Quantum

DXi V5000, DXi4800, and DXi9000 Series Release Notes 4.8

Contents

Purpose of This Release

The DXi 4.8 Software release supports DXi4800, DXi9000/9100, and DXi V5000 disk backup systems.

> **Note:** This release was scanned for vulnerabilities using Nessus® for vulnerability risk management, as part of Quantum's Quality Assurance (QA) process. The release code build was validated as secure.

What's New in DXi 4.8?

This software release features the following new features and updates:

- **Metrics Exporter –** This new feature allows users to enable the system to export all DXi Advanced Reporting metrics, like CPU, memory usage, network activity, data reduction, etc., in Prometheus data format, when requested by a Prometheus scrape request. Controls and commands in the DXi GUI or using DXi Command Line Interface (CLI) commands can enable the ability to handle these pull (or scrape) requests.

  This data can be stored in a DB that supports Prometheus data format, and visualized with an analytical platform, like Grafana. See the following topics in your product's documentation center:

  ○ *Operate > User Guide > Configuration > System > Metrics Exporter*

  ○ *Metrics Exporter* section in *Operate > DXi Command Line Interface (CLI)*.

- **Multi-Factor Authentication (MFA) –** DXi GUI Administrators can now enable software industry-standard MFA (Multi-Factor Authentication) as an optional system security feature in all DXi systems using DXi Release 4.8 or later. When enabled, MFA applies to all users created in the *System > Security > Users* tab. See the *Login Settings* (previously *Login Session*) section in the *Security* topic in your product's documentation center.

- **New DXi Password Rules –** When a customer first receives a DXi with 4.8, they run the Getting Started Wizard. Passwords entered in the Access Control page must follow the new password rules. After completing the Getting Started Wizard, adding users under *System > Security > System Users* or *System > Security > Users* requires new password rules. When upgrading to DXi 4.8, adding new users requires the new password rules. Existing users can login with their old password. See DXi Password Requirements.

- **New Bridged Network Capability for DAE VM Systems –** DAE VMs can now connect using a bridged interface with physical DXi systems. This new capability reduces the number of required physical Ethernet interfaces. This new bonded interface capability is initiated using new Command Line Interface (CLI) ***--netcfg*** commands. See *Operate > DXi Command Line Interface (CLI)* in your product's Documentation Center.

- **RestAPI Update –** RestAPI version 1.2.5 is available in this release.

- **Show Password icon** 👁 now displays in all DXi **Password** fields.

- **Various maintenance updates.**

> ⚡ **WARNING: Systems currently using DXi Software versions earlier than 4.5.0.3 MUST UPGRADE TO 4.5.0.3 before upgrading to version 4.8.** In general, Quantum strongly recommends upgrading to the latest version of DXi software before installing capacity upgrades, regardless of the capacity increment.

DXi Password Requirements

- **System Users -** Passwords must be between 8-64 characters, and must include at least one upper case (A-Z), one lowercase (a-z), one number (0-9), and one special character (` ~ ! @ # $ % ^ & * ( ) - _ = + [ ] { } \ | ; : ' " , . < > / ? space).

- **IPMI and iDRAC Users -** Service login passwords must be between 8-20 characters, and must include at least one upper case (A-Z), one lowercase (a-z), one number (0-9), and one special character (` ~ ! @ # $ % ^ & * ( ) - _ = + [ ] { } \ | ; : ' " , . < > / ? space).

Product Compatibility List

The following table provides information about DXi hardware compatibility with DXi 4.8 Software.

Component	Description
DXi4800	• 1 Node • 1 to 2 RAID controller cards. • 0 to 4 Expansion modules (JBODs) • 1 x 1 GbE Ethernet ports • (Optional) 2 x 10 GbE Ethernet ports • (Optional) Up to 8 x 25 GbE Ethernet ports (SFP28 optical or DAC Copper) • (Optional) Up to 16 x 10 GbE SFP Ethernet ports or 16 x 10GbE Base-T Ethernet ports. • (Optional) Up to 16 x 16 Gb Fibre Channel ports (for VTL or PTT) • (Optional) Up to 8 x 100 GbE Ethernet ports (Optical or DAC Copper) • 8 TB - 315 TB usable capacity
DXi9000 SD	• 1 Node • 1 Array module (RBOD) • 0 to 9 Expansion modules (EBODs) • 1 x 1 GbE Ethernet ports • (Optional) 2 x 10 GbE Ethernet ports • (Optional) Up to 8 x 25 GbE Ethernet ports (SFP28 optical or DAC Copper) • (Optional) Up to 16 x 10 GbE SFP Ethernet ports or 16 x 10GbE Base-T Ethernet ports. • (Optional) Up to 16 x 16 Gb Fibre Channel ports (for VTL or PTT) • (Optional) Up to 8 x 100 GbE Ethernet ports (Optical or DAC Copper) • 51 TB - 1020 TB usable capacity

