fibre Channel ports (PTT or VTL)<br>• 17 TB to 510 TB usable capacity |

# Supported Web Browsers

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

• Mozilla Firefox 17 or later

• Google Chrome 21 or later

• Microsoft Internet Explorer 8, 9, 10, or 11

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

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

**Note:** DXi Advanced Reporting does not support the 64-bit version of the Flash Player plug-in on Linux. Instead, use the 32-bit Flash Player plug-in and a 32-bit browser.

# OST Plug-In Support

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

- Symantec NetBackup 7.1.x or later or Backup Exec 2012 or later.

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

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

You must use the correct versions of all of these OST components. Refer to Table 1 and Table 2 for version compatibility information regarding the DXi-Series OST components. For further information concerning the OST plug-in, see the Quantum DXi-Series NetBackup and Backup Exec OST Configuration Guide.

Table 1  Backup Exec 2012 (or later) Plug-in Compatibility List

| Platform | Plug-in Version | DXi Software Version |
|---|---|---|
| Windows 2003/2008 32-bit | 2.7.2 | 3.0.1_69 |
| Windows 2003/2008/2012 64-bit* | 2.7.2 | 3.0.1_69 |

\* Backup Exec 2014 or later is required for Windows 2012 or 2012 R2. Also, plug-in version 2.7.0 or higher is required for new Backup Exec 2014 installations. (Older supported versions of the OST Plug-in are acceptable when Backup Exec is upgraded in-place to Backup Exec 2014.

Table 2  NetBackup 7.1.x (or later) Plug-in Compatibility List

| Platform | Plug-in Version* | DXi Software Version |
|---|---|---|
| RedHat Linux x86 64-bit | 2.7.2 | 3.0.1_69 |
| SUSE Linux x86 64-bit | 2.7.2 | 3.0.1_69 |
| Solaris 10 and Solaris 11 x86 64-bit | 2.7.2 | 3.0.1_69 |
| Solaris 10 and Solaris 11 SPARC 64-bit | 2.7.2 | 3.0.1_69 |
| HP-UX 11i v3 IA-64 | 2.7.2 | 3.0.1_69 |
| IBM AIX 6.1 and 7.1 Power 64-bit | 2.7.2 | 3.0.1_69 |
| Windows 2003/2008 32-bit | 2.7.2 | 3.0.1_69 |
| Windows 2003/2008/2012 64-bit** | 2.7.2 | 3.0.1_69 |

| Platform | Plug-in Version* | DXi Software Version |
|---|---|---|

\* NetBackup 7.1.0.3 or later requires Quantum OST Plug-in 2.5.2 or later.
\*\* NetBackup 7.6 or later is required for media servers running Windows 2012.

# Replication Compatibility

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

| | | Replication Source | | | | |
|---|---|---|---|---|---|---|
| | | DXi 1.4.4 DXi 1.5 | DXi 2.1.3 | DXi 2.2.x | DXi 2.3.x | DXi 3.0.x |
| Replication Target | DXi 1.4.4 DXi 1.5 | Yes | Yes | Yes | Yes | Yes |
| | DXi 2.1.3 | Yes | Yes | Yes | Yes | Yes |
| | DXi 2.2.x | Yes | Yes | Yes | Yes | Yes |
| | DXi 2.3.x | Yes | Yes | Yes | Yes | Yes |
| | DXi 3.0.x | Yes | Yes | Yes | Yes | Yes |

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

# Resolved Issues

The following issue is resolved in DXi 3.0.1_69 Software.

| Bug Number | SR Number | Description |
|---|---|---|
| 39995 | | Data may become corrupted during NFS I/O if the DXi is under very heavy load. |

# Known Issues

DXi 3.0.1_69 Software has the following known issues:

- Replication Known Issues on page 7
- Space Reclamation Known Issues on page 8
- Network Known Issues on page 9
- CLI Known Issues on page 9
- GUI Known Issues on page 9
- VTL Known Issues on page 11
- NAS Known Issues on page 11
- OST Known Issues on page 11
- Installation and Upgrade Known Issues on page 12
- Miscellaneous Known Issues on page 12
- DXi Advanced Reporting Known Issues on page 13

**Note:** The Scheduler command line interface (CLI) commands are deprecated in DXi 3.0.1_69 Software. These commands continue to function in DXi 3.0.1_69 Software but will be removed in a future software release. To schedule events, use the **Configuration > Scheduler** page in the remote management console instead.

