# HighPointIOP macOS Installation Guide

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# Overview

This guide includes important hardware/software requirements, installation & upgrade procedures, for using RAID controllers, with a macOS operating system. Support products:

RR4520 / 4522 RS6628A

# Prerequisites

This section describes the base hardware and software requirements for RAID controllers & enclosures.

# **Driver Installation**

This section covers driver installation, driver upgrade and driver uninstallation procedures for RAID controllers & enclosures in a macOS environment.

# **RAID Management Software (WebGUI) Installation**

This section covers WebGUI installation, WebGUI upgrade and WebGUI uninstallation procedures for RAID controllers & enclosures in a macOS environment.

# Troubleshooting

Please consult this section if you encounter any difficulties installing or using RAID controllers & enclosures .It includes descriptions and solutions for commonly reported technical issues.

# **Prerequisites**

- 1) Operating System Support: macOS 10.13 and later.
- 2) Before installing the driver and RAID Management software, you should log into the system as a System Administrator.
- Identify the system as either T2 or Non-T2 based if the system has a T2 chip, make sure to follow section 1 before attempting to install any software for the device.
- 4) If you're using the **Apple M1** Platform, make sure to follow <u>section 3</u> before attempting to install any software for the HighPointIOP device.

# 1. Disabling macOS Secure boot for T2 Systems

Customers working with Mac platforms manufactured in 2018 or later that feature a T2 security chip, will need to disable the **Secure Boot** in order to load drivers for third party devices.

For a list of products with the T2 Security Chipset, please visit the following website: Mac computers that have the Apple T2 Security Chip

# **Disabling Secure Boot**

In order to use these products with T2 systems, Secure Boot must be disabled. To disable this feature select "No Security" from the Startup Security Utility interface. You can access this menu by pressing the Command ( $\mathfrak{B}$ )-R keys after the Apple logo first appears during the boot-up process.

00	Startup Security Utility
$\bigcirc$	Firmware password protection is off.
1	Turn on a firmware password to prevent this computer from starting up from a different hard disk, CD, or DVD without the password.
	Turn On Firmware Password
Secure Bo	ot
Full Sec	urity
	that only your current OS, or signed operating system software currently y Apple, can run. This mode requires a network connection at software on time.
	Security ny version of signed operating system software ever trusted by Apple to run.
No Secu Does not	rity enforce any requirements on the bootable OS.
External B	oot
-	v booting from external media the ability to boot from any devices such as USB and Thunderbolt drives.

Instructions are available from Apple's website: <u>About Secure Boot</u>

# 2. Disabling SIP (for macOS 10.13x and earlier)

MacOS 10.13x and earlier may require that **SIP** (System Integrity Protection) be disabled. If enabled, older versions of macOS may prevent the device drivers from loading.

While macOS is running, open a terminal window to confirm whether **System Integrity Protection** (SIP) status is **disabled**.

If enabled, you will need to manually disable the setting. Open a terminal, and then enter the following command:

# csrutil status

•				î	test -	– -zsh —
Last	login:	Sat Oc	t 12 16	:02:36	on tt	ys000
		B201610 grity P				us enabled.
test(	etestsM	B201610	15 ~ %			

The example screenshot shown above indicates that SIP is enabled.

# To disable SIP

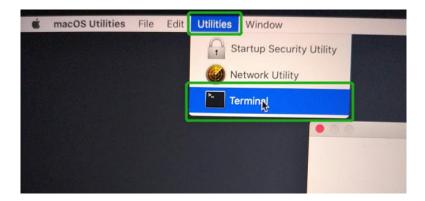
1) Restart the computer and hold down the "**Command** + **R**" buttons. Continue to hold these keys until macOS enters System Recovery mode.



*Note:* If you are unable to enter Recovery Mode to disable SIP: Make sure you are using a wired keyboard and mouse for this procedure. Wireless devices may not be recognized or function properly when booting into this mode.



2) Click on Utilities in the upper left corner and select Terminal:



3) Set SIP to disabled in using Terminal. Enter the following command:



4) Click the **Apple** logo in the upper left-hand corner of the desktop, and select **Restart** to reboot the system.

Ś	Terminal	Shell	Edit	View	Window	Help
St	artup Disk					
Re	estart 📐			Terr	ninal — -ba	sh — 80×24
St	nut Down	11	statu			511-00×24

5) After rebooting, confirm that SIP is disabled. Open terminal and type the following command:

csrutil status

```
■ est — -zsh — 80×24
Last login: Sat Oct 12 17:18:44 on console
test@testsMB20161015 ~ % csrutil status
System Integrity Protection status: disabled.
test@testsMB20161015 ~ %
```

If the status is now reported as **disabled**, you can install the device driver.

# 3. Reduced Security Policy – For Apple M1 Platform

Customers working with Apple M1 Platforms manufactured will need to **reduce the Security Policy** in order to load drivers for third party devices.

Mac computers with Apple M1 chip, please visit the following website:

Mac computers that have the Apple M1 Chip

Check Security Policy settings to determine if they need to be changed, **if Secure Boot is Full** Security please set to Reduced Security:

### System Information -> Hardware -> Controller -> Boot Policy

• • •		MacBook Pro
✓ Hardware ATA Apple Pay Audio	Model Identifier: Firmware Version: Boot UUID: Boot Policy:	MacBookPro17,1 iBoot-6723.120.36 EB0BF9A4-BD52-4A36-B9F5-701A30C0417B
Bluetooth	Secure Boot:	Reduced Security
Camera	System Integrity Protection:	Enabled
Card Reader	Signed System Volume:	Enabled
Controller	Kernel CTRR:	Enabled
Diagnostics	Boot Arguments Filtering:	Enabled
Disc Burning	Allow All Kernel Extensions:	Yes
	User Approved Privileged MDM Operations:	
Ethernet Cards Fibre Channel	DEP Approved Privileged MDM Operations:	No

### **Reduced Security Policy**

In order to use these products with Apple M1 Platform, Secure Boot must be **reduced Security**. Reduce this feature and select "**Allow user management of kernel extensions from Identified developers**" from the Startup Security Utility interface.

You can access this menu by:

Shutdown the system, pressing and holding the Power Button until you see Loading Startup Options.



Instructions are available from Apple's website:

About Secure Boot for M1

# 4. Installing the Device Driver

Current drivers can be downloaded from each product's Software Downloads webpage.

Product	Download Page			
RR4520/4522	https://www.highpoint-tech.com/USA_new/series_rr4520-Overview.htm			
RS6628A	https://www.highpoint-tech.com/USA_new/series-rs6628a-overview.htm			

# macOS High Sierra 10.13 and Mojave10.14 and macOS Catalina10.15 and macOS Big Sur 11.0 Driver Installation Procedure

1) Locate the download and double click the package to start the installer. Click the **Continue** button:

	Welcome to the HighPointIOP RAID Controller Installer	
<ul> <li>Introduction</li> <li>Destination Select</li> <li>Installation Type</li> <li>Installation</li> <li>Summary</li> </ul>	You will be guided through the steps necessary to install this software.	
	Go Back Continu	

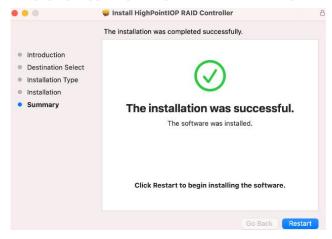
2) macOS will prompt you to install the driver. Click Install to proceed.

