

How to use Net-SNMP to set up the traffic control (packet storm control) On the DES-3528

::: MIB: PKT-STORM-CTRL-MIB -> swPktStormCtrlTable

::: OID: 1.3.6.1.4.1.171.12.25.3.1

::: Cmd: #snmpwalk -c private -v2c 10.90.90.90 1.3.6.1.4.1.171.12.25.3.1

The screenshot shows the MIB Tree on the left and the Object Information on the right. The MIB Tree is expanded to show the PKT-STORM-CTRL-MIB hierarchy, with swPktStormCtrlTable selected. The Object Information panel displays the following details:

Object name	swPktStormCtrlTable
Object ID	1.3.6.1.4.1.171.12.25.3.1
Module	PKT-STORM-CTRL-MIB
Base syntax	Sequence Of swPktStormCtrlEntry
Access	Not_Accessible
Status	Current
Sequence	1:swPktStormCtrlPortIndex - Integer 2:swPktStormCtrlThreshold - Integer 3:swPktStormCtrlBroadcastStatus - Integer 4:swPktStormCtrlMulticastStatus - Integer 5:swPktStormCtrlUnicastStatus - Integer 6:swPktStormCtrlActionStatus - Integer 7:swPktStormCtrlCountDown - Integer 8:swPktStormCtrlTimeinterval - Integer 9:swPktStormCtrlShutdownForever - Integer 10:swPktStormCtrlBCastThreshold - Integer 11:swPktStormCtrlMCastThreshold - Integer 12:swPktStormCtrlUnicastThreshold - Integer
Parent node	swPktStormMgmt
First child	swPktStormCtrlEntry
Description	A table that contains information about packet storm control. S/W mechanism is provided to monitor the traffic rate in addition to the H/W storm control mechanism. If traffic rate is too high, this port will be shut down.

● swPktStormCtrlEntry

1. swPktStormCtrlPortIndex – Integer

::: Command (on port 1):

snmpwalk -c private -v2c 10.90.90.90 1.3.6.1.4.1.171.12.25.3.1.1.1.1

Object name	swPktStormCtrlPortIndex
Object ID	1.3.6.1.4.1.171.12.25.3.1.1.1
Module	PKT-STORM-CTRL-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Only
Status	Current
Value list	1 : 0..65535
Parent node	swPktStormCtrlEntry
First child	None
Description	This object indicates the device's port number.(1..Max port number in the device).Used to specify a range of ports to be configured.

2. swPktStormCtrlthreshold – Integer

::: Command (on port 1, threshold 1000):

```
snmpwalk -c private -v2c 10.90.90.90 1.3.6.1.4.1.171.12.25.3.1.1.2.1
```

```
snmpset -c private -v2c 10.90.90.90 1.3.6.1.4.1.171.12.25.3.1.1.2.1 i 1000
```

Object name	swPktStormCtrlthreshold
Object ID	1.3.6.1.4.1.171.12.25.3.1.1.2
Module	PKT-STORM-CTRL-MIB
Base syntax	Integer
Composed syntax	Integer32
Access	Read-Write
Status	Obsolete
Parent node	swPktStormCtrlEntry
First child	None
Description	The upper threshold at which the specified storm control will turn on. .

3. swPktStormCtrlBroadcastStatus – Integer

::: Command (on port 1, status enabled):

```
# snmpwalk -c private -v2c 10.90.90.90 1.3.6.1.4.1.171.12.25.3.1.1.3.1
```

```
# snmpset -c private -v2c 10.90.90.90 1.3.6.1.4.1.171.12.25.3.1.1.3.1 i 2
```

Object name	swPktStormCtrlBroadcastStatus
Object ID	1.3.6.1.4.1.171.12.25.3.1.1.3
Module	PKT-STORM-CTRL-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Write
Status	Current
Value list	1 : disabled(1) 2 : enabled(2)
Parent node	swPktStormCtrlEntry
First child	None
Description	This object indicates the broadcast storm control enabled or disabled.

4. swPktStormCtrlMulticastStatus – Integer

::: Command (on port 1, status enabled):

```
# snmpwalk -c private -v2c 10.90.90.90 1.3.6.1.4.1.171.12.25.3.1.1.4.1
```

```
# snmpset -c private -v2c 10.90.90.90 1.3.6.1.4.1.171.12.25.3.1.1.4.1 i 2
```

Object name	swPktStormCtrlMulticastStatus
Object ID	1.3.6.1.4.1.171.12.25.3.1.1.4
Module	PKT-STORM-CTRL-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Write
Status	Current
Value list	1 : disabled(1) 2 : enabled(2)
Parent node	swPktStormCtrlEntry
First child	None
Description	This object indicates the multicast storm control enabled or disabled.