## Replication Known Issues

| Bug Number | SR Number | Description | Workaround |
|---|---|---|---|
| 31605 | | On the **Home** page and the **Status > Disk Usage** page, the value for **Data Size After Reduction** is larger than the value for **Data Size Before Reduction**. | This issue can occur when replication is enabled for a share or partition, but replication is rarely or never run. In this case, continuously replicated data accumulates on the target system, but this data is not included in the value for **Data Size Before Reduction** until a replication job is performed and a snapshot is saved. To correct the issue, manually initiate replication of the share or partition on the **Replication > Send** page, and allow the replication to complete. To avoid this issue in the future, schedule replication for the share or partition on the **Configuration > Scheduler** page. Alternately, you can enable Directory/File or Cartridge Based replication for the share or partition. |
| 36811 | | Some chargeback reporting statistics are not maintained for failback operations. | The Input Bytes for the failback operation can be viewed on the source for the failback operation. On the **Replication > Send** page, hold the cursor over the job status and note the value displayed for **Original Data Size**. **Note:** After the failback operation is complete, chargeback reporting on the target for the failback operation will accurately report the User Data Size of the data replicated. |
| 36999 | | Replication performance is slower than expected when replicating to a DXi running software version 1.x and encryption is set to **None**. (This can also cause system log files to become large.) | Select a different encryption setting for the target (**128-bit**) when replicating from a DXi running 3.x Software to a DXi running 1.x Software. |

| Bug Number | SR Number | Description | Workaround |
|---|---|---|---|
| 37000 | | If replication is disabled and the re-enabled for a share or partition on the **Replication > Send** page, previously configured Directory/File or Cartridge Based Replication settings are lost. | This is expected behavior. When replication is disabled, all replication settings for the share or partition are cleared. To re-configure the share or partition for Directory/File or Cartridge Based replication, select it and click **Configure**.<br><br>**Note:** You can disable or enable replication for all shares or partitions on the **Replication > Actions** page. This method preserves replication settings for all shares or partitions. |
| 39913 | | Namespace replication, failback replication, and synchronization jobs complete at the scheduled time or on-demand, but the replication start and/or end times reported in the remote management console may be 1 or 2 hours in the future depending on status of DST. | For information about how to determine the correct times, see Adjusting Reported Replication Start and End Times on page 16 |

## Space Reclamation Known Issues

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

## Network Known Issues

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

## CLI Known Issues

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

## GUI Known Issues

| Bug Number | SR Number | Description | Workaround |
|---|---|---|---|
| 30999 | | When creating or editing an event on the **Configuration > Scheduler** page, all times are relative to the workstation from which the GUI is accessed, rather than the DXi. | If the DXi is in a different time zone than the workstation used to access the GUI, make sure to account for the time zone differences when scheduling events. |
| 35426 | | On the **Configuration > OST > Storage Servers** page, if there are multiple pages of storage servers, the **Delete** button is unavailable (gray) if all storage servers on a page are selected even if all the storage servers meet the deletion criteria (no backup images or active connections). | This occurs if a storage server on another page does not meet the deletion criteria. De-select at least one storage server on the displayed page, and the **Delete** button will be available. |

| Bug Number | SR Number | Description | Workaround |
|---|---|---|---|
| 32609 | | On the **Configuration > Scheduler > Calendar** page, after you add or edit an event and specify recurrence **until** a date, if you hover the cursor over the event, the **UNTIL** date does not display in human readable format. | Open the event by double-clicking it to view the **UNTIL** date. |
| 32659 | | If you reboot or shut down the DXi using the **Utilities > Reboot & Shutdown** page and leave the web browser window open, after the DXi comes up again, refreshing the open web page causes the reboot or shut down command to be sent to the DXi again. | After you reboot or shut down the DXi using the **Utilities > Reboot & Shutdown** page, make sure to close the browser window. In general, you should not refresh the web browser (unless instructed to do so) or copy and paste URLs between tabs. |
| 36888 | | On the **Configuration > OST > Accent** page, after uploading certificate and key files and clicking **Apply**, a dialog box appears, but the message is truncated. | The complete dialog message is: TLS credential files were successfully installed. The system is rebooting to complete the installation. Please wait before logging in again. |
| 36926 | | When adding a scheduled event on the **Scheduler** page, the message Saving, please wait displays, the but the save action does not complete, and the schedule is not set. | Refresh the browser window, and add the scheduled event again. |
| 39135 | | If a very long security notice is specified on the **Configuration > System > Security > Security Notice** page, the end of the message may be truncated in the **Security Notice** dialog box that displays after logging on. | Specify a shorter message on the **Configuration > System > Security > Security Notice** page. |
| 39824 | | On the **Status > Hardware > Details > Storage Arrays** page, an **Attention** link displays next to **Controllers** and **Volumes**, but clicking the link displays an empty list of non-normal controllers or volumes. | Even though the **Attention** link displays, drives that are rebuilding are considered normal by the system. Click the **Controllers** or **Volumes** link to see a list of all drives. |
| 39834 | | Step 3 of the Support Wizard (**Wizards > Support** page) refers to StorageCare Guardian. However, Guardian is not supported on DXi6902. | Click **Next** to skip to the next step of the Support Wizard. |
| 39943 | | On the **Configuration > System > Network** page, the **Ethernet Port Backpanel Locations** does not display Ethernet ports 6 or higher after installing an optional network card in PCIe slot 2. | Ethernet ports 6 and higher still display under **IP Address Configuration** and can be configured as normal. |