	Install HighPointIOP RAID Controller	E
	Standard Install on "1101"	
<ul> <li>Introduction</li> <li>Destination Select</li> <li>Installation Type</li> <li>Installation</li> <li>Summary</li> </ul>	This will take 349 KB of space on your computer. Click Install to perform a standard installation of this software on the disk "1101".	
	Change Install Location	
	Go Back Install	

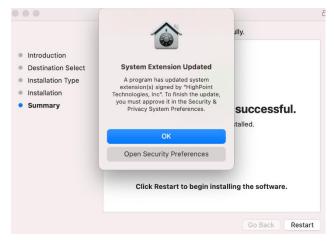
3) You will be prompted that installer is trying to install new software, enter the *Administrator* Username and Password. Once these have been entered, Click **Install Software**.

	Installer is trying to install new software.
<ul> <li>Introduc</li> <li>Destinat</li> <li>Installati</li> <li>Installati</li> <li>Summar</li> </ul>	User Name: tdest Password: •••••• Cancel Install Software
	Go Back Continue

4) If no pop-ups appear, please proceed to the next step of installation. Click Restart.



5) If you receive a popup window prompting you for permission, click **Open Security Preferences**.



6) Make sure App Store and identified developers is checked, and then click Allow.

	General FileVault Firewall	Privacy
A login password	has been set for this user Change	e Password
Require p	assword immediately 🗘 after slee	ep or screen saver begins
Show a n	nessage when the screen is locked	Set Lock Message
Disable a	utomatic login	
Allow apps down	loaded from:	
Allow apps down		
O App Stor		
O App Stor	e	
App Stor App Stor	e e and identified developers	
App Stor	e	gies, Inc" has Allow

7) You will receive a popup window, prompting you to restart. Click Not Now.

v a message wł	nen the screer	n is locked Set	Lock Message
ble auto	Ć	8	
		uired before new ons can be used	
lownload	Restart	Not Now	
Store	nostart	Hornow	

8) Return to the driver installation window. Click **Restart** to restart the system.

The installation was completed successfully.
<b>The installation was successful.</b> The software was installed.
Click Restart to begin installing the software.

9) After the system restarts, the driver's status can be viewed under **System Information**; The following screenshot shows the driver has been loaded:

<b>.</b>			Ma	cBook Pro			
Fibre Channel	Extension Name		<ul> <li>Version</li> </ul>	Last Modified	Notarized	Loaded	Obtained from
FireWire	HFS MacJapanese	0	8.0	2020/1/1, 4:00 PM	Yes	No	Apple
Graphics/Displays	HFS_MacKorean		8.0	2020/1/1, 4:00 PM	Yes	No	Apple
Memory	HESEncodings		1.0	2020/1/1, 4:00 PM	Yes	Vac	Apple
NVMExpress	HighPointIOP		4.4.8	2021/4/12, 10:10 AM	Yes	Yes	Identified De
PCI	HighPointRR		4.23.2	2021/4/2, 10:07 AM	Yes	190	Identified De
Parallel SCSI	initioFWBridge		511.60.2	2020/1/1, 4:00 PM	Yes	No	Apple
Power	Intel82574L		2.7.2	2020/1/1, 4:00 PM	Yes	No	Apple
Printers	InvalidateHmac		1.0	2020/1/1, 4:00 PM	Yes	Yes	Apple
SAS	Inconcerts 1		40.0	0000 MH 4-00 DH			A I
SATA							
SPI	HighPointIOP:						
Storage							
Thunderbolt/USB4		1.4.8					
USB		2021/4/12, 10:10 AM					
<ul> <li>Network</li> </ul>		com.nignpoint-tecn.kext.H	lighPointIOP				
Firewall		fes fes					
Locations	Get Info String: V	Jerrico: 4.4.9 Convright (	a) 2021 High Pa	int Technologies, Inc.			
Locations		Version: 4.4.8, Copyright (	c) 2021 HighPo	int Technologies, Inc.			
Volumes	Obtained from: lo	Version: 4.4.8, Copyright ( dentified Developer Universal	c) 2021 HighPo	int Technologies, Inc.			
Volumes WWAN	Obtained from: Id Kind: U	dentified Developer	c) 2021 HighPo	int Technologies, Inc.			
Volumes WWAN Wi-Fi	Obtained from: Id Kind: U Architectures: a 64-Bit (Intel): Y	dentified Developer Jniversal arm64e, x86_64 Yes		int Technologies, Inc.			
Volumes WWAN Wi-Fi V Software	Obtained from: Ic Kind: U Architectures: a 64-Bit (Intel): Y Location: /I	dentified Developer Jniversal arm64e, x86_64 /es Library/Extensions/HighPo		int Technologies, Inc.			
Volumes WWAN Wi-Fi Software Accessibility	Obtained from: Ic Kind: U Architectures: a 64-Bit (Intel): Y Location: // Kext Version: 4	dentified Developer Jniversal Jrm64e, x86_64 Yes Library/Extensions/HighPo 1,4.8		int Technologies, Inc.			
Volumes WWAN WI-Fi Software Accessibility Applications	Obtained from: k Kind: Architectures: a 64-Bit (Intel): Y Location: // Kext Version: 4 Load Address: 1	dentified Developer Jniversal irm64e, x86_64 Yes Library/Extensions/HighPo 1,4.8 18446741874801820000		int Technologies, Inc.			
Volumes WWAN Wi-Fi Software Accessibility Applications Developer	Obtained from: Is Kind: L Architectures: a 64-Bit (Intel): Y Location: // Kext Version: 4 Load Address: 1 Loadable: Y	dentified Developer Jniversal arm64e, x86_64 (es Library/Extensions/HighPo 1,4,8 18446741874801820000 (es		int Technologies, Inc.			
Volumes WWAN Wi-Fi Accessibility Applications Developer Disabled Software	Obtained from: k Kind: Architectures: a 64-Bit (Intel): Y Location: // Kext Version: 4 Load Address: 1 Loadable: Y Dependencies: S	dentified Developer Jniversal smr64e, x86_64 Yes Library/Extensions/HighPo 1,4,8 18446741874801820000 Yes Satisfied	intiOP.kext		GN21 Develop	er ID Certifica	stion Authority
Volumes WWAN Wi-Fi > Software Acpclications Developer Disabled Software Extensions	Obtained from: k Kind: Architectures: a 64-Bit (Intel): Y Location: // Kext Version: 4 Load Address: 1 Loadable: Y Dependencies: 5 Signed by: D	dentified Developer Jniversal Irm64e, x86_64 fes Library/Extensions/HighPc 14.8 8446741874801820000 fes Satisfied Jeveloper ID Application: I	intiOP.kext		9N2), Develop	er ID Certifica	ition Authority,
Volumes WWAN Wi-Fi Accessibility Applications Developer Disabled Software Extensions Fonts	Obtained from: k Kind: Architectures: a 64-Bit (Intel): Y Location: // Kext Version: 4 Load Address: 1 Loadable: Y Dependencies: 5 Signed by: D	dentified Developer Jniversal smr64e, x86_64 Yes Library/Extensions/HighPo 1,4,8 18446741874801820000 Yes Satisfied	intiOP.kext		9N2), Develop	er ID Certifica	ition Authority,
Volumes WVAN Wi-Fi v Software Accessibility Applications Developer Disabled Software Extensions Fonts Frameworks	Obtained from: k Kind: Architectures: a 64-Bit (Intel): Y Location: // Kext Version: 4 Load Address: 1 Loadable: Y Dependencies: 5 Signed by: D	dentified Developer Jniversal Irm64e, x86_64 fes Library/Extensions/HighPc 14.8 8446741874801820000 fes Satisfied Jeveloper ID Application: I	intiOP.kext		9N2), Develop	er ID Certifica	ition Authority,
Volumes WWAN Wi-Fi Software Accessibility Applications Developer Disabled Software Extensions Fronts Frameworks Installations	Obtained from: k Kind: Architectures: a 64-Bit (Intel): Y Location: // Kext Version: 4 Load Address: 1 Loadable: Y Dependencies: 5 Signed by: D	dentified Developer Jniversal Irm64e, x86_64 fes Library/Extensions/HighPc 14.8 8446741874801820000 fes Satisfied Jeveloper ID Application: I	intiOP.kext		9N2), Develop	er ID Certifica	tion Authority,
Volumes WVAN Wi-Fi Software Accessibility Applications Developer Disabled Software Disabled Software Disabled Software Fransworks Installations Language & Region	Obtained from: k Kind: Architectures: a 64-Bit (Intel): Y Location: // Kext Version: 4 Load Address: 1 Loadable: Y Dependencies: 5 Signed by: D	dentified Developer Jniversal Irm64e, x86_64 fes Library/Extensions/HighPc 14.8 8446741874801820000 fes Satisfied Jeveloper ID Application: I	intiOP.kext		9N2), Develop	er ID Certifica	ition Authority,
Volumes WWAN Wi-Fi Software Accessibility Applications Developer Disabled Software Extensions Fronts Frameworks Installations	Obtained from: k Kind: Architectures: a 64-Bit (Intel): Y Location: // Kext Version: 4 Load Address: 1 Loadable: Y Dependencies: 5 Signed by: D	dentified Developer Jniversal Irm64e, x86_64 fes Library/Extensions/HighPc 14.8 8446741874801820000 fes Satisfied Jeveloper ID Application: I	intiOP.kext		9N2), Develop	er ID Certifica	ation Authority,
Volumes WVAN Wi-Fi Software Accessibility Applications Developer Disabled Software Disabled Software Disabled Software Fransworks Installations Language & Region	Obtained from: k Kind: Architectures: a 64-Bit (Intel): Y Location: // Kext Version: 4 Load Address: 1 Loadable: Y Dependencies: 5 Signed by: D	dentified Developer Jniversal Irm64e, x86_64 fes Library/Extensions/HighPc 14.8 8446741874801820000 fes Satisfied Jeveloper ID Application: I	intiOP.kext		9N2), Develop	er ID Certifica	ation Authority,
Volumes WWAN Wi-Fi Accessibility Applications Developer Disabled Software Extensions Franteworks Installations Language & Region Legacy Software	Obtained from: k Kind: Architectures: a 64-Bit (Intel): Y Location: // Kext Version: 4 Load Address: 1 Loadable: Y Dependencies: 5 Signed by: D	dentified Developer Jniversal Irm64e, x86_64 fes Library/Extensions/HighPc 14.8 8446741874801820000 fes Satisfied Jeveloper ID Application: I	intiOP.kext		9N2), Develop	er ID Certifica	ition Authority,
Volumes WWAN Wi-Fi Software Accessibility Applications Developer Disabled Software Disabled Software Extensions Fonts Fonts Installations Language & Region Legacy Software Logs	Obtained from: k Kind: Architectures: a 64-Bit (Intel): Y Location: // Kext Version: 4 Load Address: 1 Loadable: Y Dependencies: 5 Signed by: D	dentified Developer Jniversal Irm64e, x86_64 fes Library/Extensions/HighPc 14.8 8446741874801820000 fes Satisfied Jeveloper ID Application: I	intiOP.kext		9N2), Develop	er ID Certifica	ation Authority,
Volumes WWAN Wi-Fi Software Accessibility Applications Developer Disabled Software Extensions Fonts Franeworks Installations Language & Region Legacy Software Logs Managed Client	Obtained from: k Kind: Architectures: a 64-Bit (Intel): Y Location: // Kext Version: 4 Load Address: 1 Loadable: Y Dependencies: 5 Signed by: D	dentified Developer Jniversal Irm64e, x86_64 fes Library/Extensions/HighPc 14.8 8446741874801820000 fes Satisfied Jeveloper ID Application: I	intiOP.kext		9N2), Develop	er ID Certifica	ation Authority,
Volumes WWAN Wi-Fi Software Accessibility Applications Developer Disabled Software Extensions Fonts Fonts Installations Language & Region Legacy Software Logs Managed Client Preference Panes	Obtained from: k Kind: U Architectures: a 64-Bit (Intel): V Location: A Kext Version: 4 Load Address: 1 Loadable: Y Dependencies: S Signed by: A	dentified Developer Jniversal Irm64e, x86_64 fes Library/Extensions/HighPc 14.8 8446741874801820000 fes Satisfied Jeveloper ID Application: I	HighPoint Tech	nologies, Inc (DX6G69M	9N2), Develop	er ID Certifica	ation Authority,

