

D-link Switch: DGS-3627 Firmware: R1 MIB File: V1

How to use NET-SNMP – Limited Multicast (DGS-3627)

The Location of Limited Multicast OID

The screenshot shows the D-Link MIB Compiler interface. The left pane displays a list of MIB files with their corresponding Root IDs. The right pane shows a tree view of the selected MIB file's structure.

MIB	Root ID
DGS3612G-L2MGMT-MIB	1.3.6.1.4.1.171.11.70.9.2
DGS3627G-L2MGMT-MIB	1.3.6.1.4.1.171.11.70.8.2
DGS3627-L2MGMT-MIB	1.3.6.1.4.1.171.11.70.6.2
DGS3650-L2MGMT-MIB	1.3.6.1.4.1.171.11.70.5.2
DISMAN-PING-MIB	1.3.6.1.2.1.80
DISMAN-TRACEROUTE-MIB	1.3.6.1.2.1.81
DLINK-AGENT-MIB	1.3.6.1.4.1.171.12.1
DLINK-AUTH-MIB	1.3.6.1.4.1.171.12.3
DLINK-EQUIPMENT-MIB	1.3.6.1.4.1.171.12.11
DLINK-ID-REC-MIB	1.3.6.1.4.1.171
Dot1xMGMT-MIB	1.3.6.1.4.1.171.12.30
Double-VLAN-MIB	1.3.6.1.4.1.171.12.28
DVMRP-MIB	1.3.6.1.3.62
DXS3326GSR-SWL2MGMT-MIB	1.3.6.1.4.1.171.11.59.7.2
DXS3326GSR-SWL3MGMT-MIB	1.3.6.1.4.1.171.11.59.7.3
DXS3350SR-SWL2MGMT-MIB	1.3.6.1.4.1.171.11.59.8.2
DXS3350SR-SWL3MGMT-MIB	1.3.6.1.4.1.171.11.59.8.3
ENTITY-MIB	1.3.6.1.2.1.47
EQUIPMENT-MIB	1.3.6.1.4.1.171.12.11
EtherLike-MIB	1.3.6.1.2.1.10.7
FILE-SYSTEM-MIB	1.3.6.1.4.1.171.12.14
IANAifType-MIB	1.3.6.1.2.1.30
IANA-RTPROTO-MIB	1.3.6.1.2.1.84
IEEE8021-PAE-MIB	1.0.8802.1.1.1
IF-MIB	1.3.6.1.2.1.31
IGMP-STD-MIB	1.3.6.1.2.1.85
IGMPV3-MIB	1.3.6.1.4.1.171.12.18
IP-MAC-BIND-MIB	1.3.6.1.4.1.171.12.23
IPMROUTE-STD-MIB	1.3.6.1.2.1.83

The tree view on the right shows the following structure for the selected MIB:

- swL2IGMPRouterPortsVid
- swL2IGMPRouterStaticPortList
- swL2IGMPRouterDynamicPortList
- swL2IGMPRouterForbiddenPortList
- swL2TrafficSegMgmt
 - swL2TrafficSegTable
 - swL2TrafficSegEntry
 - swL2TrafficSegPort
 - swL2TrafficSegForwardPorts
- swL2plLimitedMulticastMgmt
 - swL2plLimitedMulticastTable
 - swL2plLimitedMulticastEntry
 - swL2plLimitedMulticastPortIndex
 - swL2plLimitedMulticastHead
 - swL2plLimitedMulticastTail
 - swL2plLimitedMulticastAccess
 - swL2plLimitedMulticastState
 - swL2plLimitedMulticastDelState
- swL2MgmtMIBTraps
 - swL2Notify
 - swL2NotifyPrefix
 - swL2NotifFirmware
 - swL2macNotification
 - swL2NotificationBindings
 - swL2macNotifInfo
- SNMPv1 Traps
 - No Traps
- Type Assignments
 - MacAddress
 - VlanId
 - PortList
- Textual Conventions

MIB File: DES3627-L2MGMT-MIB

OID: 1.3.6.1.4.1.171.11.70.6.2.15.1

Limited Multicast Table

Object name	swL2IpLimitedMulticastEntry
Object ID	1.3.6.1.4.1.171.11.70.6.2.15.1.1
Module	DGS3627-L2MGMT-MIB
Base syntax	Sequence
Access	Not_Accessible
Status	Current
Index	1.swL2IpLimitedMulticastPortIndex
Parent node	swL2IpLimitedMulticastTable
First child	swL2IpLimitedMulticastPortIndex
Description	A particular route to a particular destination, under a particular policy. Once an entry be built,it shouldn't be modified.That is,it just support create and delete action.

Show Limited Multicast Port Index

:: Command ::

```
snmpwalk -v2c -c public 192.168.0.1 1.3.6.1.4.1.171.11.70.6.2.15.1.1.1
```

Object name	swL2IpLimitedMulticastPortIndex
Object ID	1.3.6.1.4.1.171.11.70.6.2.15.1.1.1
Module	DGS3627-L2MGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Only
Status	Current
Value list	1 : 0.65535
Parent node	swL2IpLimitedMulticastEntry
First child	None
Description	A port to config the limited multicast address.

