

Question: What are the meanings and possible causes of the private Gigamon SNMP Trap messages.

Answer: See each trap listed below for the details of the description and possible causes. Some of the traps are **edge triggered** events and some are **polled events**. The edge triggered events will send a trap immediately. The polled events are queried every 30 seconds. If a change from the previous state is detected at the time of the query, a trap will be sent. Beside each trap is indicated whether the trap type is edge triggered or polled.

Note: To clearly display the details of the trap messages, the Gigamon MIB file must be compiled and loaded into the 3rd Party SNMP Trap Receiver software. Also when adding the Trap Host Destinations in the GigaVUE, if version 2 is selected, more details such as the affect port number, delta values of packets, will be available where applicable.

Example: `config snmp_trap host 192.168.1.150 all ver 2 alias John'sPC`

#1. **gigamonSnmPacketDropNotification** (polled every 30 seconds)

Description: The specified port has experienced packet drop during the last 30 second polling interval. This counter is reset after each poll event. On the GigaVUE-MP platform, the only way to determine if packet drops are occurring is to enable this SNMP Trap. In the GigaVUE-420 and GigaVUE2404, in addition to the SNMP Trap, an event will be logged in the syslog.log file without enabling the SNMP Trap.

Probable Causes, Symptoms and Resolutions:

These packet drops are normal behavior for any traffic aggregation devices.

Multiple causes may contribute to the packet drops reported by this trap.

- a. The network ports connected to a tool port are receiving traffic exceeding its connected output port's capacity. The average bandwidth on the network ports may be low, but the peak traffic coming in at same time (sometimes called a micro-burst) on 2 or more ports can still cause packet drops since they can overwhelm available bandwidth on the output ports.
- b. The random nature of traffic distribution makes it difficult to eliminate packet drops entirely. The packet drops may be reduced via putting filters on the input ports or use ST mapping to distribute the desired packets to the proper tools. See the GigaVUE users guide on setting up filters and maps. If these actions does not reduce the packet drop count to a satisfactory level, capture the 'show diag' command output in a Notepad text file and contact Gigamon Support for possible recommendations to minimize dropped packets.

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#2. **gigamonSnmpPortLinkChangeNotification** (polled every 30 seconds)

(Starting in version 6.1 polled every 1 second for GV2404/GV420/GVMP)

Description: The specified port has experienced a link down or link up state change.

Probable Causes, Symptoms and Resolutions:

This trap is sent when a link state changes from up/down to down/up. This is normal behavior if the GigaVUE port's end point has changed its state, a user has manually changed the GigaVUE port's link up or down state, or a cable is plugged or unplugged.

If a port is configured as part of a port-pair, and the link on one side goes down, the GigaVUE will propagate the link state to the other port in the port pair resulting in two link state change traps being sent.

If this trap occurs without any of the above conditions happening, capture the 'show diag' command output in a Notepad text file and contact Gigamon Support.

#3. **gigamonSnmpUserAuthFailNotification** (edge triggered, only on login attempt)

Description: A user login attempt has failed.

Probable Causes, Symptoms and Resolutions:

This is caused when:

- a. a user attempts to log in to the GigaVUE with an incorrect username or password, or the user does not have an account on the system yet.
- b. The privilege level settings in GigaVUE do not match the privilege level settings in the TACACS/RADIUS server.

#4. **gigamonSnmpConfigSaveNotification** (edge triggered, only on CLI command)

Description: A user has just saved the system configuration to a file.

Probable Causes, Symptoms and Resolutions:

This trap is sent whenever a user saves a configuration to a configuration file using the **config save** command.

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#5. **gigamonSnmprResetSystemNotification** (edge triggered, only on startup)

Description: System reset notification triggered by cold or warm start. This trap is issued after the system has completed its reboot.

Probable Causes, Symptoms and Resolutions:

This can be caused by:

- a. a user issued the 'reset system' command. When a 'reset system' command is received, the message "System being reset, shutting down..." is also broadcast to all users who are logged into the GigaVUE.
- b. a user power cycled the system using the power supply module switches or the system suffered a power loss and comes back up.
- c. intermittent power supply failure. This may be accompanied by a PowerStatusChangeTrap (see Trap #9 below). If these traps are seen in combination, capture the 'show diag' command output in a Notepad text file and contact Gigamon Support.
- d. a software crash and reboot. To confirm a software crash is occurring, connect a terminal to the GigaVUE's serial port. When a crash occurs an address will be output to the serial port followed by the normal boot messages (see example below). Capture any output from the serial port during the crash along with the 'show diag' command output (after it reboots) in a Notepad text file and contact Gigamon Support.