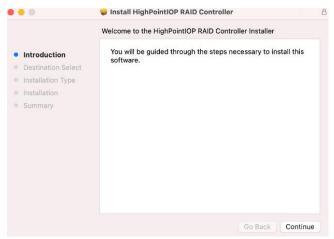
Note: The driver revision shown in the screenshots may not correspond with current software releases. Please make sure to download the latest driver updates from the product's Software Updates page.

# 5. Update the Device Driver

Current drivers can be downloaded from each product's Software Downloads webpage.

Product	Download Page
RR4520/4522	https://www.highpoint-tech.com/USA_new/series_rr4520-Overview.htm
RS6628A	https://www.highpoint-tech.com/USA_new/series-rs6628a-overview.htm

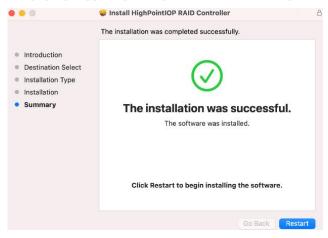
1) Locate the download and double click the package to start the installer. Click the **Continue** button:



2) macOS will prompt you to install the driver. Click Install to proceed.

	Install HighPointIOP RAID Controller	
	Standard Install on "1101"	
<ul> <li>Introduction</li> <li>Destination Select</li> <li>Installation Type</li> <li>Installation</li> <li>Summary</li> </ul>	This will take 349 KB of space on your computer. Click Install to perform a standard installation of this software on the disk "1101".	
	Change Install Location Go Back Install	

3) If no pop-ups appear, please proceed to the next step of installation. Click Restart.



4) If you receive a popup window prompting you for permission, click **Open Security Preferences**.

Introduction Destination Select Installation Type	System Extension Updated A program has updated system extension(s) signed by "HighPoint	
Installation Summary	Technologies, Inc <sup>e</sup> . To finish the update, you must approve it in the Security & Privacy System Preferences.	successful.
	ОК	
	Open Security Preferences	
	Click Restart to begin insta	lling the software.

5) Make sure App Store and identified developers is checked, and then click Allow.

	Privacy
A login password has been set for this user Chang	e Password
Require password immediately O after sle	ep or screen saver begins
Show a message when the screen is locked	Set Lock Message
Disable automatic login	
Allow apps downloaded from:	
Allow apps downloaded from: App Store	
App Store	
App Store App Store and identified developers	
App Store	ogies, Inc" has Allow

6) You will receive a popup window, prompting you to restart. Click Not Now.

v a mess <mark>age w</mark>	hen the screer	is locked Set I	ock Message
ble auto		8	
		uired before new ons can be used.	
downloa	Restart	Not Now	
Store	restart		

7) Return to the driver installation window. Click **Restart** to restart the system.

