



	Scalar i3
Product	Scalar i6
	Scalar i6H
Firmware Version	301G.GS055
Date	June 2023

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## **About This Release**

The Scalar 301G.GS055 release is a 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. Fixes include:

- Proxy server configuration support.
- · Robotic improvements.
- RAS ticket auto-closure support.
- Accessibility column added to Media North Panel in the WebGUI.
- Bug fixes and enhancements (see Resolved Issues on page 10).

## **General Information**

- The Scalar library Web UI 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@guantum.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 <b>Trash</b> 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 <sup>2</sup>	Requires EKM	Requires EKM	Requires EKM	Requires EKM
	License	License	License	License
KMIP Key Manager <sup>1</sup>	Requires EKM	Requires EKM	Requires EKM	Requires EKM
	License	License	License	License

<sup>1.</sup> Only SafeNet/Thales encryption key servers are supported/tested KMIP configurations.

<sup>2.</sup> 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 ManagedEncryption	Supported	Supported	Supported	Supported
SKM	Requires SKM	Requires SKM	Requires SKM	Requires
	License	License	License	SKM License
TKLM/SKLM <sup>2</sup>	Requires EKM	Requires EKM	Requires EKM	Requires
	License	License	License	EKM License
KMIP Key Manager <sup>1</sup>	Requires EKM	Requires EKM	Requires EKM	Requires
	License	License	License	EKM License

<sup>1.</sup> 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 51 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.

<sup>2.</sup> 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	P381 <sup>1</sup>
IBM LTO-8 (SAS) (HH) 6 Gb	P381 <sup>1</sup>
IBM LTO-9 (SAS) (HH) 12 Gb	PA63 <sup>1</sup>
<sup>1</sup> Bundled with library firmware.	

FC Half High (HH) Drive Types	Latest Firmware Version
IDMALTO CAFONALINO OF	KAJ9 (Standard)¹
IBM LTO-6 (FC) (HH) 8 Gb	KAJ9 (FIPS)
IDM LTO 7 (FC) (HU) 9 Ch	P381 (Standard)¹
IBM LTO-7 (FC) (HH) 8 Gb	P381 (FIPS)
IBM I TO 9 (EC) (HH) 9 Ch	P381 (Standard) ¹
IBM LTO-8 (FC) (HH) 8 Gb	P381 (FIPS)
IBM LTO-9 (FC) (HH) 8 Gb	PA63 (Standard)¹
IBM L10-9 (FC) (ПП) 6 Gb	PA63 (FIPS)
<sup>1</sup> Bundled with library firmware.	

## Scalar i6 Drives

FC Full High (FH) Drive Types	Latest Firmware Version
IDMITO 6 (FC) (FU) 9 Ch	KAJ8 (Standard)¹
IBM LTO-6 (FC) (FH) 8 Gb	KAJ8 (FIPS)
IDM LTO 7 (EC) (EU) 9 Ch1	P380 (Standard)¹
IBM LTO-7 (FC) (FH) 8 Gb <sup>1</sup>	P380 (FIPS)
IDM LTO 9 (FC) (FU) 9 Ch	P380 (Standard)¹
IBM LTO-8 (FC) (FH) 8 Gb	P380 (FIPS)
IDM LTO 0 (EC) (EU) 9 Ch	PA62 (Standard)¹
IBM LTO-9 (FC) (FH) 8 Gb	PA62 (FIPS)
IDM I TO 0 (SAS) (FU) 42 Ch1	PA62 (Standard)¹
IBM LTO-9 (SAS) (FH) 12 Gb <sup>1</sup>	PA62 (FIPS)
<sup>1</sup> Bundled with library firmware.	

### Scalar i6H Drives

FC Full High (FH) Drive Types	Latest Firmware Version
IBM LTO-7 (FC) (FH) 8 Gb	P380 (Standard)¹
	P380 (FIPS)
IBM LTO 9 (EC) (EU) 9 Ch	P380 (Standard)¹
IBM LTO-8 (FC) (FH) 8 Gb	P380 (FIPS)
IBM LTO-9 (FC) (FH) 8 Gb	PA62 (Standard)¹
	PA62 (FIPS)
IBM LTO-9 (SAS) (FH) 12 Gb	PA62 (Standard)¹
	PA62 (FIPS)
<sup>1</sup> Bundled with library firmware.	

## iBlade BaseOS Versions for Library Code

The following table provides the iBlade BaseOS versions for the 301G.GS055 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 301G.GS055 firmware resolved the following issues (bug fixes).

