

# How to use NET-SNMP – Limited Multicast

## The Location of Limited Multicast OID Management

The screenshot shows a NET-SNMP browser interface. The top bar indicates the agent IP is 10.90.90.90. The left pane shows a list of MIBs, with 'DES3526-L2MGMT-MIB' selected. The main pane displays a tree view of the MIB structure. A red box highlights the 'swL2LimitedMulticastMgmt' node and its sub-nodes: 'swL2MulticastRangeTable', 'swL2LimitedMulticastPortInfo', and 'swL2LimitedMulticastRangeTable'. The right pane shows the details for the selected node 'swL2LimitedMulticastMgmt'.

Object name	swL2LimitedMulticastMgmt
Object ID	1.3.6.1.4.1.171.11.64.1.2.5
Module	DES3526-L2MGMT-MIB
Base syntax	Object Identifier
Access	Not Accessible
Status	Mandatory
Parent node	swL2MgmtMIB
First child	swL2MulticastRangeTable

**MIB File: DES3526-L2MGMT-MIB**

**OID: 1.3.6.1.4.1.171.11.64.1.2.5**

## Limited Multicast Table

Object name	swL2MulticastRangeTable
Object ID	1.3.6.1.4.1.171.11.64.1.2.5.1
Module	DES3526-L2MGMT-MIB
Base syntax	Sequence Of swL2MulticastRangeEntry
Access	Not_Accessible
Status	Current
Sequence	1:swL2MulticastRangeName - Octet String 2:swL2MulticastRangeFromIp - IP Address 3:swL2MulticastRangeToIp - IP Address 4:swL2MulticastRangeRowStatus - Integer
Parent node	swL2LimitedMulticastMgmt
First child	swL2MulticastRangeEntry
Description	.

### Show Limited Multicast Range Name

:: Command ::

```
snmpwalk -v2c -c public 192.168.0.1 1.3.6.1.4.1.171.11.64.1.2.5.1.1.1
```

Object name	swL2MulticastRangeName
Object ID	1.3.6.1.4.1.171.11.64.1.2.5.1.1.1
Module	DES3526-L2MGMT-MIB
Base syntax	Octet String
Composed syntax	DisplayString
Access	Read-Only
Status	Current
Parent node	swL2MulticastRangeEntry
First child	None
Description	This object specifies multicast range name.

## Show Limited Multicast Range From IP

### :: Command ::

```
snmpwalk -v2c -c public 192.168.0.1 1.3.6.1.4.1.171.11.64.1.2.5.1.1.2
```

Object name	swL2MulticastRangeFromIp
Object ID	1.3.6.1.4.1.171.11.64.1.2.5.1.1.2
Module	DES3526-L2MGMT-MIB
Base syntax	IP Address
Composed syntax	IpAddress
Access	Read-Create
Status	Current
Parent node	swL2MulticastRangeEntry
First child	None
Description	This object specifies begin IP address for this range.

## Show Limited Multicast Range 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	swL2MulticastRangeToIp
Object ID	1.3.6.1.4.1.171.11.64.1.2.5.1.1.3
Module	DES3526-L2MGMT-MIB
Base syntax	IP Address
Composed syntax	IpAddress
Access	Read-Create
Status	Current
Parent node	swL2MulticastRangeEntry
First child	None
Description	This object specifies end IP address for this range.

## Setup Multicast Range Row Range Status

### :: Command ::

```
snmpset -v2c -c public 192.168.0.1 1.3.6.1.4.1.171.11.64.1.2.5.1.1.4
```

Object name	swL2MulticastRangeRowStatus
Object ID	1.3.6.1.4.1.171.11.64.1.2.5.1.1.4
Module	DES3526-L2MGMT-MIB
Base syntax	Integer
Composed syntax	RowStatus
Access	Read-Create
Status	Current
Value list	1 : active(1) 2 : notInService(2) 3 : notReady(3) 4 : createAndGo(4) 5 : createAndWait(5) 6 : destroy(6)
Parent node	swL2MulticastRangeEntry
First child	None
Description	This object indicates the status of this entry.