	The installation was completed successfully.
<ul> <li>Introduction</li> <li>Destination Select</li> <li>Installation Type</li> <li>Installation</li> <li>Summary</li> </ul>	The installation was successful. The software was installed.
	Click Restart to begin installing the software.

8) After the system restarts, the driver's status can be viewed under **System Information**; The following screenshot shows the driver has been loaded:

• • •			Ma	cBook Pro			
Fibre Channel	Extension Name		<ul> <li>Version</li> </ul>	Last Modified	Notarized	Loaded	Obtained from
FireWire	HFS_MacJapane	60	8.0	2020/1/1, 4:00 PM	Yes	No	Apple
Graphics/Displays	HFS_MacKorean		8.0	2020/1/1, 4:00 PM	Yes	No	Apple
Memory	HFSEncodings		1.0	2020/1/1, 4:00 PM	Yes	Ver	Apple
NVMExpress	HighPointIOP		4.4.8	2021/4/12, 10:10 AM	Yes	Yes	Identified Dev
PCI	HighPointRR		4.23.2	2021/4/2, 10:07 AM	Yes	IND	Identified Dev
Parallel SCSI	initioFWBridge		511.60.2	2020/1/1, 4:00 PM	Yes	No	Apple
Power	Intel82574L		2.7.2	2020/1/1, 4:00 PM	Yes	No	Apple
Printers	InvalidateHmac		1.0	2020/1/1, 4:00 PM	Yes	Yes	Apple
SAS	inconcerter 1		40.0	2020/ J1, 4000 PM		**	Apple
SATA							
SPI	HighPointIOP:						
Storage							
Thunderbolt/USB4		4.4.8					
USB		2021/4/12, 10:10 AM	0.0000000000				
- Natwork		comunigripoint-tech.xext	HighPointiOP				
v Network	Notarized:	Yes	HighPointiOP				
Firewall	Notarized: Loaded:	Yes		int Westmann and			
Firewall Locations	Notarized: Loaded: Get Info String:	Yes Yes Version: 4.4.8, Copyright		int Technologies, Inc.			
Firewall Locations Volumes	Notarized: Loaded: Get Info String: Obtained from:	Yes Yes Version: 4.4.8, Copyright Identified Developer		int Technologies, Inc.			
Firewall Locations Volumes WWAN	Notarized: Loaded: Get Info String: Obtained from: Kind:	Yes Yes Version: 4.4.8, Copyright Identified Developer Universal		int Technologies, Inc.			
Firewall Locations Volumes WWAN Wi-Fi	Notarized: Loaded: Get Info String: Obtained from: Kind:	Yes Yes Version: 4.4.8, Copyright Identified Developer		int Technologies, Inc.			
Firewall Locations Volumes WWAN Wi-Fi V Software	Notarized: Loaded: Get Info String: Obtained from: Kind: Architectures: 64-Bit (Intel):	Yes Yes Version: 4.4.8, Copyright Identified Developer Universal arm64e, x86_64	t (c) 2021 HighPo	int Technologies, Inc.			
Firewall Locations Volumes WWAN Wi-Fi Software Accessibility	Notarized: Loaded: Get Info String: Obtained from: Kind: Architectures: 64-Bit (Intel): Location: Kext Version:	Yes Yes Version: 4.4.8, Copyright Identified Developer Universal arm64e, x86_64 Yes /Library/Extensions/High 4.4.8	t (c) 2021 HighPo PointIOP.kext	int Technologies, Inc.			
Firewall Locations Volumes WWAN Wi-Fi Software Accessibility Applications	Notarized: Loaded: Get info String: Obtained from: Kind: Architectures: 64-Bit (Intel): Location: Kext Version: Load Address:	Yes Yes Version: 4.4.8, Copyright Identified Developer Universal arm64e, x86_64 Yes (Library/Extensions/Hight 4.4.8 18446741874801820000	t (c) 2021 HighPo PointIOP.kext	int Technologies, Inc.			
Firewall Locations Volumes WWAN Wi-Fi Software Accessibility Applications Developer	Notarized: Loaded: Get info String: Obtained from: Kind: Architectures: 64-Bit (intel): Location: Kext Version: Load Address: Load able:	Yes Yes Version: 4.4.8, Copyright Identified Developer Universal universal universal universal universal universal (Library/Extensions/Highi 4.4.8 18446741874801820000 Yes	t (c) 2021 HighPo PointIOP.kext	int Technologies, Inc.			
Firewall Locations Volumes WWAN Wi-Fi Software Accessibility Applications Developer Disabled Software	Notarized: Loaded: Get info String: Obtained from: Kind: Architectures: 64-Bit (Intel): Location: Kext Version: Load Address: Dependencies:	Yes Yes Version: 4.4.8, Copyright Identified Developer Universal arm64e, x86_64 Yes (Library/Extensions/Hight 4.4.8 18446741874801820000 Yes Satisfied	t (c) 2021 HighPo PointIOP.kext 0				
Firewall Locations Volumes WWAN Wi-Fi Software Accessibility Applications Developer	Notarized: Loaded: Obtained from: Kind: Architectures: 64-Bit (Intel): Location: Kext Version: Load Address: Loadable: Dependencies: Signed by:	Yes Yes Uersion: 4.4.8, Copyright Identified Developer Universal arm64e, x86_64 Yes /Library/Extensions/High 4.4.8 1844674187480182000/ Yes Satisfied Developer ID Application	t (c) 2021 HighPo PointIOP.kext 0		9N2), Develop	er ID Certifica	ation Authority,
Firewall Locations Volumes WWAN Wi-Fi ~ Software Accessibility Applications Developer Disabled Software Extensions Fonts	Notarized: Loaded: Obtained from: Kind: Architectures: 64-Bit (Intel): Location: Kext Version: Load Address: Loadable: Dependencies: Signed by:	Yes Yes Version: 4.4.8, Copyright Identified Developer Universal arm64e, x86_64 Yes (Library/Extensions/Hight 4.4.8 18446741874801820000 Yes Satisfied	t (c) 2021 HighPo PointIOP.kext 0		9N2), Develop	er ID Certifica	ation Authority,
Firewall Locations Volumes WW-Fi Wi-Fi Software Acocessibility Applications Developer Disabled Software Extensions	Notarized: Loaded: Obtained from: Kind: Architectures: 64-Bit (Intel): Location: Kext Version: Load Address: Loadable: Dependencies: Signed by:	Yes Yes Uersion: 4.4.8, Copyright Identified Developer Universal arm64e, x86_64 Yes /Library/Extensions/High 4.4.8 1844674187480182000/ Yes Satisfied Developer ID Application	t (c) 2021 HighPo PointIOP.kext 0		9N2), Develop	er ID Certifica	ation Authority,
Firewall Locations Volumes WWAN Wi-Fi Accessibility Applications Developer Disabled Software Extensions Fonts	Notarized: Loaded: Obtained from: Kind: Architectures: 64-Bit (Intel): Location: Kext Version: Load Address: Loadable: Dependencies: Signed by:	Yes Yes Uersion: 4.4.8, Copyright Identified Developer Universal arm64e, x86_64 Yes /Library/Extensions/High 4.4.8 1844674187480182000/ Yes Satisfied Developer ID Application	t (c) 2021 HighPo PointIOP.kext 0		9N2), Develop	er ID Certifica	ation Authority,
Firewall Locations Volumes WWAN Wi-Fi ~ Software Accessibility Applications Developer Disabled Software Extensions Fronts Frameworks	Notarized: Loaded: Obtained from: Kind: Architectures: 64-Bit (Intel): Location: Kext Version: Load Address: Loadable: Dependencies: Signed by:	Yes Yes Uersion: 4.4.8, Copyright Identified Developer Universal arm64e, x86_64 Yes /Library/Extensions/High 4.4.8 1844674187480182000/ Yes Satisfied Developer ID Application	t (c) 2021 HighPo PointIOP.kext 0		9N2), Develop	er ID Certifica	ation Authority,
Firewall Locations Volumes WWAN Wi-Fi Accessibility Applications Developer Disabled Software Extensions Fonts Frameworks Installations Language & Region	Notarized: Loaded: Obtained from: Kind: Architectures: 64-Bit (Intel): Location: Kext Version: Load Address: Loadable: Dependencies: Signed by:	Yes Yes Uersion: 4.4.8, Copyright Identified Developer Universal arm64e, x86_64 Yes /Library/Extensions/High 4.4.8 1844674187480182000/ Yes Satisfied Developer ID Application	t (c) 2021 HighPo PointIOP.kext 0		9N2), Develop	er ID Certifica	ition Authority,
Firewall Locations Volumes WWAN Wi-Fi Software Accessibility Applications Developer Disabled Software Extensions Fronts Frameworks Installations Language & Region Legacy Software	Notarized: Loaded: Obtained from: Kind: Architectures: 64-Bit (Intel): Location: Kext Version: Load Address: Loadable: Dependencies: Signed by:	Yes Yes Uersion: 4.4.8, Copyright Identified Developer Universal arm64e, x86_64 Yes /Library/Extensions/High 4.4.8 1844674187480182000/ Yes Satisfied Developer ID Application	t (c) 2021 HighPo PointIOP.kext 0		9N2), Develop	er ID Certifica	tion Authority,
Firewall Locations Volumes WWAN Wi-Fi ~ Software Accessibility Applications Developer Disabled Software Extensions Fonts Installations Language & Region Legacy Software Logs	Notarized: Loaded: Obtained from: Kind: Architectures: 64-Bit (Intel): Location: Kext Version: Load Address: Loadable: Dependencies: Signed by:	Yes Yes Uersion: 4.4.8, Copyright Identified Developer Universal arm64e, x86_64 Yes /Library/Extensions/High 4.4.8 1844674187480182000/ Yes Satisfied Developer ID Application	t (c) 2021 HighPo PointIOP.kext 0		9N2), Develop	er ID Certifica	tion Authority,
Firewall Locations Volumes WWAN Wi-Fi Software Accessibility Applications Developer Disabled Software Extensions Fronts From evorks Installations Language & Region Legacy Software Logs Managed Client	Notarized: Loaded: Obtained from: Kind: Architectures: 64-Bit (Intel): Location: Kext Version: Load Address: Loadable: Dependencies: Signed by:	Yes Yes Uersion: 4.4.8, Copyright Identified Developer Universal arm64e, x86_64 Yes /Library/Extensions/High 4.4.8 1844674187480182000/ Yes Satisfied Developer ID Application	t (c) 2021 HighPo PointIOP.kext 0		9N2), Develop	er ID Certifica	ition Authority,
Firewall Locations Volumes WWAN Wi-Fi Software Accessibility Applications Developer Disabled Software Extensions Fonts Froms Frameworks Installations Language & Region Legacy Software Logs Managed Client Preference Panes	Notarized: Loaded: Obtained from: Kind: Architectures: 64-Bit (Intel): Location: Kext Version: Load Address: Loadable: Dependencies: Signed by:	Yes Yes Uersion: 4.4.8, Copyright Identified Developer Universal arm64e, x86_64 Yes /Library/Extensions/High 4.4.8 1844674187480182000/ Yes Satisfied Developer ID Application	t (c) 2021 HighPo PointIOP.kext 0		9N2), Develop	er ID Certifica	ition Authority,
Firewall Locations Volumes WWAN Wi-Fi Software Accessibility Applications Developer Disabled Software Extensions Fornts Frameworks Installations Language & Region Legacy Software Logs Managed Client	Notarized: Get Info String: Obtained from: Kind: Architectures: 64-Bit (Intel): Location: Kext Version: Load Address: Loadable: Dependencies: Signed by:	Yes Yes Uersion: 4.4.8, Copyright Identified Developer Universal arm64e, x86_64 Yes /Library/Extensions/High 4.4.8 1844674187480182000/ Yes Satisfied Developer ID Application	t (c) 2021 HighPo PointIOP.kext 0 h: HighPoint Tech	nologies, Inc (DX6G69M	9N2), Develop	er ID Certifica	ition Authority,

