



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

## 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.

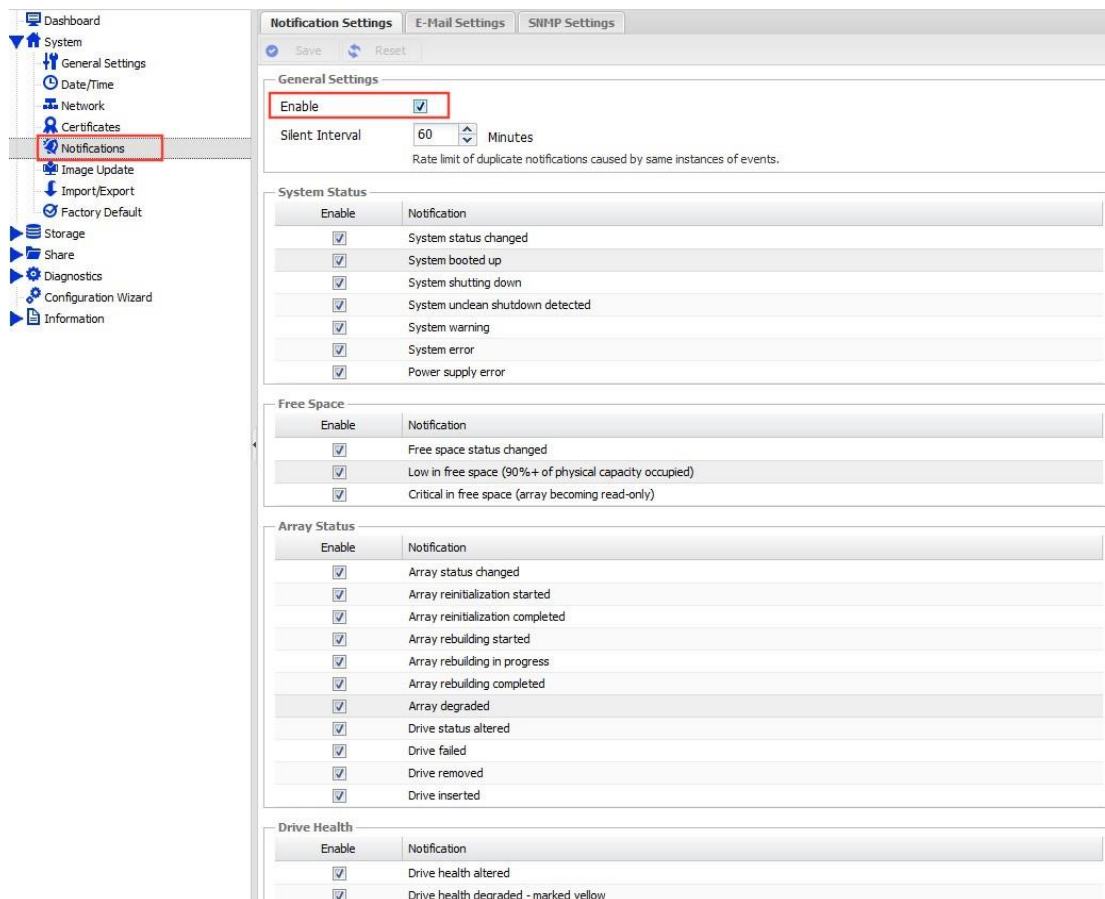
An introduction about how to configure SNMP trap service follows below.

## 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.



The screenshot displays the NeoSapphire GUI's 'Notification Settings' configuration page. The left sidebar shows the 'Notifications' menu item selected. The main panel shows the 'Notification Settings' tab with the 'Enable' checkbox checked. Below this, there are four sections: 'System Status', 'Free Space', 'Array Status', and 'Drive Health', each with a table of notification events and their corresponding 'Enable' checkboxes.

Enable	Notification
<input checked="" type="checkbox"/>	System status changed
<input checked="" type="checkbox"/>	System booted up
<input checked="" type="checkbox"/>	System shutting down
<input checked="" type="checkbox"/>	System unclean shutdown detected
<input checked="" type="checkbox"/>	System warning
<input checked="" type="checkbox"/>	System error
<input checked="" type="checkbox"/>	Power supply error

Enable	Notification
<input checked="" type="checkbox"/>	Free space status changed
<input checked="" type="checkbox"/>	Low in free space (90%+ of physical capacity occupied)
<input checked="" type="checkbox"/>	Critical in free space (array becoming read-only)

Enable	Notification
<input checked="" type="checkbox"/>	Array status changed
<input checked="" type="checkbox"/>	Array reinitialization started
<input checked="" type="checkbox"/>	Array reinitialization completed
<input checked="" type="checkbox"/>	Array rebuilding started
<input checked="" type="checkbox"/>	Array rebuilding in progress
<input checked="" type="checkbox"/>	Array rebuilding completed
<input checked="" type="checkbox"/>	Array degraded
<input checked="" type="checkbox"/>	Drive status altered
<input checked="" type="checkbox"/>	Drive failed
<input checked="" type="checkbox"/>	Drive removed
<input checked="" type="checkbox"/>	Drive inserted

Enable	Notification
<input checked="" type="checkbox"/>	Drive health altered
<input checked="" type="checkbox"/>	Drive health degraded - marked yellow

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

Notification Settings | E-Mail Settings | **SNMP Settings**

Save | Reset | Download MIB | Send Test Trap

**SNMP Control**

Enable

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

Save | Reset | Download MIB | Send Test Trap

**SNMP Control**

Enable

**Trap Configuration**



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.