## VTL Known Issues

| Bug Number | SR Number | Description | Workaround |
|---|---|---|---|
| 39734 | | NDMP path to tape (PTT) backup jobs are slow or fail with status 23 or 86. | NDMP backup jobs can take longer or fail altogether if media and tape drives are not in optimal condition. Replace old media and clean the tape drives in the attached library. |

## NAS Known Issues

| Bug Number | SR Number | Description | Workaround |
|---|---|---|---|
| 29705 | | Backup failures occur due to timeouts under heavy, concurrent VTL and NAS ingest. | Use the following CLI command to configure NFS shares for asynchronous mode:<br>**syscli --nfscommit async {--share <sharename>}** |
| 27908 | 1387940 1408612 1465392 1493202 | Files copied to exported NFS and CIFS shares do not retain their original creation time. | To determine the creation time, examine the original file rather than the copy on the share. |
| 37651 | | If a workgroup user is deleted using the **syscli --del user** command while a CIFS share is mounted, a user with the same username cannot be later added. | Use a different username when adding a workgroup user. To avoid this issue, make sure to unmount any CIFS shares before deleting the associated workgroup users. |

## OST Known Issues

| Bug Number | SR Number | Description | Workaround |
|---|---|---|---|
| 36868 | | When attempting to enable concurrent optimized duplication with the following CLI command:<br>`syscli --edit storageserver --name <storage_server_name> --concurrentopdup enabled`<br>the command appears to complete successfully, but concurrent optimized duplication is not actually enabled. | Use the **Configuration > OST > Storage Servers** page in the remote management console to enable concurrent optimized duplication. |

## Installation and Upgrade Known Issues

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

## Miscellaneous Known Issues

| Bug Number | SR Number | Description | Workaround |
|---|---|---|---|
| 26610 | 1349564 | Spectra Logic T120 and greater libraries cannot be discovered on the **Configuration > PTT > Physical Device Discovery** page. | Before attempting to discover the Spectra Logic, place the library into STK L700 emulation mode. Data partitions must be individually configured to use the Sun/StorageTek L700 emulation mode. Only data partitions configured to use the STK L700 emulation mode are recognized by the DXi. |
| 37163 | | The LCD front panel and the system banner display **Attention**, and a service ticket is generated referring to a problem with **omcliproxy**. | This issue can be ignored and does not impact functionality. Delete the unneeded RAS ticket. |

## DXi Advanced Reporting Known Issues

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

# Documentation

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

| Document Number | Document Title |
|---|---|
| 6-68161 | DXi6902 Site Planning Guide |
| 6-68165 | DXi6902 User Essentials |
| 6-68159 | DXi6902 User's Guide |

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

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

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

# Supported Backup Applications

The following backup applications are supported for use with DXi 3.0.1_69 Software:

| Backup Application | Revision |
|---|---|
| Symantec NetBackup | 7.1.x and later |
| EMC NetWorker | 7.6.5 and later |
| IBM Tivoli Storage Manager | 6.3.3 and later |
| HP Data Protector | 7.1 and later |
| Symantec Backup Exec | 2012 and later |
| Quantum vmPRO | 3.2 and later |
| CommVault Simpana | 9 and later |
| Veeam Backup & Replication | 6.5 and later |
| Dell NetVault | 9.0.x and later |
| ASG-Time Navigator | 4.2 and later |
| CA ARCserve | 16.5 and later |
| Microsoft Data Protection Manager | 2010 and later |
| Oracle Secure Backup | 10.2 and later |
| Syncsort Backup Express | 3.1.x and later |

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

# DXi Additional Notes

For additional information about DXi 3.0.1_69 Software, refer to the following sections.