Note: The driver revision shown in the screenshots may not correspond with current software releases. Please make sure to download the latest driver updates from the product's Software Updates page.

# 6. Uninstalling the Device Driver

### Uninstalling the Device driver for macOS 10.13/10.14

To uninstall the HighPointIOP driver, you will need to open a Terminal window and enter the following command:

```
sudo rm -rf /Library/Extensions/HighPointIOP.kext
```

```
Last login: Thu Aug 19 10:04:34 on ttys000

[test@tests-MacBook-Pro ~ % sudo rm -rf /Library/Extensions/HighPointIOP.kext ]

[Password:

test@tests-MacBook-Pro ~ % ]
```

### Uninstalling the Device driver for macOS 10.15/11.0

To uninstall the HighPointIOP driver, you will need to open a Terminal window and enter the following command:

sudo rm -rf /Library/Extensions/HighPointIOP.kext

sudo kextcache --i /

```
test - -zsh - 99×25
test@tests-MacBook-Pro-M1-2020-110 ~ % sudo rm -rf /Library/Extensions/HighPointIOP.kext
Password:
test@tests-MacBook-Pro-M1-2020-110 ~ % sudo kextcache -i /
kextcache -i /
Executing: /usr/bin/kmutil install --volume-root / --check-rebuild
Not rebuilding KC for arch: 'arm64e'
kmutil done
test@tests-MacBook-Pro-M1-2020-110 ~ %
```

# 7. Installing the RAID Management Software (WebGUI)

1) Double click the package named **HighPointWebGUI.pkg** to start the installer. When the window appears, click the **Continue** button.

	Welcome to the HighPoint Web RAID Controller Management Installer
Introduction Destination Select	You will be guided through the steps necessary to install this software.
Installation Type	
Installation	
Summary	

2) You will be promoted to click the Install button. Click Install to continue.

	Standard Install on "1010"
Introduction	This will take 2.7 MB of space on your computer.
Destination Select	Click Install to perform a standard installation of this software for all users of this computer. All users of this computer will be
Installation Type	able to use this software.
Installation	
Summary	

3) You will then be promoted to enter the *Administrator* Username and Password. Once these have been entered, click **Install Software** to continue.

	Standard Install on "1010"	
<ul> <li>Introduction</li> <li>Destination St</li> <li>Installation</li> <li>Summary</li> </ul>	Installer is trying to install new software. Type your password to allow this. Username: Password: Cancel Install Software	re be
	Go Back	

4) The WebGUI Management software has been installed. Click **Close** to complete the procedure.

•••	Install HighPoint Web RAID Controller Management
<ul> <li>Introduction</li> <li>Destination Select</li> <li>Installation Type</li> <li>Installation</li> <li>Summary</li> </ul>	The installation was completed successfully. Image: Complete State           The installation was successful.           The software was installed.

