Quantum.

Scalar i3, i6, and i6H Release Notes 310G.GS120

Product/Software Release Date

December 2023

Contents

About This Release	2
General Information	2
Security Scanners	
Compatibility and Support	
Resolved Issues	10
Known Issues	12
Documentation	14
Contacting Quantum	

© 2023 Quantum Corporation. All rights reserved. Your right to copy this manual is limited by copyright law. Making copies or adaptations without prior written authorization of Quantum Corporation is prohibited by law and constitutes a punishable violation of the law. ActiveScale, DXi, DXi Accent, FlexSync, FlexTier, iLayer, Lattus, Quantum, The Quantum Logo, QXS, Scalar, StorNext, SuperLoader, Vision, and Xcellis are either registered trademarks or trademarks of Quantum Corporation and its affiliates in the United States and/or other countries. All other trademarks are the property of their respective owners. Quantum specifications are subject to change.

December 2023 6-68531-41 RevA



About This Release

The Scalar 310G.GS120 release is a feature and maintenance release that details bug fixes described in the Resolved Issues section. Refer to Known Issues for additional information.

What's New in this Release?

This release supports the Scalar i3, i6, and i6H libraries. Enhancements in this library include:

- LTO-9 calibration support.
- LTO-9 drive firmware update (Q9E0/1)
- LDAP User ID Attribute search support.
- To view all bug fixes and enhancements, see Resolved Issues on page 10

General Information

- The Scalar library WebGUI application requires that the browser cache be cleared and the application re-loaded to ensure that all new functionality is implemented.
- (Scalar i3/i6 only) If an iBlade is present, Scalar systems with an Internet connection will automatically update and level the iBlade BaseOS FW during a library FW update.

If the Scalar system does not have an Internet connection, you can still update your iBlade BaseOS FW as described on our Documentation Center:

- Go to www.quantum.com/documentation and select your product.
- Go to Operate > User Guide > About Devices > Devices BaseOS. To will see detailed steps on updating iBlade BaseOS FW
- (Scalar i3/i6 only) Veeam Tape Server iBlades If Microsoft Hyper-V or any other hypervisor is
 installed on the Veeam Tape Server iBlade, the Virtual Machine (VM) Operating System (OS) will not
 be able to see the blade FC/SAS controller. This will cause the Scalar drives to no longer be visible to
 the VM OS.
- (Scalar i3/i6 only) Bridging and teaming interfaces on the Veeam Tape Server iBlade is not supported and can cause network card issues.
- Some snapshots, logs or RAS tickets are as large as 12 MBs. If you have automated notifications
 configured for RAS tickets and logs you may not receive them if your email does not allow attachments
 of this size.
- The Web client places a cookie on the user's computer to provide the last user's credentials upon login. The cookie only collects the user's credentials to facilitate login, and does not collect any other user data.

- Any application or browser connecting over https must support TLS v1.2 or higher.
- To help maintain system integrity and for marketing purposes, Quantum regularly collects system
 information through automatic emails and cloud based telemetric auto support. These emails and auto
 support telemetric data contain configuration and status information only, and do not contain any
 customer data stored on the system.

Email Support

To disable this function:

- 1. Log on to your library.
- 2. Select Notifications from the Navigation menu.
- 3. Select the check box next to scalartelemetrics@quantum.com in the North Panel.
- 4. From the **Operation** panel, select **Reports**.
- 5. Click the trash can icon next to **Scalar Telemetrics** report.
- 6. Click Apply, then Close.

Auto Support

To disable this function:

- 1. Log on to your library.
- 2. Select **Notifications** from the **Navigation** menu.
- 3. Select the check box next to Auto Support in the North Panel.
- 4. To disable RAS tickets, select **RAS Tickets** From the **Operation** panel.
- 5. De-select the **Enable Auto Support Communication** check box.
- 6. Click Apply, then Close.
- 7. From the **Operation** panel, select **Reports**.
- 8. Click the trash can icon next to **Scalar Telemetrics** report.
- 9. Click Apply, then Close.