Change Request Number	Service Request Number	Description	Resolution
SQ-1614		Proxy server configuration support added.	Enhancement.
SQ-2600		HTTP response header security issues.	Fixed.
SQ-2801		After firmware update, Incompatible Drive RAS ticket (ET079) occurs despite correct drive sled VPD content	Fixed.
SQ-2895		Auto-closure support added for RAS tickets generated by GET and PUT failures to storage slots.	Enhancement.
	689219		
SQ-2949	711124	Installation of new service license causes all other library licenses to disappear.	Fixed.
	711458	,	
SQ-2972	690780	Cartridge Inventory Error RAS ticket (ET057) occurs during library firmware upgrade.	Fixed.
SQ-2974	690824	WebGUI reports error during library firmware upgrade that successfully completes.	Fixed.
SQ-2982		Library shows a power supply status of "Missing" for a power supplies never installed in the library. Status changed to "Not Installed".	Fixed.
SQ-3010	693374	Cartridge Inventory Error RAS ticket (ET057) incorrectly generates after robotic motion issues addressed.	Fixed.
SQ-3031	690784	Incorrect severity on Module Alignment Problem (ET032) RAS ticket when robotics require manual attention.	Fixed.
SQ-3046		HTTD/SSL cookie security flog issues	Fixed.
SQ-3047		HTTP/SSL cookie security flag issues.	rixeu.
SQ-3050	712802	Manual EDLM scan will not start.	Fixed.
SQ-3069		LTO-9 full-height drive firmware updated to version PA62. LTO-9 half-height drive firmware updated to version PA63.	Enhancement.

Change Request Number	Service Request Number	Description	Resolution
SQ-3166	718789	Multiple error RAS ticket ET135 leads to multiple ET155	Fixed.
	722920	RAS tickets on tape drives.	Tixeu.
WUI-1379		Updated password configuration rules.	Enhancement.

## **Known Issues**

This release of Scalar 301G.GS055 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		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.
	Humidity and temperature differences occur between the library temperature and humidity sensors and additional sensors outside of the library.	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-1847	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.	Disregard and close the RAS ticket.
SQ-1970	LTO-9 media initialization time.	When LTO-9 media is loaded into a drive for the first time, it may take up to two hours for the media to be initialized and calibrated. You should expect delays in media access and unload timing.

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.
WUI-1273	Drive/Media Issue Timeline does not show all data for selected time frame.	Select larger time frame.
WUI-1417	RAS ticket count in WebGUI icon flyover does not match number of tickets currently displayed in WebGUI.	Use north panel of <b>Status &gt; RAS Tickets</b> in WebGUI to verify total number of RAS tickets displayed in WebGUI.
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-1550	Computer download option in System > Library Firmware does not work when using a Chrome browser for the WebGUI.	User Firefox, Safari, or Edge browser. Downloads are also available on the Quantum Downloads and Firmware web page.

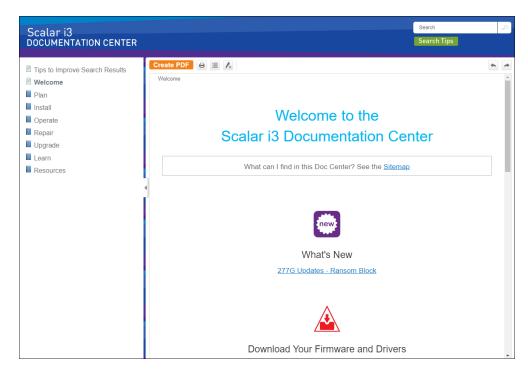
## **Documentation**

### Scalar i3 Documentation

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

Scalar i3 documentation includes:

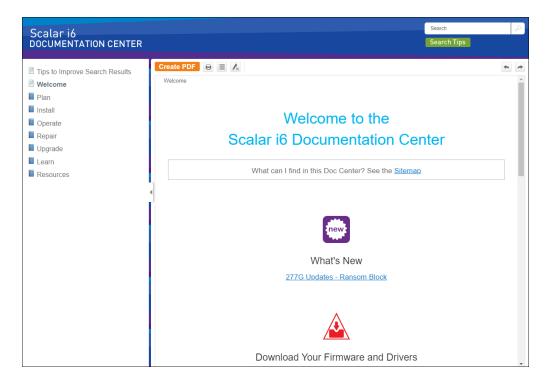
- · Site Planning Guide
- · Installation Guide
- · Operation Guides
- · Repair and Upgrade Guides
- Reference Guides (Web Services, SCSI, SNMP)



## 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/	