# 8. Updating the WebGUI

- 1) First, uninstall the current WebGUI. Please refer to item 8 below (<u>Uninstalling the</u> <u>WebGUI</u>).
- 2) Download the latest version of the WebGUI from the appropriate Software Downloads webpage.
- 3) Locate the download and double click the package named **HighPointWebGUI.pkg** to start the installer. Please refer to <u>Installing the WebGUI</u> for more information.

# 9. Uninstalling the WebGUI

To uninstall the WebGUI, access Applications, click on HPTWEBGUI, select uninstall, and double-click the **uninstall-WEBGUI. command**. The uninstall command will automatically open a terminal

< >	
Favorites	AJA System Test Lite.app     HighPoint RAement.webloc     uninstall-WebGUI.command
	App Store.app
Applications	ATTO In initial
Desktop	ATTO ConfigTool
1 Documents	🔕 ATTO Disk Benchmark.app
	🚰 Automator.app
O Downloads	S AutoSwitchInput.app
1 test	Blackmagic Deed Test.app
	Blackmagic RAW
ocations	C Books.app
Macintosh HD	Calculator.app
	🔂 Calendar.app
OSXRESERVED	🕼 Carbon Copy Cloner.app
BOOTCAMP	4 Chess.app
10136	Contacts.app
	DaVinci Resolve
🔛 10154 - Data	Dictionary.app FaceTime.app
a mocana	<ul> <li>Find My.app</li> </ul>
Network	Font Book.app
Wetwork .	6 Foxmail.app
ags	Home.app
Red	HPTWEBGUI
eq Red	Image Capture.app
Orange	IORenistru Fringer ann

Enter the macOS password, uninstall the software:

e e test — uninstall-WebGUI.com
Last login: Wed Nov 18 16:23:31 on ttys000
/Applications/HPTWEBGUI/uninstall-WebGUI.command ; exit;
test@tests-MBP-2016 ~ % /Applications/HPTWEBGUI/uninstall/uninstall-WebGUI.command ; exit;
This script will attempt to uninstall HighPoint Web RAID Controller Manage Service
Note: You must be logged on as an administrator to uninstall the software.
The script will prompt you for an administrator password.

If prompted for a password please enter your administrator password.

The following service files will be deleted /Applications/HPTWEBGUI /Library/Receipts/wwwfiles.pkg /Library/Receipts/webservice.pkg /Library/LaunchDaemons/HPTWebGUIDaemon.plist /usr/share/hpt /usr/bin/hptdaemonctl

Password:

激活 Window 转到"设置"以激活

# **10. Trouble shooting**

# Unable to connect to the WebGUI

After the driver and management software are installed, the management software displays a "Connection Failure" warning when attempting to start the interface:

							High Pol
Global View	Physical	Logical	Setting	Event	SHI	Logout	Help
			Connect	ion Failu	re		

# This error can be triggered by one of the following issues:

- 1. The hardware is not recognized by macOS
- 2. The device driver is not installed or is not loading properly.
- 3. WEBGUI service is not running.
- 4. The system's SIP status is incorrect.
- 5. If you are using a T2 system, Secure Boot may not be disabled.
- 6. If you are using Apple M1 system, Security Policy may not be 'Reduced'.

# Verifying the hardware

# 1) The device is connected to the host through the Thunderbolt

01. If you are using the controller via our RocketStor 6661A adapter and a Thunderbolt<sup>TM</sup> 3 connection, please make sure the RocketStor 6661A device is properly recognized by macOS.

Diagnostics Disc Burning Ethernet Cards Fibre Channel FireWire	✓ Thunderbolt Bus RocketStor 66	61A		
Graphics/Displays				
Memory				
NVMExpress				
PCI				0
Parallel SCSI	RocketStor 6661A			
Power	ROCKETSTOP 6661A			
Printers	Vendor Name:	HighPoint Technol	ogies Inc	
SAS	Device Name:	RocketStor 6661A		
SATA	Vendor ID:	0x43		
SPI	Device ID:	0x6661		
Storage	Device Revision:	0x1		
Thunderbolt	UID:	0x004371936C22	2B00	
USB	Route String: Firmware Version:	1		
Network	Port (Upstream):	20.1		
Firewall	Status:		Device connected	
Locations	Link Status:		0x2	
Volumes	Speed:		Up to 40 Gb/s x1	
WWAN	Current Link W		0x2	
Wi-Fi	Cable Firmwar		0.9.0	
Software	Port:	Firmware Version:	0.36.0	
Accessibility	Status:		No device connected	
Applications	Link Status:		0x7	
Developer	Speed:		Up to 40 Gb/s x1	
Disabled Software	Current Link W		0x1	
Extensions	Link Controller	Firmware Version:	0.36.0	

If the RocketStor 6661A entry is not displayed, this may be related to a connection problem - move the RS6661A to another Thunderbolt<sup>TM</sup> 3 port or replace the cable and recheck the entry.

02. If RocketStor 6661A is correctly connected, make sure the **System Information**→**PCI** controller is recognized by macOS (see example below):

✓ Hardware	pci1103,4520:	
ATA	peri103,4520.	
Apple Pay	Type:	RAID Controller
Audio	Driver Installed:	No
Bluetooth	Tunnel Compatible:	No
Camera	Pause Compatible:	No
Card Reader	MSI:	No
Controller	Bus:	PCI
Diagnostics	Slot:	Thunderbolt@3,0,0
	Vendor ID:	0x1103
Disc Burning	Device ID:	0x4520
Ethernet Cards	Subsystem Vendor ID:	0x1b4b
Fibre Channel	Subsystem ID:	0x9580
FireWire	Revision ID:	0x00b3
Graphics/Displays	Link Width:	x4
Memory	Link Speed:	5.0 GT/s
NVMExpress		
PCI		
Parallel SCSI		

2) The device is directly connected to the host through the PCIE SLOT

make sure the **System Information**→**PCI** controller is recognized by macOS (see example below):

ATA ATA	pci1103,4520:	
Apple Pay	Type:	RAID Controller
Audio	Driver Installed:	No
Bluetooth	Tunnel Compatible:	No
Camera	Pause Compatible:	No
Card Reader	MSI:	No
Controller	Bus:	PCI
Diagnostics	Slot:	Thunderbolt@3,0,0
Disc Burning	Vendor ID:	0x1103
	Device ID:	0x4520
Ethernet Cards	Subsystem Vendor ID:	0x1b4b
Fibre Channel	Subsystem ID:	0x9580
FireWire	Revision ID:	0x00b3
Graphics/Displays	Link Width:	x4
Memory	Link Speed:	5.0 GT/s
NVMExpress		
PCI		

### 3) The device is RAID enclosures

make sure the **System Information**→**Thunderbolt** controller is recognized by macOS (see example below):

V Hardware	Thunderbolt/USB4 Device Tree	
Apple Pay	Thunderbolt/USB4 Bus 0	
Audio	RocketStor 6628A	
Bluetooth	Thunderbolt/USB4 Bus 1	
Camera		
Card Reader		
Controller		
Diagnostics		
Disc Burning		
Ethernet Cards		
Fibre Channel	RocketStor 6628A:	
FireWire	ROCKETSTON OUZON.	
Graphics/Displays	Vendor Name: HighPoint Techno	logies Inc.
Memory	Device Name: RocketStor 6628	
NVMExpress	Mode: Thunderbolt 3	
PCI	Device ID: 0x6628	
Parallel SCSI	Vendor ID: 0x43	
Power	Device Revision: 0x1	
Printers	UID: 0x0043A322ED3/ Route String: 1	SAAOU
SAS	Firmware Version: 25.1	
SATA	Port (Upstream):	
SPI	Status:	Device connected
Storage	Link Status:	0x2
Thunderbolt/USB4	Speed:	Up to 40 Gb/s x1
LISB	Current Link Width:	0x2
Network	Link Controller Firmware Version:	0.36.0
Firewall	Port: Status:	No device connected
Locations	Link Status:	No device connected 0x7
	Speed:	Up to 40 Gb/s x1
Volumes	Current Link Width:	0x1
WWAN	Link Controller Firmware Version:	
Wi-Fi		STA ( 7 STA)

# Make sure the HighPointIOP Driver is loaded

Please refer to the <u>Appendix - Checking the Driver status and Version</u> to make sure the HighPointIOP driver is installed properly.