Example: **T0bthread:00007c03;40:00422064;01:0058304c** followed by:

```
+Read MAC from NVRAM [OK]
Ethernet eth0: MAC address 00:a0:d1:e2:db:2a
IP: 192.168.1.211/255.255.255.0, Gateway: 192.168.1.1
Default server: 10.0.0.1, DNS server IP: 10.0.0.1
RedBoot(tm) bootstrap and debug environment [ROMRAM]
Certified release, version GV_RB3.0 - built 11:04:42, Oct 29 2006
Copyright (C) 2000, 2001, 2002, Red Hat, Inc.
RedBoot> fis load -b 0x80500000 gv.3_5_11
RedBoot> go 0x805000bc
Network stack using 139776 bytes for misc space
    139776 bytes for mbufs
    280576 bytes for mbuf clusters
Read MAC from NVRAM [OK]
Initializing chipsets...[OK]
UCD-SNMP version 4.1.2
Restoring system parameters [OK]
Restoring user configurations [OK]
Initializing command line interfaces [OK]
```

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#6. **gigamonSnmprxTxErrorNotification** (polled every 30 seconds)

Description: This trap indicates the specified port has received one or more packets with errors (CRC, packets too large or too small, alignment errors, etc).

Probable Causes, Symptoms and Resolutions:

This trap is sent when an interface receives an error packets. This usually indicates a physical layer problem in the cabling, NIC, or cabling configuration.

#7. **gigamonSnmptapRelayChangeNotification** (edge triggered)

Description: A GigaVUE hardware module was removed or inserted.

Probable Causes, Symptoms and Resolutions:

This trap is sent when:

- a. A user removes or inserts a module.
- b. If this trap is received without a user removing or inserting a module, then it may indicate a system problem. In this case, capture the 'show diag' command output in a Notepad text file and contact Gigamon Support.

#8. **gigamonSnmptapRelayChangeNotification** (edge triggered, only on CLI command)

Description: A user has initiated, through the **config port-params x taptx active/passive** command, to change the specified Tap-TX port-pair's operational mode between "active" and "passive".

Probable Causes, Symptoms and Resolutions:

This trap is sent when a user initiates a Tap-TX mode change using the **config port-params x taptx active/passive** command. See the GigaTAP-TX FAQ for information

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related to the link re-negotiation times. If this trap is seen without a user issuing this command, capture the 'show diag' command output in a Notepad text file and contact Gigamon Support.

#9. **gigamonPowerChangeNotification** (polled every 30 seconds)

Description: One of the power supply modules has either been turned "ON" or "OFF".

Probable Causes, Symptoms and Resolutions:

This trap is sent when a power supply is turned on or off. If this trap is received without a user turning a power supply on or off, then capture the 'show diag' command output in a Notepad text file and contact Gigamon Support.

#10. **gigamonFanChangeNotification** (polled every 30 seconds)

Description: One of the fan modules speed has changed.

Probable Causes, Symptoms and Resolutions:

This trap is sent when a change in fan speed is detected. If a fan module has not been inserted or removed, then capture the 'show diag' command output in a Notepad text file and contact Gigamon Support.

#11. **gigamonTemperatureChangeNotification** (polled every 30 seconds)

Description: The internal temperature of the system has exceed 67 degrees Celsius. This SNMP Trap is available only on the GigaVUE-420 version 4.0 software. In later releases, this event is broadcast to the CLI screen and logged to the syslog,log file on both the GigaVUE-420 and GigaVIU-2404 platforms.

Probable Causes, Symptoms and Resolutions:

If this trap is received, make sure both Fan Modules are operating correctly. Also check the ambient room temperature.

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#12. **gigamonSnmptFirmwareChangeNotification (edge triggered, only on startup)**

Description: The system firmware version has changed.

Probable Causes, Symptoms and Resolutions:

This trap is sent the first time the system is rebooted after a different version of the GigaVUE software has been downloaded and installed into its flash memory.

For Technical Support contact Gigamon Systems via email at support@gigamon.com or call 408-263-2024.

