

Quantum Scalar i3, i6, and i6H Release Notes

Product	Scalar i3 Scalar i6 Scalar i6H
Firmware Version	291G.GS005
Date	November 2022

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About This Release

Scalar i3 Release

The Scalar i3 291G.GS005 release is a maintenance release that details bug fixes described in the [Resolved Issues](#) section. Refer to [Known Issues](#) for additional information.

Scalar i6 Release

The Scalar i6 291G.GS005 release is a maintenance release that details bug fixes described in the [Resolved Issues](#) section. Refer to [Known Issues](#) for additional information.

Scalar i6H Release

The Scalar i6H 291G.GS005 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:

- Robotics Improvements.
- 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@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 Telemetry** 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

WebGUI Path	Option	Default Setting
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: LibraryAssisted 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 10.2.0 (#75)

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 License	Requires SKM License	Requires SKM License	Requires SKM License
TKLM/SKLM ²	Requires EKM License	Requires EKM License	Requires EKM License	Requires EKM License
KMIP Key Manager ¹	Requires EKM License	Requires EKM License	Requires EKM License	Requires EKM 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 License	Requires SKM License	Requires SKM License	Requires SKM License
TKLM/SKLM ²	Requires EKM License	Requires EKM License	Requires EKM License	Requires EKM License
KMIP Key Manager ¹	Requires EKM License	Requires EKM License	Requires EKM License	Requires EKM 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.

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.

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	KAJ9 ¹
IBM LTO-7 (SAS) (HH) 6 Gb	P381 ¹
IBM LTO-8 (SAS) (HH) 6 Gb	P381 ¹
IBM LTO-9 (SAS) (HH) 12 Gb	P373 ¹

¹ Bundled with library firmware.

FC Half High (HH) Drive Types	Latest Firmware Version
IBM LTO-6 (FC) (HH) 8 Gb	KAJ9 (Standard) ¹ KAJ9 (FIPS)
IBM LTO-7 (FC) (HH) 8 Gb	P381 (Standard) ¹ P381 (FIPS)
IBM LTO-8 (FC) (HH) 8 Gb	P381 (Standard) ¹ P381 (FIPS)
IBM LTO-9 (FC) (HH) 8 Gb	P373 (Standard) ¹ P373 (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 KAJ8 (FIPS)
IBM LTO-7 (FC) (FH) 8 Gb ¹	P380 (Standard) ¹ P380 (FIPS)
IBM LTO-8 (FC) (FH) 8 Gb	P380 (Standard) ¹ P380 (FIPS)
IBM LTO-9 (FC) (FH) 8 Gb	P372 (Standard) ¹ P372 (FIPS)
IBM LTO-9 (SAS) (FH) 12 Gb ¹	P372 (Standard) ¹ P372 (FIPS)

¹ 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)

FC Full High (FH) Drive Types	Latest Firmware Version
IBM LTO-8 (FC) (FH) 8 Gb	P380 (Standard) ¹
	P380 (FIPS)
IBM LTO-9 (FC) (FH) 8 Gb	P372 (Standard) ¹
	P372 (FIPS)
IBM LTO-9 (SAS) (FH) 12 Gb	P372 (Standard) ¹
	P372 (FIPS)

¹ Bundled with library firmware.

iBlade BaseOS Versions for Library Code

The following table provides the iBlade BaseOS versions for the 291G.GS005 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 291G.GS005 firmware resolved the following issues (bug fixes).

Change Request Number	Service Request Number	Description	Resolution
SQ-2885		Improvements to library robot GETs for Drive Bay Storage (DBS) slots.	Enhancement.
SQ-2898		Recovered write error and recovered writer error in the drive utilization statistics table are incorrectly the same.	Fixed.
SQ-2901		Undefined error occurs during library firmware upload.	Fixed.
SQ-2904		Robot Y down motion enhancements to reduce RAS ticket (ET025) frequency.	Enhancement.
SQ-2900		Library PUT retries range extended for half-height drives	Enhancement.

In addition to the resolved issues above, the 291 firmware release contains the following resolved issues from the 290 firmware release.

Change Request Number	Service Request Number	Description	Resolution
SQ-234	471309	Updates to RAS ticket ET052 (SCB Functionality Problem).	Enhancement.
SQ-1821	616947	Documentation updates to state that EDLM will not work with application managed encryption (AME) media.	Enhancement.
SQ-2446	649521	Library tracks media movement in duplicate locations, causing unexpected media RAS ticket.	Fixed.
SQ-2653	660335	Remove Certificate Signing Request (CSR) Common Name (CN) field checking from Web Services. The CN field no longer requires an IP or DNS name. The CN field will still require an IP or DNS name in the WebGUI.	Enhancement.
SQ-2816	675692	Manual EDLM tests do not start.	Fixed.

