

# How to Configure SNMP Trap in AccelStor All-Flash Array

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## **Version History**

Version	Changed	Date
V1.0	First release	20170603



## **SNMP Trap**

SNMP (Simple Network Management Protocol) is used to manage network connected systems. It has a simple set of operations that allow devices to be managed remotely. A network connected system consists of one or more remotely managed devices. Managers control a device by sending SNMP messages to SNMP agent software installed in the device. SNMP agents send an event or notification to managers when a given condition is met. These are sent as SNMP trap messages.

An introduction about how to configure SNMP trap service follows below.

## **NeoSapphire GUI**

1. On the menu to the left, select **System** -> **Notifications** and check **Enable**.

For administrative purposes, there are many event notifications available that have been categorized into 4 groups: **System Status**, **Free Space**, **Array Status** and **Drive Health**.

Select some or all of the items as needed.

🖵 Dashboard	Notification Settings	E-Mail Settings SNMP Settings
V 🕈 System	🔿 Save 🗶 Res	
General Settings	Consul Continue	
O Date/Time	- General Sectings -	
The Network	Enable	
Votifications	Silent Interval	60  Minutes Rate limit of duplicate potifications caused by same instances of events
🖤 Image Update		
Import/Export	- System Status	
Sectory Default	Enable	Notification
Storage	<b>V</b>	System status changed
Share		System booted up
Conformation Winterd		System shutting down
		System undean shutdown detected
		System warning
	V	System error
		Power supply error
	- Free Space	
	Enable	Notification
	•	Free space status changed
		Low in free space (90% + of physical capacity occupied)
		Critical in free space (array becoming read-only)
	- Array Status	
	Enable	Notification
		Array status changed
		Array reinitialization started
		Array reinitialization completed
		Array rebuilding started
		Array rebuilding in progress
		Array rebuilding completed
		Array degraded
		Drive status altered
		Drive failed
		Drive removed
		Drive inserted
	- Drive Health	
	Enable	Notification
	(M)	Drive health degraded madend valles:
	V	Unive rieard) degradued - marked yellow

2. Switch to the SNMP Settings tab and enable SNMP Control.



Notifica	tion Settings	E-Mail Settings	SNMP Settings
<ul> <li>Save</li> </ul>	💲 Reset ,	🛃 Download MIB 🛛 🖾	Send Test Trap
Enable	Control	]	

3. Enter the IP address of the **Receiver Host** (the SNMP management server) and click **Save**.

오 Save 💲 Res	set 🛃 Download MIB 🛛 Send Test Trap	
- SNMP Control -		
Enable		
- Trap Configurat	tion	
Version	2c	
Community	public	
Receiver Host	10.144.1.141 This field should be a domainname or an IP address	
Receiver Port	162	

#### Click **Apply** and **Yes** to complete the configuration.

A The configuration has been changed.	You must apply the changes in order for them to take effect.	<ul> <li>Apply</li> </ul>	
Parameters			
Version	Version of SNMP protocol to use for the trap. Default i (Note: only community-based SNMPv2c is supported.)	use for the trap. Default is 2c. SNMPv2c is supported.)	
Community	The communities configured in the community menu when sending out the trap. (Note: please enter your e SNMP trap community name given by the network monitoring software setting on the server. Public is a s for read-only community; private is for read-write community.)	to use xact string	
Receiver Host	Enter host information. IP address and host name are allowed, not the local host information.		
Receiver Port	Specify that port number 162 is set to default for SNN it can be modified to the same port number as the about host server.	1P trap; ove	
Download MIB	Acquire AccelStor-defined Management Information E (MIB) file. Import this MIB file into your trap receiver application/SW. Once you get the trap notifications, yo don't have to look up the Object ID (OID) from the MI	Base B.	
Send Test Trap	Validate settings are correct.		



## **SNMP Management Server**

- 1. You need SNMP trap software to receive event trap notifications. For demonstration purposes, there is ample free software available. Choose one with support for SNMP trap functionality. (Note: for commercial use, please purchase a genuine copy.) In this document, the SNMP browser is used for demonstration. You can download it from <u>here</u>.
- 2. Download and unzip the MIB file from the management interface on NeoSapphire.



3. Load the MIB into the SNMP browser.



4. Select the MIB file.

Look in:	NS3600_	MIB	~	1 📂 🖽 -	
全日 最近的項目		ror-smi Phire-mib			
点面					
文件					
文件  本機					
文件 本機	File name:	NEOSAPPHIRE-MIB.txt			Open

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## **Test Result**

1. Enable Trap Receiver in the SNMP browser.

😼 iReasoning MIB Browser

File Edit Operations	Tools Bookmarks Help	
Address:	🔌 Trap Receiver	Ctrl+I
SNMP MIBs	Trap Sender	
MIB Tree	Ping	
	Trace Route	

#### 2. Start Trap Receiver.

Result Table Trap Receiver ×			
Operations Tools			
🜔 🛯 🎦 🔏			
Description	Source	Time	Severity

#### 3. In the NeoSapphire management interface, click Send Test Trap.

Notifi	Notification Settings		otification Settings   E-Mail 9		E-Mail Settings	SNMP Settings	
0 S	ave	C Resel	🛃 Download MIE	8 🔀 Send Test Trap	]		
Success					×		
(j)	The	test trap has	s been sent successful OK	y. Please check your tra	ap receiver.		

4. Check to ensure that the **Trap Receiver** received the test trap notification.

	soning MIB Browser							2 <u>44</u>	
File Ec	dit Operations Tools	Bookmarks H	lelp						
Address:	~	Advanced	OID: 1.3.6.1.4.1.46	032			✓ Operations: Get	~	<b>60</b>
SNMP MI	Bs		Result Table	Trap Receiver ×					
P MIB T	ree		Operations	Tools					
18-1-1 m	org dod internet private enter	prises accetsion	0 0 10						
				VII 46	Levinor	Termentor			
			Description		Source	Time		Sevenity	
			Source: Trap OID: Variable Bind Name: Value:	10.144.13.14 iso.org.dod.internet.pri ings: .1.3.6.1.2.1.1.3.0 [TimeTicks] 175 hours	Timestamp: ivate.enterprises.accelstor.neosapp1 4 minutes 18 seconds (63025878)	175 hours 4 minutes 18 second irre.event.trapSystemStatus.trapSystemW	îs SN 'arning Co	MP Version: mmunity:	2 public
			Name:	snmpTrapOID					
			Value:	[OID] trapSystemWarn	iing				
			Name:	.iso.org.dod.internet.pri	ivate.enterprises.accelstor.neosappl	nire.event.eventSystemStatus.eventSystem	nWarning		
			Value:	[OctetString] Trap test					
Name OID MIB	accelstor 1.3.6.1.4.1.46032 ACCELSTOR-SMI		Description:	One or more system w	arnings are detected.				
Syntex	0								
Access Status			1						
DefVal									
DefVal Indexes									

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