After a library firmware upgrade, Quantum recommends that you clear your web browser cache before logging back into the WebGUI.

Library Default Settings

Scalar i3, i6, and i6H software is installed with certain default settings. This section outlines those default settings. Review this section to determine if any of the default settings need to be changed to make your library run more effectively.

WebGUI Path	Option	Default Setting
User Access > Settings	Local User Interface (LUI) Access	Open Access
	Admin/User Access: Session Timeout	15 minutes
	Services Access: Enable Remote Access	Disabled
	Enable Local Service Port Login: Access Window	Indefinite
Notifications > RAS Tickets	Enable RAS Tickets	Enabled
	Severity	All options Enabled
Notifications > Reports	Scalar Telemetrics	Once you have an email server configured, telemetrics is enabled for monthly automatic emails. To disable, click the Trash icon.
Library > IE Area	I/E Slots	0 (zero)
Library > Settings	Operational Parameters: Automatic Inventory	Enabled
	Operational Parameters: Library Assisted Drive Unload	Disabled
	Operational Parameters: Logical Drive Serial Number Addressing	Enabled
	Operational Parameters: Logical System Addressing	Disabled
	IE Assignment Mode: Local UI Assignment	Enabled
System > Network	Connectivity / SSH	Disabled
System > Notifications	Email Reports / Auto Support	Enabled
System > Settings	Library-Initiated Website Access	Enabled

Security Scanners

Quantum tests with the following Security scanners against the library:

Tenable Nessus Professional Version 10 - Version 10.5.1 (#8) WINDOWS

No high/critical vulnerabilities found against this release using Nessus Professional Security Scanner.

Compatibility and Support

Encryption Key Management Drive Support

The following table provides the encryption key management drive support.

Full-Height Drives

Encryption Option	IBM LTO-6 (FH)	IBM LTO-7 (FH)	IBM LTO-8 (FH)	IBM LTO-9 (FH)
Application Managed Encryption	Supported	Supported	Supported	Supported
SKM	Requires SKM	Requires SKM	Requires SKM	Requires SKM
	License	License	License	License
TKLM/SKLM ²	Requires EKM	Requires EKM	Requires EKM	Requires EKM
	License	License	License	License
KMIP Key Manager ¹	Requires EKM	Requires EKM	Requires EKM	Requires EKM
	License	License	License	License

^{1.} Only SafeNet/Thales encryption key servers are supported/tested KMIP configurations.

^{2.} Applies to IBM TKLM/SKLM and SGKLM (GKLM) key server communication using the KMIP communication protocol.

Half-Height Drives

Encryption Option	IBM LTO-6 (HH)	IBM LTO-7 (HH)	IBM LTO-8 (HH)	IBM LTO-9 (HH)
Application Managed Encryption	Supported	Supported	Supported	Supported
SKM	Requires SKM	Requires SKM	Requires SKM	Requires
	License	License	License	SKM License
TKLM/SKLM ²	Requires EKM	Requires EKM	Requires EKM	Requires
	License	License	License	EKM License
KMIP Key Manager ¹	Requires EKM	Requires EKM	Requires EKM	Requires
	License	License	License	EKM License

^{1.} Only SafeNet/Thales encryption key servers are supported/tested KMIP configurations.

Web Browser Support

The Scalar i3, i6, and i6H WebGUI supports the following web browsers. Quantum recommends upgrading to the latest version of the browser.

Web Browser	Versions Supported
Internet Explorer	Not supported.
Google Chrome	Version 114 and above.
Mozilla Firefox	Version 55 and above.
Apple Safari	Recommend latest version.
Microsoft Edge	Recommend using Edge version 79 or greater, using the Chromium engine. This resolves issues of slowness found in the older versions of Edge.

^{2.} Applies to IBM TKLM/SKLM and SGKLM (GKLM) key server communication using the KMIP communication protocol.