- If the HighPointIOP driver is not loading, proceed to <u>Check the security & privacy status</u>. If HighPoint software is blocked in the permission, you need to click Allow.
- If the driver is loading properly, but the WebGUI is still unable to start, please try to restart the WebGUI service. Please refer to <u>Appendix - WebGUI service restart</u> make settings.

If WebGUI is still not connected, please contact our <u>Support Department</u> to open a support ticket. Please make sure to include any screenshots and system information you are able to collect (see the Appendix for more information).

### Check the SIP status

- 1) Please refer to the <u>Appendix Checking the SIP Status</u>.
- 2) If the settings are not correct for your system, please refer to the driver installation manual for each system to reset the SIP status.

### For T2 Systems: Make sure Secure Boot is disabled

Please refer to the <u>Systems with T2 chipsets</u> – Secure Boot status. If the setting is incorrect, you will need to reboot the system to change the setting.

# For Apple M1 Platform: Make sure Security Policy is reduced

Please refer to the <u>Apple M1 Platform-Reduced Security Policy</u>. If the setting is incorrect, you will need to shutdown the system to change the setting.

If you encounter any problems while checking items 1-5, please refer to the <u>Appendix</u> to collect information about your system and configuration, and submit a support ticket to our Customer Support department using our Online Support Portal: <u>https://www.highpoint-tech.com/websupport/main.php</u>

# The WebGUI can't connect to a remote system

If you can't connect to a remote system, make sure **raidman-httpsd** is running on the target system, and confirm that you can access the remote system via a TCP/IP connection. If you have a firewall configured, make sure TCP port 7402 is not blocked.

# Appendix

When submitting s support ticket via our Online Support Portal, the following information will help our Support Department diagnose and resolve your issue as quickly and efficiently as possible.

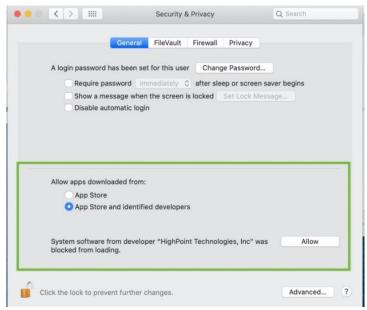
# **Collecting the macOS version**

1) Click on the Apple logo located near the upper left-hand portion of the Desktop, and click "Version". Then the version number of the system will all be displayed.



# Check the security & privacy

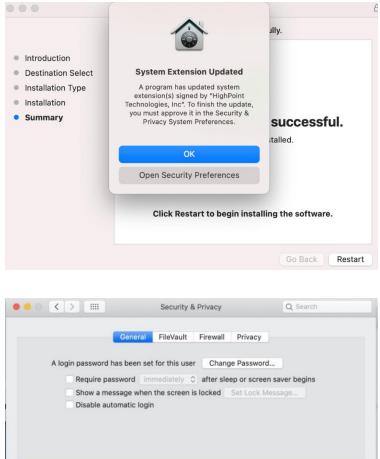
1) Check if there is HighPoint software blocked in the permission, if it is blocked, you need to click "Allow".



2) If 'System software from developer 'HighPoint Technologies, Inc' was blocked from loading' is not displayed, please do the following:

•••	$\langle \rangle$	Security & Privacy		Q Search
	Gener	ral FileVault Firewal	I Privacy	
	A login password has beer	n set for this user Cha	nge Password	
	🗹 Require password		leep or screen sav	
		hen the screen is locked	Set Lock Messa	age
	Disable automatic			
	Allow apps downloaded fro	om:		
	O App Store			
	App Store and ider	tified developers		
6 c	lick the lock to make change	IS.		Advanced ?

- i) First, uninstall the driver, please refer to the Uninstalling the Device Driver
- ii) Install the driver again, please refer to the <u>Installing the Device Driver</u>, The System Extensions Updated window that pops up when installing the driver, please click Open Security Preferences, Allow the permission.

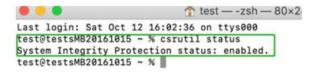


# General FileVault Firewall Privacy A login password has been set for this user Change Password... Require password Immediately C after sleep or screen saver begins Show a message when the screen is locked Set Lock Message... Disable automatic login Allow apps downloaded from: App Store App Store App Store and identified developers System software from developer "HighPoint Technologies, Inc" was Allow Image: Click the lock to prevent further changes. Advanced... ?

# **Checking the SIP Status**

Open a Terminal window and enter the following command: csrutil status

Please take a screenshot of the output, and attach it to a support case (see example below):



The status will vary depending on which version of macOS you are using:

macOS Version	SIP Status	Driver Status
10.13.X	Disable	Loaded
10.14.x	Enable	Loaded
10.15.x	Enable	Loaded
11.x	Enable	Loaded

Disable SIP please refer to **Disabling SIP (for macOS13x and earlier)** 

### Systems with T2 chipsets - Secure Boot status

You will need reboot the system and enter Recovery Mode to check the Secure Boot status. This setting should remain **disabled**.

Please refer to **Disabling Secure Boot** 

# Checking the Driver status and Version

Click on System Information → Extensions, and then click on HighPointIOP entry – please take a screenshot and attach it this support case (see the example below):