## Limited Multicast Status Table

Object name	swL2LimitedMulticastStatusTable
Object ID	1.3.6.1.4.1.171.11.64.1.2.5.2.1
Module	DES3526-L2MGMT-MIB
Base syntax	Sequence Of swL2LimitedMulticastStatusEntry
Access	Not_Accessible
Status	Current
Sequence	1:swL2LimitedMulticastPort - Integer 2:swL2LimitedMulticastAccess - Integer 3:swL2LimitedMulticastState - Integer
Parent node	swL2LimitedMulticastPortInfo
First child	swL2LimitedMulticastStatusEntry
Description	.

## Show Limited Multicast Port

### :: Command ::

```
snmpwalk -v2c -c public 192.168.0.1 1.3.6.1.4.1.171.11.64.1.2.5.2.1.1.1
```

Object name	swL2LimitedMulticastPort
Object ID	1.3.6.1.4.1.171.11.64.1.2.5.2.1.1.1
Module	DES3526-L2MGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Only
Status	Current
Value list	1 : 1.65535
Parent node	swL2LimitedMulticastStatusEntry
First child	None
Description	This object indicates the port .

## Set Limited Multicast Access Type

### :: Command ::

```
snmpset -v2c -c public 192.168.0.1 1.3.6.1.4.1.171.11.64.1.2.5.2.1.1.2
```

Object name	swL2LimitedMulticastAccess
Object ID	1.3.6.1.4.1.171.11.64.1.2.5.2.1.1.2
Module	DES3526-L2MGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Write
Status	Current
Value list	1 : none(1) 2 : permit(2) 3 : deny(3)
Parent node	swL2LimitedMulticastStatusEntry
First child	None
Description	This object indicates the access type.

## Set Limited Multicast State

### :: Command ::

```
snmpset -v2c -c public 192.168.0.1 1.3.6.1.4.1.171.11.64.1.2.5.2.1.1.3
```

Object name	swL2LimitedMulticastState
Object ID	1.3.6.1.4.1.171.11.64.1.2.5.2.1.1.3
Module	DES3526-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	swL2LimitedMulticastStatusEntry
First child	None
Description	This object indicates the state for this port.

## Limited Multicast Range Table

Object name	swL2LimitedMulticastRange Table
Object ID	1.3.6.1.4.1.171.11.64.1.2.5.2.2
Module	DES3526-L2MGMT-MIB
Base syntax	Sequence Of swL2LimitedMulticastRangeEntry
Access	Not_Accessible
Status	Current
Sequence	1:swL2LimitedMulticastID - Integer 2:swL2LimitedMulticastRangeName - Octet String 3:swL2LimitedMulticastFromIp - IP Address 4:swL2LimitedMulticastToIp - IP Address 5:swL2LimitedMulticastRowStatus - Integer
Parent node	swL2LimitedMulticastPortInfo
First child	swL2LimitedMulticastRangeEntry
Description	.

## Show Multicast Range ID

### :: Command ::

```
snmpwalk -v2c -c public 192.168.0.1 1.3.6.1.4.1.171.11.64.1.2.5.2.2.1.1
```

Object name	swL2limitedMulticastID
Object ID	1.3.6.1.4.1.171.11.64.1.2.5.2.2.1.1
Module	DES3526-L2MGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Only
Status	Current
Value list	1 : 1.65535
Parent node	swL2limitedMulticastRangeEntry
First child	None
Description	This object indicates the range ID .

## Show Multicast Range Name

### :: Command ::

```
snmpwalk -v2c -c public 192.168.0.1 1.3.6.1.4.1.171.11.64.1.2.5.2.2.1.2
```

Object name	swL2limitedMulticastRangeName
Object ID	1.3.6.1.4.1.171.11.64.1.2.5.2.2.1.2
Module	DES3526-L2MGMT-MIB
Base syntax	Octet String
Composed syntax	DisplayString
Access	Read-Create
Status	Current
Parent node	swL2limitedMulticastRangeEntry
First child	None
Description	

## Show Limited multicast From IP

:: Command ::

```
snmpwalk -v2c -c public 192.168.0.1 1.3.6.1.4.1.171.11.64.1.2.5.2.2.1.3
```

Object name	swL2LimitedMulticastFromIp
Object ID	1.3.6.1.4.1.171.11.64.1.2.5.2.2.1.3
Module	DES3526-L2MGMT-MIB
Base syntax	IP Address
Composed syntax	IpAddress
Access	Read-Only
Status	Current
Parent node	swL2LimitedMulticastRangeEntry
First child	None
Description	This object specifies begin IP address of the range on this port.