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Show Limited Multicast From IP

:: Command ::

```
snmpwalk -v2c -c public 192.168.0.1 1.3.6.1.4.1.171.11.70.6.2.15.1.1.2
```

Object name	swL2IpLimitedMulticastHead
Object ID	1.3.6.1.4.1.171.11.70.6.2.15.1.1.2
Module	DGS3627-L2MGMT-MIB
Base syntax	IP Address
Composed syntax	IpAddress
Access	Read-Write
Status	Current
Parent node	swL2IpLimitedMulticastEntry
First child	None
Description	The head of multicast address range.

Show Limited Multicast To IP

:: Command ::

```
snmpwalk -v2c -c public 192.168.0.1 1.3.6.1.4.1.171.11.64.1.2.5.1.1.3
```

Object name	swL2IpLimitedMulticastTail
Object ID	1.3.6.1.4.1.171.11.70.6.2.15.1.1.3
Module	DGS3627-L2MGMT-MIB
Base syntax	IP Address
Composed syntax	IpAddress
Access	Read-Write
Status	Current
Parent node	swL2IpLimitedMulticastEntry
First child	None
Description	The tail of multicast address range.

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Show Limited Multicast Access

:: Command ::

```
snmpwalk -v2c -c public 192.168.0.1 1.3.6.1.4.1.171.11.70.6.2.15.1.1.4
```

Object name	swL2IpLimitedMulticastAccess
Object ID	1.3.6.1.4.1.171.11.70.6.2.15.1.1.4
Module	DGS3627-L2MGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Write
Status	Current
Value list	1 : none(0) 2 : permit(1) 3 : deny(2)
Parent node	swL2IpLimitedMulticastEntry
First child	None
Description	It allow you to permit or deny multicast range.

Show Limited Multicast State

:: Command ::

```
snmpwalk -v2c -c public 192.168.0.1 1.3.6.1.4.1.171.11.70.6.2.15.1.1.5
```

Object name	swL2IpLimitedMulticastState
Object ID	1.3.6.1.4.1.171.11.70.6.2.15.1.1.5
Module	DGS3627-L2MGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Write
Status	Current
Value list	1 : other(1) 2 : disabled(2) 3 : enabled(3)
Parent node	swL2IpLimitedMulticastEntry
First child	None
Description	Enable or disable limited multicast address for the chosen portlist.

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Show Limited Multicast Del State

:: Command ::

```
snmpwalk -v2c -c public 192.168.0.1 1.3.6.1.4.1.171.11.70.6.2.15.1.1.6
```

Object name	swL2IpLimitedMulticastDelState
Object ID	1.3.6.1.4.1.171.11.70.6.2.15.1.1.6
Module	DGS3627-L2MGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Write
Status	Current
Value list	1 : valid(1) 2 : invalid(2)
Parent node	swL2IpLimitedMulticastEntry
First child	None
Description	Enable or disable delete limited multicast address for the chosen portlist.

Deny Client Report from Multicast address 239.1.1.10 to 239.1.1.12

SNMP Command

```
snmpset -v2c -c private 192.168.0.1 1.3.6.1.4.1.171.11.70.6.2.15.1.1.2.1 a 239.1.1.10  
1.3.6.1.4.1.171.11.70.6.2.15.1.1.3.1 a 239.1.1.12 1.3.6.1.4.1.171.11.70.6.2.15.1.1.4.1 i 2  
1.3.6.1.4.1.171.11.70.6.2.15.1.1.5.1 i 3
```

Step 1. Set up the Multicast Address Range “from” which IP address

```
snmpset -v2c -c private 192.168.0.1 1.3.6.1.4.1.171.11.70.6.2.15.1.1.2.1 a 239.1.1.10
```

1 → Port Number

239.1.1.10 → “From” Multicast Address

Step 2. Set up Multicast Address Range “to” which IP address

```
snmpset -v2c -c private 192.168.0.1 1.3.6.1.4.1.171.11.70.6.2.15.1.1.3.1 a 239.1.1.12
```

239.1.1.12 → “End” Multicast Address

Step 3. Set up Limited Multicast Access

```
snmpset -v2c -c private 192.168.0.1 1.3.6.1.4.1.171.11.70.6.2.15.1.1.4.1 i 2
```

2 → Deny

Step 4. Set up Limited Multicast State

```
snmpset -v2c -c private 192.168.0.1 1.3.6.1.4.1.171.11.70.6.2.15.1.1.5.1 i 3
```

3 → to set “Status” Enable

Enable or disable delete limited multicast address →

```
snmpset -v2c -c private 192.168.0.1 1.3.6.1.4.1.171.11.70.6.2.15.1.1.6.1 i 1
```

1 → Port Number