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

## Email Reports

Quantum recommends enabling **Email Reports**. When enabled, **Email Reports** periodically sends system configuration and status information to Quantum, including any software upgrades you have installed using the **Software Upgrade Utility**. Quantum Support can use this information to provide a better support experience in the future.

To configure **Email Reports**:

1 Make sure a valid outgoing e-mail server is specified on the **Configuration > Notifications > Email > Server** page. Also make sure to select the **Enable automatic emails to Quantum** check box on this page.

2 (Optional) Specify any additional recipients to receive the reports on the **Configuration > Notifications > Email > Email Reports > Recipients** page.

3 Make sure a weekly **Email Reports** schedule is configured on the **Configuration > Scheduler** page. Configure two weekly recurring events: one for **Status** reports and one for **Configuration** reports.

## Adjusting Reported Replication Start and End Times

Namespace replication, failback replication, and synchronization jobs start at the scheduled time or on-demand, but the replication start and/or end times reported in the remote management console may be 1 or 2 hours in the future (see Known Issue 39913). The amount of the time offset depends on:

- Software version running on the source and target (pre-3.0 or 3.0)

- Status of Daylight Savings Time (DST)

Use the information in Table 3 to determine the correct start and end times.

Table 3  Replication Time Offsets

| | | | Target | | | |
|---|---|---|---|---|---|---|
| | | | Pre-3.0 | | 3.0 | |
| | | | DST | No DST | DST | No DST |
| **Source** | **Pre-3.0** | **DST** | N/A | N/A | Target start +1h<br>Target end +1h | N/A |
| | | **No DST** | N/A | N/A | Target start +1h<br>Target end +1h | N/A |
| | **3.0** | **DST** | Source start +2h<br>Source end +1h<br><br>Target start +2h<br>Target end +1h<br><br>Target start/end in source time zone | Source start +2h<br>Source end +1h<br><br>Target start +2h<br>Target end +1h<br><br>Target start/end in source time zone | Source start +2h<br>Source end +1h<br><br>Target start +2h<br>Target end +1h | Source start +2h<br>Source end +1h<br><br>Target start +1h |
| | | **No DST** | Target start/end in source time zone | Target start/end in source time zone | Target start +1h<br>Target end +1h | N/A |

## Configuring a Constant Replication Bandwidth Throttle

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

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

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

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

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

**Making Multiple Changes to a Recurring Scheduled Event**

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

1 Create a recurring event having two or more instances in the series.

2 Edit one or more instances within the series, creating exception instances, using one or both of the following methods:

   a Deleting (one or more instances within the series).

   b Changing the start time (of one or more instances within the series).

3 Finally, change the base start time of the entire recurring event series.

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

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

**Free Space**

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

**System Metadata**

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

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

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

**System Metadata = [ File System Used Space ] - [ Reclaimable Space ] - [ Blockpool Reduced Data Size ] - [ Non-Deduplicated Data Size ]**

The following values are used in this formula:

- **File System Used Space** - All space used by all parts of the system. This includes temporary files (such as those used by replication, space reclamation, and healthchecks), as well as cached files that have not yet been truncated.

- **Reclaimable Space** - The disk space that can be used for new deduplicated data. The DXi will automatically compact reclaimable space to create more free space as needed.

- **Blockpool Reduced Data Size** - The amount of deduplicated data in the blockpool that has non-zero reference counts (that is, data that is not a

candidate for space reclamation). During space reclamation, this value will decrease as reference counts are decremented.

- **Non-Deduplicated Data Size** - The size of data stored on shares that do not have data deduplication enabled. This value increases or decreases as data is added to or removed from these shares.

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

## Date & Time Configuration

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

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

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

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

## Network Hostname Restrictions

The network hostname must not exceed 64 characters.

## Internet Explorer Security Level

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

## Changing the Number of Allowed Sources

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

**Quantum Vision**

You must update to the latest version of Quantum Vision (4.2 or later) to operate with DXi 3.0.1_69 Software.

**StorageCare Guardian**

StorageCare Guardian does not currently support DXi6902.

**OST NetBackup Version**

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

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

**Running Healthchecks**

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

# DXi Advanced Reporting Additional Notes

For additional information about DXi Advanced Reporting 3.0.1_69, refer to the following sections.

- Replication Reports Are Not Supported
- Logging On to DXi Advanced Reporting
- Decrease in Before Reduction Data

**Replication Reports Are Not Supported**

The replication reports are not supported in this release.

**Logging On to DXi Advanced Reporting**

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

**Decrease in Before Reduction Data**

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

# Contacting Quantum

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

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

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

For worldwide support:

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