Firmware Compatibility

For the most up-to-date information on the latest qualified library and drive firmware, please visit:

Scalar i3 Firmware

https://www.quantum.com/en/service-support/downloads-and-firmware/si3/

Scalar i6 Firmware

https://www.quantum.com/en/service-support/downloads-and-firmware/si6/

Drive Firmware

Scalar i3 Drives

SAS Half High (HH) Drive Types	Latest Firmware Version
IBM LTO-6 (SAS) (HH) 6 Gb	KAJ9¹
IBM LTO-7 (SAS) (HH) 6 Gb	Q387¹
IBM LTO-8 (SAS) (HH) 6 Gb	Q387¹
IBM LTO-9 (SAS) (HH) 12 Gb	Q9E1 ¹
¹ Bundled with library firmware.	

FC Half High (HH) Drive Types	Latest Firmware Version
IBM LTO 6 (EC) (HH) 9 Ch	KAJ9 (Standard)¹
IBM LTO-6 (FC) (HH) 8 Gb	KAJ9 (FIPS)
IBM LTO 7 (EC) (HH) 9 Ch	Q387 (Standard)¹
IBM LTO-7 (FC) (HH) 8 Gb	Q387 (FIPS)
IBM I TO 9 (EC) (IIII) 9 Ch	Q387 (Standard) ¹
IBM LTO-8 (FC) (HH) 8 Gb	Q387 (FIPS)
IBM LTO-9 (FC) (HH) 8 Gb	Q9E1 (Standard)¹
IBM L10-9 (FC) (HH) 6 GD	Q9E1 (FIPS)
¹ Bundled with library firmware.	

Scalar i6 Drives

FC Full High (FH) Drive Types	Latest Firmware Version
IBM LTO-6 (FC) (FH) 8 Gb	KAJ8 (Standard)¹
1BW E10-0 (1 C) (111) 8 GB	KAJ8 (FIPS)
IDM LTO 7 (EC) (EU) 9 Ch1	Q386 (Standard)¹
IBM LTO-7 (FC) (FH) 8 Gb ¹	Q386 (FIPS)
IDM LTO 9 (FC) (FU) 9 Ch	Q386 (Standard)¹
IBM LTO-8 (FC) (FH) 8 Gb	Q386 (FIPS)
IBM LTO 0 (EC) (EU) 9 Ch	Q9E0 (Standard)¹
IBM LTO-9 (FC) (FH) 8 Gb	Q9E0 (FIPS)
IBM I TO 0 (\$4\$) (EU) 12 Cb1	Q9E0 (Standard)¹
IBM LTO-9 (SAS) (FH) 12 Gb ¹	Q9E0 (FIPS)
¹ Bundled with library firmware.	

Scalar i6H Drives

FC Full High (FH) Drive Types	Latest Firmware Version
IDM LTO 7 /FC) /FU) 9 Ch	Q386 (Standard)¹
IBM LTO-7 (FC) (FH) 8 Gb	Q386 (FIPS)
IDM LTO 9 (EC) (EU) 9 Ch	Q386 (Standard)¹
IBM LTO-8 (FC) (FH) 8 Gb	Q386 (FIPS)
IBM LTO 0 (EC) (EU) 9 Ch	Q9E0 (Standard)¹
IBM LTO-9 (FC) (FH) 8 Gb	Q9E0 (FIPS)
IBM LTO-9 (SAS) (FH) 12 Gb	Q9E0 (Standard)¹
IBM E10-9 (SAS) (F11) 12 GD	Q9E0 (FIPS)
¹ Bundled with library firmware.	

iBlade BaseOS Versions for Library Code

The following table provides the iBlade BaseOS versions for the 310G.GS120 library code.

iBlade OS	Customer BaseOS Download From Web	iBlade SLFTS Application
Linux	1.3.0-6	2.10.0-40
Windows	1.3.0-4	N/A

The latest tape driver versions are located at:

Scalar i3

https://www.quantum.com/en/service-support/downloads-and-firmware/si3/

Scalar i6

https://www.quantum.com/en/service-support/downloads-and-firmware/si6/

Resolved Issues

This release of Scalar 310G.GS120 firmware resolved the following issues (bug fixes).

