

# How to use SNMP to check the error port (TX Frame)

Example on DGS-3600

CLI Example- for TX Frames:

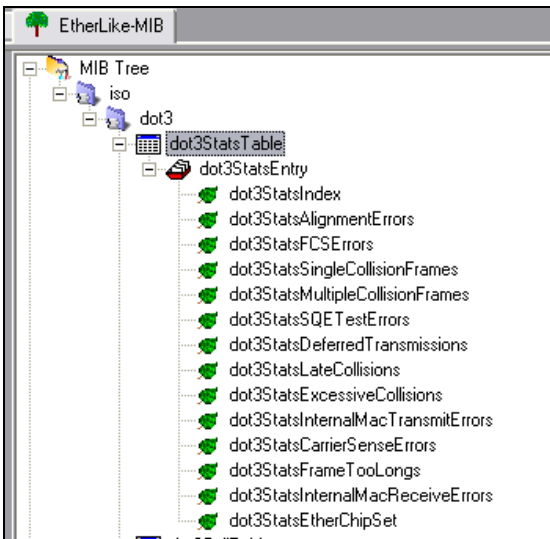
```
DGS-3650:admin#show error ports 1
Command: show error ports 1

Port number : 1
RX Frames
-----
CRC Error          0
Undersize          0
Oversize           0
Fragment           0
Jabber             0
Drop Pkts          0
Symbol Error       0
Buffer Full Drop   0
ACL Drop           0
Multicast Drop     0
VLAN Ingress Drop 0
TX Frames
-----
Excessive Deferral 0
CRC Error           0
Late Collision      0
Excessive Collision 0
Single Collision    0
Collision           0
```

The following is MIB for tx error counter in

iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1).transmission(10).dot3(7).dot3StatsTable(2).

EtherLike-MIB:



## 1. Excessive Deferral:

Object name	dot3StatsDeferredTransmissions
Object ID	1.3.6.1.2.1.10.7.2.1.7
Module	EtherLike-MIB
Base syntax	Counter
Composed syntax	Counter
Access	Read-Only
Status	Mandatory
Parent node	dot3StatsEntry
First child	None
Description	A count of frames for which the first transmission attempt on a particular interface is delayed because the medium is busy.  The count represented by an instance of this object does not include frames involved in collisions.

SNMP Command:

# snmpwalk -c public -v2c 10.90.90.90 1.3.6.1.2.1.10.7.2.1.7.1 (1=port 1)

## 2. CRC Error:

Object name	dot3StatsAlignmentErrors
Object ID	1.3.6.1.2.1.10.7.2.1.2
Module	EtherLike-MIB
Base syntax	Counter
Composed syntax	Counter
Access	Read-Only
Status	Mandatory
Parent node	dot3StatsEntry
First child	None
Description	<p>A count of frames received on a particular interface that are not an integral number of octets in length and do not pass the FCS check.</p> <p>The count represented by an instance of this object is incremented when the alignmentError status is returned by the MAC service to the LLC (or other MAC user). Received frames for which multiple error conditions obtain are, according to the conventions of IEEE 802.3 Layer Management, counted exclusively according to the error status presented to the LLC.</p>

SNMP Command:

```
# snmpwalk -c public -v2c 10.90.90.90 1.3.6.1.2.1.10.7.2.1.2.1 (1=port 1)
```

## 3. Late Collision:

Object name	dot3StatsLateCollisions
Object ID	1.3.6.1.2.1.10.7.2.1.8
Module	EtherLike-MIB
Base syntax	Counter
Composed syntax	Counter
Access	Read-Only
Status	Mandatory
Parent node	dot3StatsEntry
First child	None
Description	<p>The number of times that a collision is detected on a particular interface later than 512 bit-times into the transmission of a packet.</p> <p>Five hundred and twelve bit-times corresponds to 51.2 microseconds on a 10 Mbit/s system. A (late) collision included in a count represented by an instance of this object is also considered as a (generic) collision for purposes of other collision-related statistics.</p>

SNMP Command:

```
# snmpwalk -c public -v2c 10.90.90.90 1.3.6.1.2.1.10.7.2.1.8.1 (1=port 1)
```

#### 4. Excessive Collision:

Object name	dot3StatsExcessiveCollisions
Object ID	1.3.6.1.2.1.10.7.2.1.9
Module	EtherLike-MIB
Base syntax	Counter
Composed syntax	Counter
Access	Read-Only
Status	Mandatory
Parent node	dot3StatsEntry
First child	None
Description	A count of frames for which transmission on particular interface fails due to excessive collisions.

SNMP Command:

```
# snmpwalk -c public -v2c 10.90.90.90 1.3.6.1.2.1.10.7.2.1.9.1 (1=port 1)
```

#### 5. Single Collision:

Object name	dot3StatsSingleCollisionFrames
Object ID	1.3.6.1.2.1.10.7.2.1.4
Module	EtherLike-MIB
Base syntax	Counter
Composed syntax	Counter
Access	Read-Only
Status	Mandatory
Parent node	dot3StatsEntry
First child	None
Description	A count of successfully transmitted frames on a particular interface for which transmission is inhibited by exactly one collision.  A frame that is counted by an instance of this object is also counted by the corresponding instance of either the ifOutUcastPkts, ifOutMulticastPkts, or ifOutBroadcastPkts, and is not counted by the corresponding instance of the dot3StatsMultipleCollisionFrames object.

SNMP Command:

```
# snmpwalk -c public -v2c 10.90.90.90 1.3.6.1.2.1.10.7.2.1.4.1 (1=port 1)
```

## 6. Collision:

Object name	dot3StatsMultipleCollisionFrames
Object ID	1.3.6.1.2.1.10.7.2.1.5
Module	EtherLike-MIB
Base syntax	Counter
Composed syntax	Counter
Access	Read-Only
Status	Mandatory
Parent node	dot3StatsEntry
First child	None
Description	<p>A count of successfully transmitted frames on a particular interface for which transmission is inhibited by more than one collision.</p> <p>A frame that is counted by an instance of this object is also counted by the corresponding instance of either the ifOutUcastPkts, ifOutMulticastPkts, or ifOutBroadcastPkts, and is not counted by the corresponding instance of the dot3StatsSingleCollisionFrames object.</p>

SNMP Command:

```
# snmpwalk -c public -v2c 10.90.90.90 1.3.6.1.2.1.10.7.2.1.5.1 (1=port 1)
```