Component	Description
DXi9000 HD	• 1 Node • 1 Array module (RBOD) • 1 Expansion module (EBOD) • 1 x 1 GbE Ethernet ports • (Optional) 2 x 10 GbE Ethernet ports • (Optional) Up to 8 x 25 GbE Ethernet ports (SFP28 optical or DAC Copper) • (Optional) Up to 16 x 10 GbE SFP Ethernet ports or 16 x 10GbE Base-T Ethernet ports. • (Optional) Up to 16 x 16 Gb Fibre Channel ports (for VTL or PTT) • (Optional) Up to 8 x 100 GbE Ethernet ports (Optical or DAC Copper) • 204 TB - 1020 TB usable capacity
DXi9100	• 1 Node • 1-2 Array modules (RBODs) • 0-2 Expansion modules (EBODs) • 1 x 1 GbE Ethernet ports • 2 x 10 GbE Ethernet ports • (Optional) 2 x 10 GbE Ethernet ports • (Optional) Up to 8 x 25 GbE Ethernet ports (SFP28 optical or DAC Copper) • (Optional) Up to 16 x 10 GbE SFP Ethernet ports or 16 x 10GbE Base-T Ethernet ports. • (Optional) Up to 16 x 16 Gb Fibre Channel ports (for VTL or PTT) • (Optional) Up to 8 x 100 GbE Ethernet ports (Optical or DAC Copper) • 204 TB - 2 PB usable capacity

Resolved Issues

The following issues were resolved in DXi 4.8 Software.

Issue Number	Description	Customer Number
DXE-19431	Following network glitches and once the network is again stable, in-process replication resumes. A RAS ticket is gnerated if the network stalls.	619373, 624297, 662650, 662653, 662651, 712167
DXE-18214	rest/StorageArrays no longer fails reporting Feature encryption premium	566237
DXE-19462	syscli list adminalert no longer causes incorrect sql queries	625747
DXE-20315	Firmware bundle now handles upgrade of firmware on new cards installed if the same card type was previously upgraded.	662051
DXE-20794	Need to detect the PERC H840 in the wrong PCI Slot and generate a RAS ticket and abort storage expansion. Fixed in code.	685340

Known Issues

DXi 4.8 Software has the following known issues:

Issue Number	Description
DXE-26082	Status page showed network ports p5p3 and p5p4 down with attention mode after successfully upgrading from 4.6.0-build1 to 4.8.0-build8. There is no functional impact to the DXi. Quantum Service can remove the attention after upgrade.
DXE-26006	GUI: Can not return to home page from Disk Usage page. Customers using DXi4800 and ingesting data may be unable to navigate from the *GUI Status > Disk Usage* page to the GUI Home page. Workaround: Navigate to another GUI page and then navigate to the Home page.
DXE-26043	Netserver is not working properly. Usually this function is used in conjunction with Service to test the network connection from one DXi to another. Netserver is not used for any data storage functionality.

Issue Number	Description
DXE-26091	Command needs improvement: Parameters and values names are not consistent. No functionality impact. Some inconsistencies and improvements that could be made in a future release.
DXE-26091	CLI: Secure Email: CLI (Command Line Interface) command needs improvement. Parameters and values names are not consistent. No functionality impact. Some inconsistencies and improvements that could be made in a future release.
DXi-25942	DART GUI banner does not display full firmware version. DART (DXi Advanced Reporting) GUI does not contain enough space to display the new full firmware version. The firmware version has changed due to use of Git code build methods. The DXi code version can still be obtained from the DART GUI.

Documentation

For the latest DXi V5000, DXi4800, and DXi9000 Series documentation using DXi 4.8 software, see the following DXi Documentation Centers:

- **DXi V5000 Documentation Center:** www.quantum.com/dxiv5000docs
- **DXi4800 Documentation Center:** www.quantum.com/DXi4800Docs
- **DXi9000 Series Documentation Center:** www.quantum.com/DXi9000Docs

Supported Backup Applications

For the current list of backup applications supported for use with DXi 4.8 Software:

1. Click on https://www.quantum.com/swcompguide.aspx

   The **Support > Software Compatibility With Tape Libraries** page appears.

2. In the **Compatibility Guide** list, select **Software / Disk-Based Backup Systems.**

3. (Optional) Select your system and software from the **Storage Device** and **Application Software** lists.

   > ℹ️ **Note:** If the storage device and application software are not selected, a full list of all available devices and software will appear and requires a minute or two to populate. Select your system and software for a faster-appearing, shorter list.

4. Click **Submit.**

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

DXi Additional Notes

Email Reports

Quantum recommends enabling **Email Reports** after upgrading to DXi 4.8 Software (if not already enabled). When enabled, **Email Reports** periodically sends system configuration and status information to Quantum, including any software upgrades you have installed using the **Software Upgrade Utility.** Quantum Support can use this information to provide a better support experience in the future.

To configure Email Reports:

1. Make sure a valid outgoing e-mail server is specified on the **Configuration > Notifications > Email > Server** page.

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

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

Contacting Quantum

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

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

Region	Support Contact
North America	1-800-284-5101 (toll free) +1-720-249-5700
EMEA	+800-7826-8888 (toll free) +49 6131 324 185
Asia Pacific	+800-7826-8887 (toll free) +603-7953-3010
For worldwide support:	
https://www.quantum.com/en/company/contact-us/	