# Make sure System Information → Extensions → HighPointIOP 'Loaded' is Yes

Fibre Channel							
- INTRESIDENTED	Extension Name	^	Version	Last Modified	Notarized	Loaded	Obtained from
FireWire	HFS MacJapanese		8.0	2020/1/1, 4:00 PM	Yes	No	Apple
Graphics/Displays	HFS MacKorean		8.0	2020/1/1, 4:00 PM	Yes	No	Apple
Memory	HFSEncodings		1.0	2020/1/1, 4:00 PM	Yes	Vac	Apple
NVMExpress	HighPointIOP		4.4.8	2021/4/12, 10:10 AM	Yes	Yes	Identified Dev
PCI	HighPointRR		4.23.2	2021/4/2, 10:07 AM	Yes	100	Identified Dev
Parallel SCSI	initioFWBridge		511.60.2	2020/1/1, 4:00 PM	Yes	No	Apple
Power	Intel82574L		2.7.2	2020/1/1, 4:00 PM	Yes	No	Apple
Printers	InvalidateHmac		1.0	2020/1/1, 4:00 PM	Yes	Yes	Apple
SAS	10000000 1		40.0		**		
SATA							
SPI	HighPointIOP:						
Storage	-						
Thunderbolt/USB4	Version: 4.4.8	100000000000000000000000000000000000000					
USB		12, 10:10 AM	0				
~ Network	Notarized: Yes	inpoint-tech.kext.High	PointiOP				
Firewall	Loaded: Yes						
Locations	Get Info String: Version	: 4.4.8. Copyright (c) 2	021 HighPo	int Technologies, Inc.			
Volumes	Obtained from: Identifie	d Developer	10.20 Dec. 10.00	009-150-150-050-050-050-050-050-050-050-050			
WWAN	Kind: Universi						
Wi-Fi		, x86_64					
~ Software	64-Bit (Intel): Yes		22.83.5				
	Location: /Library, Kext Version: 4.4.8	/Extensions/HighPoint)	OP.kext				
Accessibility							
Accessibility Applications		41974901920000					
Applications		41874801820000					
Applications Developer	Load Address: 184467 Loadable: Yes Dependencies: Satisfie						
Applications Developer Disabled Software	Loadable: Yes Dependencies: Satisfier Signed by: Develop	d er ID Application: Hig!	Point Tech	nologies, Inc (DX6G69M	19N2), Develop	er ID Certifica	ition Authority,
Applications Developer Disabled Software Extensions	Loadable: Yes Dependencies: Satisfie	d er ID Application: Hig!	Point Tech	nologies, Inc (DX6G69M	19N2), Develop	er ID Certifica	ition Authority,
Applications Developer Disabled Software Extensions Fonts	Loadable: Yes Dependencies: Satisfier Signed by: Develop	d er ID Application: Hig!	Point Tech	nologies, Inc (DX6G69M	19N2), Develop	er ID Certifica	ition Authority,
Applications Developer Disabled Software Extensions Fonts Frameworks	Loadable: Yes Dependencies: Satisfier Signed by: Develop	d er ID Application: Hig!	Point Tech	nologies, Inc (DX6G69M	9N2), Develop	er ID Certifica	ation Authority,
Applications Developer Disabled Software Extensions Fronts Frameworks Installations	Loadable: Yes Dependencies: Satisfier Signed by: Develop	d er ID Application: Hig!	Point Tech	nologies, Inc (DX6G69M	9N2), Develop	er ID Certifica	ation Authority,
Applications Developer Disabled Software Extensions Fonts Frameworks Installations Language & Region	Loadable: Yes Dependencies: Satisfier Signed by: Develop	d er ID Application: Hig!	nPoint Tech	nologies, Inc (DX6G69N	9N2), Develop	er ID Certifica	ation Authority,
Applications Developer Disabled Software Extensions Frameworks Installations Language & Region Legacy Software	Loadable: Yes Dependencies: Satisfier Signed by: Develop	d er ID Application: Hig!	Point Tech	nologies, Inc (DX6G69M	9N2), Develop	er ID Certifica	ation Authority,
Applications Developer Disabled Software Extensions Fonts Fonts Installations Language & Region Legacy Software Logs	Loadable: Yes Dependencies: Satisfier Signed by: Develop	d er ID Application: Hig!	Point Tech	nologies, Inc (DX6G69M	19N2), Develop	er ID Certifica	ation Authority,
Applications Developer Disabled Software Extensions Fonts Frameworks Installations Language & Region Legacy Software Logs Managed Client	Loadable: Yes Dependencies: Satisfier Signed by: Develop	d er ID Application: Hig!	Point Tech	nologies, Inc (DX6G69M	I9N2), Develop	er ID Certifica	ation Authority,
Applications Developer Disabled Software Extensions Fonts Fromtworks Installations Language & Region Legacy Software Logs Managed Client Preference Panes	Loadable: Yes Dependencies: Satisfier Signed by: Develop	d er ID Application: Hig!	Point Tech	nologies, Inc (DX6G69M	I9N2), Develop	er ID Certifica	ation Authority,
Applications Developer Disabled Software Extensions Fonts Frameworks Installations Language & Region Legacy Software Logs Managed Client	Loadable: Yes Dependencies: Satisfier Signed by: Develop	d er ID Application: Higl oot CA			19N2), Develop	er ID Certifica	ation Authority,

Note: The driver revision shown in the screenshots may not correspond with current software releases. Please make sure to download the latest driver updates from the product's Software Updates page.

# **WebGUI Screenshots**

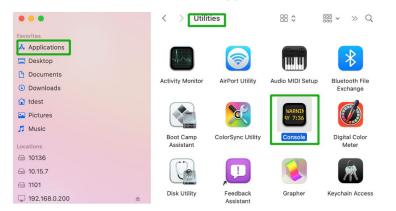
Please take screenshots of WEBGUI each Tab (such as Physical, Logical, Event, etc.) and upload these to your support case. In addition, check the Event log tab and save a copy of the current log – please upload this to the support case.

# WebGUI service restart

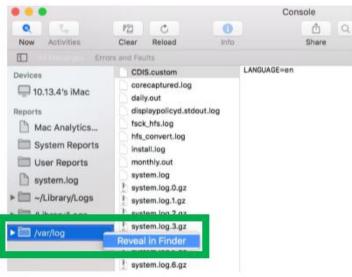
If you can't connect to the WebGUI, please check if a process named raidman-httpsd is running on the system. If it is not running, you can start it manually by opening a terminal window and running the command: "**sudo hptdaemonctl restart**".

# How to Collect System Logs

Please attach a copy of the /var/log folder to your support ticket.
 To locate the /var/log Folder: 1. Go to Applications → Utilities → Console:



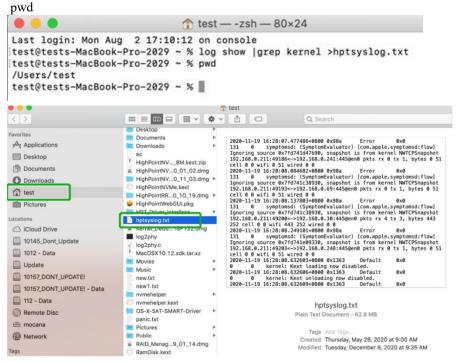
2) On the left side of the Console application, right-click on the /var/log folder and select Reveal in Finder:



3) You should then be automatically directed to the log folder in the var directory. Please remember when sending the folder to zip file, you should first direct it to a separate location (such as the desktop).

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Desktop	🔁 private	>	🚞 tmp	>	🥫 audit		daily.out	
Documents	System	>	📄 var	>	tackups		📄 DiagnosticMessages	>
	🔤 Users	>			Containers	>	🚞 displaypolicy	>
Downloads					🚞 db	>	📄 displaypolid.stdout.lo	g
· tdest					🚞 empty	>	🚞 dm	>
Pictures					i folders	>	🛅 emond	>
Music					📷 install		fsck_apfs_error.log	
Wusie					🥫 jabberd		fsck_apfs.log	
ations					🚞 lib	5	fsck_hfs.log	
10136					🚞 log	>	hpt.log	
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1101					🚞 mail	>	install.log	
) mocana					🚞 MobileSoftwareUpdate	>	kernel-shutdown.log	
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Purple					🚞 spool	>	system.log.4.gz	
					-		to evetom log 5 gz	

- 4) In addition to /var/log Folder detailed above, please attach a copy of the errlog.txt file:
  - a. Open terminal and type the following, then press Enter:
    log show |grep kernel > hptsyslog.txt
    Note:
    It takes about 5-10
    minutes to respond after this command is entered, please don't worry, this isbecause your log file i s relatively large, so it takes a lot of time.
  - b. Enter the following command to view the path where the log is stored.



Please attach the hptsyslog.txt to your support ticket