## Show Limited multicast To IP

:: Command ::

```
snmpwalk -v2c -c public 192.168.0.1 1.3.6.1.4.1.171.11.64.1.2.5.2.2.1.4
```

Object name	swL2LimitedMulticastToIp
Object ID	1.3.6.1.4.1.171.11.64.1.2.5.2.2.1.4
Module	DES3526-L2MGMT-MIB
Base syntax	IP Address
Composed syntax	IpAddress
Access	Read-Only
Status	Current
Parent node	swL2LimitedMulticastRangeEntry
First child	None
Description	This object specifies end IP address of the range on this port.



## Show Limited Multicast Row Status

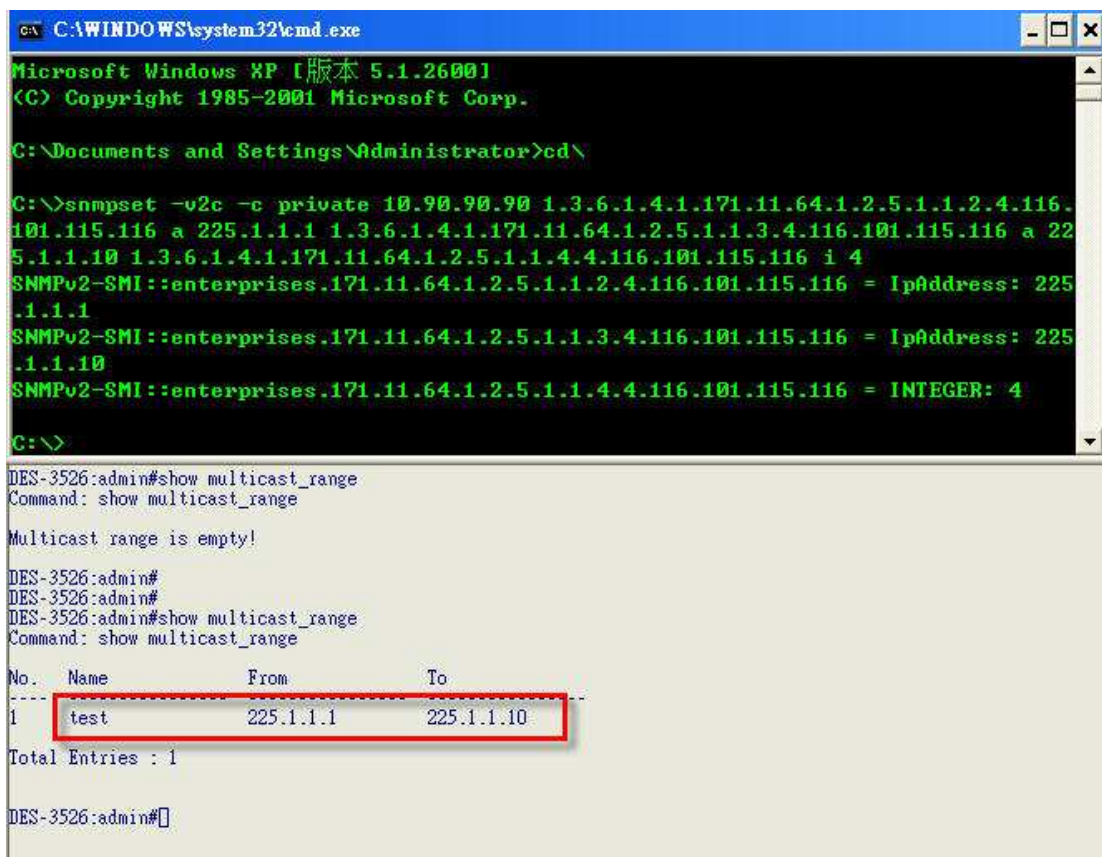
:: Command ::

```
snmpwalk -v2c -c public 192.168.0.1 1.3.6.1.4.1.171.11.64.1.2.5.2.2.1.5
```