Change Request Number	Service Request Number	Description	Resolution
SQ-1847	0716666	Library posts Power Supply Configuration/Installation RAS ticket (ET004) after a library firmware upgrade. The power supplies are powered on and no fault is indicated.	Fixed.
SQ-1938		LTO-9 tape calibration feature added to perform LTO-9 media calibration mounts.	Enhancement.
SQ-2181	633764	Capacity on Demand (COD) licensing incorrect after capacity upgrade.	Fixed.
SQ-2359	646386	Media Calibration History Log added to support LTO-9 tape calibration.	Enhancement.
SQ-2526			
SQ-3930	653863	User ID Attribute added to LDAP search.	Enhancement.
SQ-3315			
SQ-2614	664617	Inventory log not updated after upgrading library firmware.	Fixed.
SQ-2657	669268	Block manually upgrading drive firmware when auto leveling is turned on.	Enhancement.
SQ-2815		Root cause enhancements added to RCS Self-Test Failure RAS ticket (ET026).	Enhancement.
SQ-2926		Auto cleaning fails due to robot hitting top cover.	Fixed.
SQ-3088	0715720	"Sequester on Full" policy does not work on an Active	Fixed.
3Q-3000	744368	Vault-defined airgap magazine.	i ixeu.
SQ-3092	716122	Configuration issue causes email server to reject library emails.	Fixed.

Change Request Number	Service Request Number	Description	Resolution
		The following enhancements were made to support LTO-9 tape calibration:	
		New RAS tickets:	
SQ-3164	720752	 Media Calibration Completed (ET192) 	Enhancement.
3Q-3104	120132	 Media Calibration Canceled (ET193) 	Ennancement.
		 Media Calibration Failed (ET194) 	
		 Media Inventory Report provides LTO-9 media tape calibration status. 	
SQ-3213		Removed FSC data from Tape Alert 19.	Enhancement.
SQ-3241	724245	Suppress SNMP traps based on RAS ticket email configuration.	Enhancement.
SQ-3329	714931	RCS Scanner RAS ticket (ET017) resolution text	Enhancement.
SQ-3070	7 14001	updated.	Emanoement.
SQ-3411	742347	Library issue where reset causes drive I/O interruption.	Fixed.
SQ-3320	20	Library leeds where reserved alone in a line rapheris	. nou.
SQ-3421		LTO-9 drive firmware updated to Q9E0/1.	Enhancement.
WUI-1417		RAS ticket count in WebGUI icon flyover does not match number of tickets currently displayed in WebGUI	Fixed.
		Users assigned to the "User" role and correctly configured Entitlement actions now have access to the	
WUI-1794		following:	
WUI-1795		LTO-9 media calibration.	Enhancement.
WUI-1796		 All Maintenance and Actions operations in the Drive menu option. 	
		Import operations on the Media menu option.	
WUI-1686	724551	User role is unable to execute allowed operations.	Fixed.

Known Issues

This release of Scalar 310G.GS120 firmware has the following known issues:

Change Request Number	Description	Workaround
SQ-556	Veeam iBlade updates fail when using service port.	Use customer port to perform Veeam iBlade updates.
SQ-1193	Manual drive cleaning fails when I/E station is open and closed while cleaning is in process.	Close error and repeat manual drive cleaning.
SQ-1531	Humidity and temperature differences occur between the library temperature and humidity sensors and additional sensors outside of the library.	Library temperature and humidity readings may be different than additional temperature and humidity readings within a data center. Temperature and humidity sensors provide status for temperature readings and approximations internal to the library enclosure.
		External air outside is heated up inside the library enclosure due to numerous factors, such as the frequency of robotic operations and the number of drives and drive operations. This can warm the air by about 2°C to 6°C within the library enclosure.
		As result of the air heating inside the library, the humidity will also drop within the library enclosure. Keep this in mind when setting library temperature and humidity ranges.
SQ-1733	A syslog resource with an invalid name is created when DNS is configured. When running a test command, the response is 500, The syslog server test failed. This can be incorrectly interpreted that the test started but was not finished	Make sure the configured syslog server can be reached with DNS identification.
	successfully, when the issue is that the host does not exist.	