5. swPktStormCtrlUnicastStatus – Integer

::: Command (on port 1, status enabled):

snmpwalk -c private -v2c 10.90.90.90 1.3.6.1.4.1.171.12.25.3.1.1.5.1

snmpset -c private -v2c 10.90.90.90 1.3.6.1.4.1.171.12.25.3.1.1.5.1 i 2

Object name	swPktStormCtrlUnicastStatus
Object ID	1.3.6.1.4.1.171.12.25.3.1.1.5
Module	PKT-STORM-CTRL-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Write
Status	Current
Value list	1 : disabled(1) 2 : enabled(2)
Parent node	swPktStormCtrlEntry
First child	None
Description	This object indicates the unicast(Destination Loopback Fail) storm control enabled or disabled.

6. swPktStormCtrlActionStatus – Integer

::: Command (on port 1, status drop):

snmpwalk -c private -v2c 10.90.90.90 1.3.6.1.4.1.171.12.25.3.1.1.6.1

snmpset -c private -v2c 10.90.90.90 1.3.6.1.4.1.171.12.25.3.1.1.6.1 i 2

Object name	swPktStormCtrlActionStatus
Object ID	1.3.6.1.4.1.171.12.25.3.1.1.6
Module	PKT-STORM-CTRL-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Write
Status	Current
Value list	1 : shutdown(1) 2 : drop(2)
Parent node	swPktStormCtrlEntry
First child	None
Description	There are two actions to take for storm control, shutdown and drop. The former is implemented in S/W, and the latter is implemented in H/W. If user choose shutdown, Needs configure countdown and time_interval as well.

7. swPktStormCtrlCountDown – Integer

::: Note:

This parameter is only useful for ports configured as shutdown in the action field of this command (see the manual for the detailed)

::: Command (on port 1, action shutdown, count down value 5):

```
# snmpwalk -c private -v2c 10.90.90.90 1.3.6.1.4.1.171.12.25.3.1.1.7.1
```

```
# snmpset -c private -v2c 10.90.90.90 1.3.6.1.4.1.171.12.25.3.1.1.6.1 i 1
```

```
1.3.6.1.4.1.171.12.25.3.1.1.7.1 i 5
```

Object name	swPktStormCtrlCountDown
Object ID	1.3.6.1.4.1.171.12.25.3.1.1.7
Module	PKT-STORM-CTRL-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Write
Status	Current
Value list	1 : 0..30
Parent node	swPktStormCtrlEntry
First child	None
Description	If packet storm has been encountered continuously on given port for a long period of time (indicated by the value of this object), the port will be shut down forever until it's recovered manually. The range of the countdown time is 5-30 minutes. User can configure countdown to 0 to disable the function of shutdown forever. If set this value from 1 to 4 will get 'bad value' return code.

8. swPktStormCtrlTimeinterval – Integer

::: Command (on port 1, value 9):

```
# snmpwalk -c private -v2c 10.90.90.90 1.3.6.1.4.1.171.12.25.3.1.1.8.1
```

```
# snmpset -c private -v2c 10.90.90.90 1.3.6.1.4.1.171.12.25.3.1.1.8.1 i 9
```

Object name	swPktStormCtrlTimeinterval
Object ID	1.3.6.1.4.1.171.12.25.3.1.1.8
Module	PKT-STORM-CTRL-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Write
Status	Current
Value list	1 : 5..30
Parent node	swPktStormCtrlEntry
First child	None
Description	The sampling interval of received packet counts. The possible value will be 5~30 seconds.

9. swPktStormCtrlShutdownForever – Integer

::: Command (on port 1):

```
# snmpwalk -c private -v2c 10.90.90.90 1.3.6.1.4.1.171.12.25.3.1.1.9.1
```

Object name	swPktStormCtrlShutdownForever
Object ID	1.3.6.1.4.1.171.12.25.3.1.1.9
Module	PKT-STORM-CTRL-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Only
Status	Current
Value list	1 : yes(1) 2 : no(2)
Parent node	swPktStormCtrlEntry
First child	None
Description	This object indicates the storm control whether or not shutted down forever.