Object name	swL2LimitedMulticastRowStatus
Object ID	1.3.6.1.4.1.171.11.64.1.2.5.2.2.1.5
Module	DES3526-L2MGMT-MIB
Base syntax	Integer
Composed syntax	RowStatus
Access	Read-Create
Status	Current
Value list	1 : active(1) 2 : notInService(2) 3 : notReady(3) 4 : createAndGo(4) 5 : createAndWait(5) 6 : destroy(6)
Parent node	swL2LimitedMulticastRangeEntry
First child	None
Description	This object indicates the status of this entry.

[Procedures via NETSNMP]

Step1. Create multicast\_range name "test" from 225.1.1.1 to 225.1.1.10.



```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [版本 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\Administrator>cd\

C:\>snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.11.64.1.2.5.1.1.2.4.116.101.115.116 a 225.1.1.1 1.3.6.1.4.1.171.11.64.1.2.5.1.1.3.4.116.101.115.116 a 225.1.1.10 1.3.6.1.4.1.171.11.64.1.2.5.1.1.4.4.116.101.115.116 i 4
SNMPv2-SMI::enterprises.171.11.64.1.2.5.1.1.2.4.116.101.115.116 = IPAddress: 225.1.1.1
SNMPv2-SMI::enterprises.171.11.64.1.2.5.1.1.3.4.116.101.115.116 = IPAddress: 225.1.1.10
SNMPv2-SMI::enterprises.171.11.64.1.2.5.1.1.4.4.116.101.115.116 = INTEGER: 4

C:\>
```

```
DES-3526:admin#show multicast_range
Command: show multicast_range

Multicast range is empty!

DES-3526:admin#
DES-3526:admin#
DES-3526:admin#show multicast_range
Command: show multicast_range

No.   Name           From           To
-----
1     test           225.1.1.1     225.1.1.10
-----
Total Entries : 1

DES-3526:admin#
```

Step2. Add Limited\_Mulicast range profile named “test” to port 1.

Step3. Enable Limited\_Multicast state on port 1.

Step4. Configure Limited\_Multicast access on port 1 to be “Permit”.

```
DES-3526 Fast Ethernet Switch Command Line Interface
Firmware: Build 6.00.B36
Copyright(C) 2008 D-Link Corporation. All rights reserved.
username:
password:
DES-3526:admin#
DES-3526:admin#
DES-3526:admin#show limited_multicast_addr ports 1
Command: show limited_multicast_addr ports 1

Port      : 1
State     : Disabled
Access    : Deny

No.       Name           From           To
-----
DES-3526:admin#show limited_multicast_addr ports 1
Command: show limited_multicast_addr ports 1

Port      : 1
State     : Enabled
Access    : Permit

No.       Name           From           To
-----
1         test           225.1.1.1      225.1.1.10
```

```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [版本 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\Administrator>cd\

C:\>snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.11.64.1.2.5.2.1.1.2.1 i
2 1.3.6.1.4.1.171.11.64.1.2.5.2.1.1.3.1 i 3 1.3.6.1.4.1.171.11.64.1.2.5.2.2.1.2.
1 x 0x74657374 1.3.6.1.4.1.171.11.64.1.2.5.2.2.1.5.1 i 4
SNMPv2-SMI::enterprises.171.11.64.1.2.5.2.1.1.2.1 = INTEGER: 2
SNMPv2-SMI::enterprises.171.11.64.1.2.5.2.1.1.3.1 = INTEGER: 3
SNMPv2-SMI::enterprises.171.11.64.1.2.5.2.2.1.2.1 = STRING: "test"
SNMPv2-SMI::enterprises.171.11.64.1.2.5.2.2.1.5.1 = INTEGER: 4

C:\>
```