Change Request Number	Description	Workaround
SQ-2711	Attempting to upgrade library firmware from 260 and 270 to 280 from the "Firmware from Quantum Website" upload option under System > Library Firmware fails.	Download the firmware to your local computer and use the "Firmware from Local Computer" upload option.
SQ-3093	Media accessibility information is not always correct, and reports media as accessible when it is not.	Disregard current media accessibility status reporting.
SQ-3163	If the "Automatic Install on Next Reboot" library firmware upgrade option is selected, the "Roll back to firmware/firmware version" radio button does not display the previous version of library firmware after the firmware upgrade is complete.	Previous versions of library firmware can be uploaded to the library using the "Firmware from Local Computer" upgrade option.
SQ-3305	If you roll back the 310 library firmware release to prior firmware releases and have configured password rules, the passwords will reset to previously set passwords.	Quantum recommends that you be prepared to reset passwords if you require a roll-back to releases prior to 310 library firmware.
SQ-3322	WebGUI issues occur when using browser tabs to sign in as two different users in the same browser.	Do not sign on as two different users within the same browser. You MUST sign off in order to log in as a different user; or use a different browser.
WUI-1273	Drive/Media Issue Timeline does not show all data for selected time frame.	Select larger time frame.
WUI-1493	System > Syslog and Encryption > KMIP Key Manger modal windows display 11th row.	Disregard 11th row. Only 10 servers (10 row entries) are allowed.
WUI-1652	Partition control path for Advanced Path Failover (APF) allows mixed SAS and FC drives to be enabled for primary and secondary control paths.	You cannot mix FC and SAS drives for primary and secondary control paths. Select FC drives or SAS drives only.

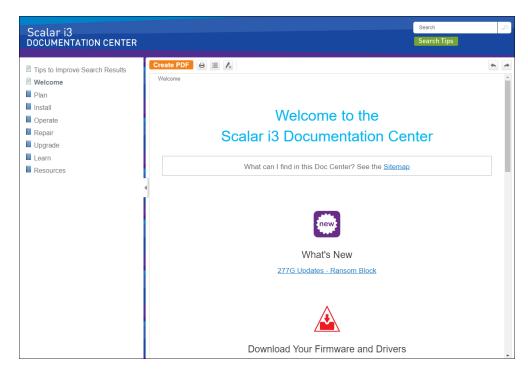
Documentation

Scalar i3 Documentation

All Scalar i3 documentation is available at the Scalar i3 Documentation Center: www.quantum.com/Scalari3Docs

Scalar i3 documentation includes:

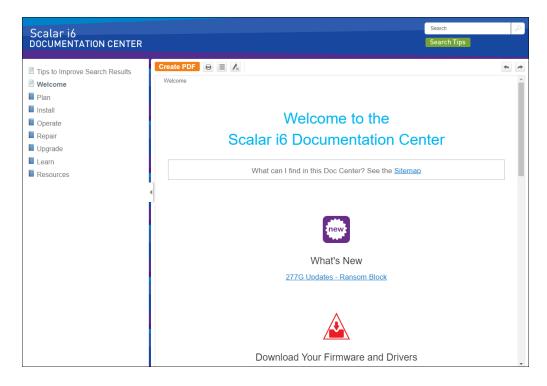
- · Site Planning Guide
- · Installation Guide
- · Operation Guides
- · Repair and Upgrade Guides
- Reference Guides (Web Services, SCSI, SNMP)



Scalar i6 Documentation

All Scalar i6 documentation is available at the Scalar i6 Documentation Center: www.quantum.com/Scalari6Docs

Scalar i6 documentation includes:



Contacting Quantum

For further assistance, 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/		