Known Issues

This release of Scalar 291G.GS005 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-1531	Humidity and temperature differences occur between the library temperature and humidity sensors and additional sensors outside of the library.	<p>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.</p> <p>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.</p> <p>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.</p>
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-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-2801	After firmware update, Incompatible Drive RAS ticket (ET079) occurs despite correct drive sled VPD content.	Disregard RAS ticket.
WUI-1273	Drive/Media Issue Timeline does not show all data for selected time frame.	Select larger time frame.

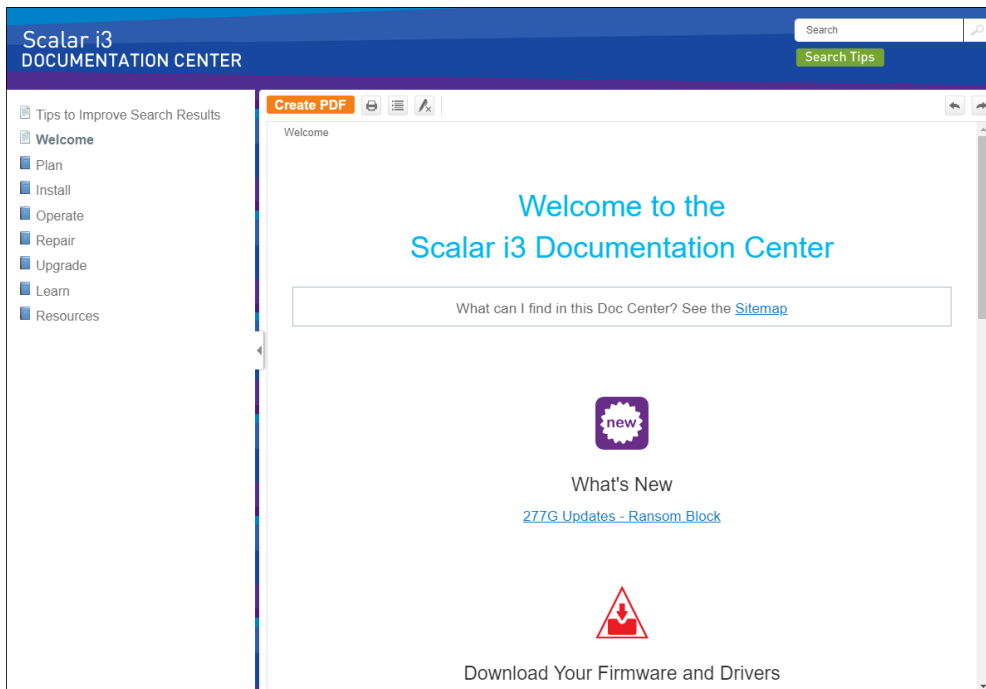
Documentation

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)

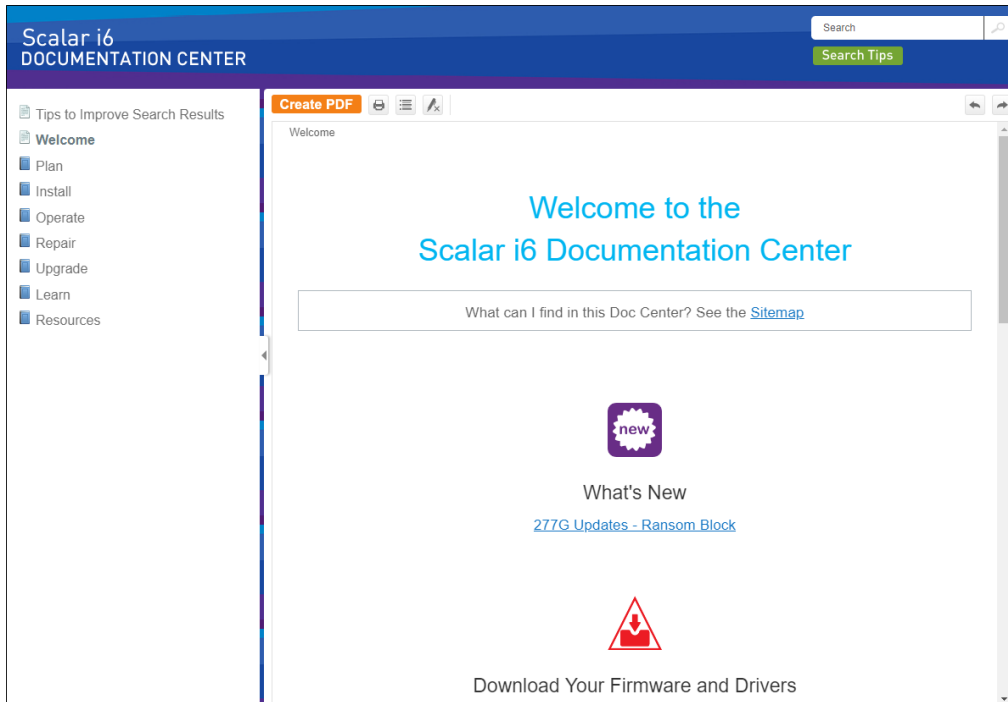


Scalar i6 Documentation

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/>