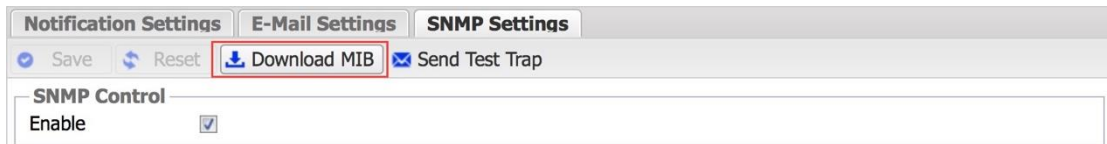
 The configuration has been changed. You must apply the changes in order for them to take effect.  Apply

Parameters

Version	Version of SNMP protocol to use for the trap. Default is 2c. (Note: only community-based SNMPv2c is supported.)
Community	The communities configured in the community menu to use when sending out the trap. (Note: please enter your exact SNMP trap community name given by the network monitoring software setting on the server. Public is a string for read-only community; private is for read-write community.)
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 SNMP trap; it can be modified to the same port number as the above host server.
Download MIB	Acquire AccelStor-defined Management Information Base (MIB) file. Import this MIB file into your trap receiver application/SW. Once you get the trap notifications, you don't have to look up the Object ID (OID) from the MIB.
Send Test Trap	Validate settings are correct.

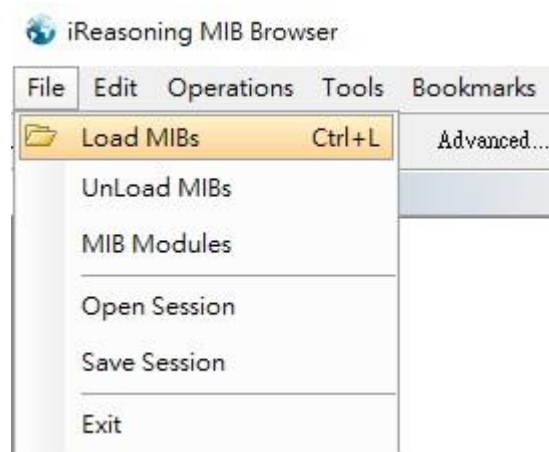
## SNMP Management Server

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 [here](#).
2. Download and unzip the MIB file from the management interface on NeoSapphire.

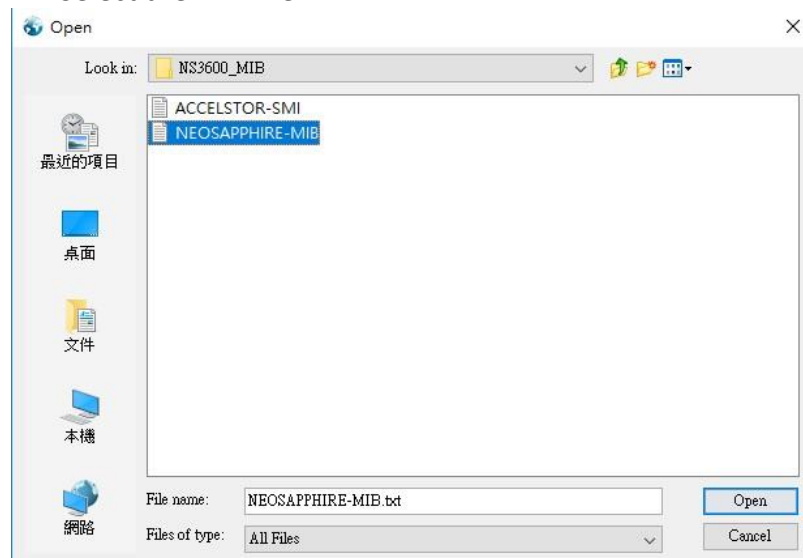


3. Load the MIB into the SNMP browser.

1.

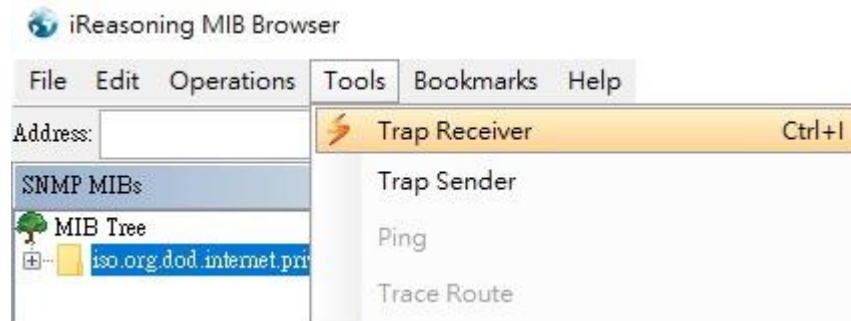


4. Select the MIB file.

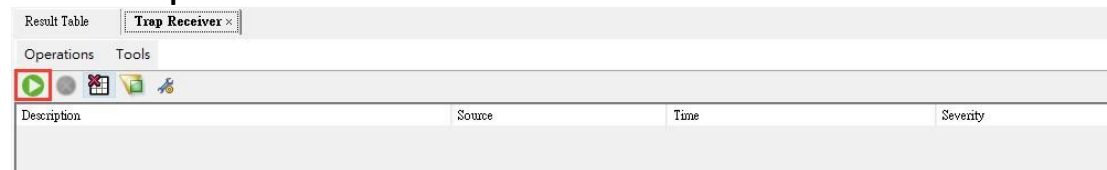


## Test Result

1. Enable **Trap Receiver** in the SNMP browser.



2. Start **Trap Receiver**.



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



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

