How to create FDB static entry via NET-SNMP

Please refer to Q-Bridge MIB

dot1qStaticUnicastTable

Example 1

Add entry on port 1 MAC 00-02-03-04-05-07

Command

#snmpset -v 2c -c private 10.90.90.90 1.3.6.1.2.1.17.7.1.3.1.1.3.1.0.2.3.4.5.7.0 x 0x80000000 1.3.6.1.2.1.17.7.1.3.1.1.4.1.0.2.3.4.5.7.0 i 3

```
DGS-3200-10:4#show fdb
Command: show fdb

 Unicast MAC Address Aging Time  = 300

 VID  VLAN Name                         MAC Address       Port  Type
 ---- -------------------------------- ----------------- ----- -----------------
 1    default                          00-02-03-04-05-07 1     Permanent
 1    default                          00-11-95-C5-D9-E8 10    Dynamic
 1    default                          00-1C-F0-97-9C-E2 CPU   Self

Total Entries: 3
```

Description

snmpset -v 2c -c private 10.90.90.90 1.3.6.1.2.1.17.7.1.3.1.1.3.1.0.2.3.4.5.7.0 x 0x80000000

1.3.6.1.2.1.17.7.1.3.1.1.3.1.0.2.3.4.5.7.0 ----------VID

1.3.6.1.2.1.17.7.1.3.1.1.3.1.0.2.3.4.5.7.0 ----------MAC address

0x80000000 (add entry on port 1)

|80| 00| 00| 00|

| 10000000 | 00000000 | 00000000 | 00000000 |

Delete the entry

snmpset -v 2c -c private 10.90.90.90 1.3.6.1.2.1.17.7.1.3.1.1.3.1.0.2.3.4.5.7.0 x 0x00400000 1.3.6.1.2.1.17.7.1.3.1.1.4.1.0.2.3.4.5.7.0 i 2

Example 2

Add entry on port 10 MAC 00-0C-0D-0E-0F-11

Command

#snmpset -v 2c -c private 10.90.90.90 1.3.6.1.2.1.17.7.1.3.1.1.3.1.0.12.13.14.15.17.0 x 0x00400000 1.3.6.1.2.1.17.7.1.3.1.1.4.1.0.12.13.14.15.17.0 i 3

```
DGS-3200-10:4#show fdb
Command: show fdb

 Unicast MAC Address Aging Time  = 300

 VID  VLAN Name                         MAC Address       Port  Type
 ---- --------------------------------- ----------------- ----- ------------------
 1    default                           00-0C-0D-0E-0F-11 10    Permanent
 1    default                           00-11-95-C5-D9-E8 10    Dynamic
 1    default                           00-1C-F0-97-9C-E2 CPU   Self

Total Entries: 3
```

Description

snmpset -v 2c -c private 10.90.90.90 1.3.6.1.2.1.17.7.1.3.1.1.3.1.0.12.13.14.15.17.0 x 0x00400000

1.3.6.1.2.1.17.7.1.3.1.1.3.1.0.12.13.14.15.17.0 ----------VID

1.3.6.1.2.1.17.7.1.3.1.1.3.1.0.12.13.14.15.17.0 ----------MAC address

0.12.13.14.15.17 → 00-0C-0D-0E-0F-11

0x00400000 (add entry on port 10)

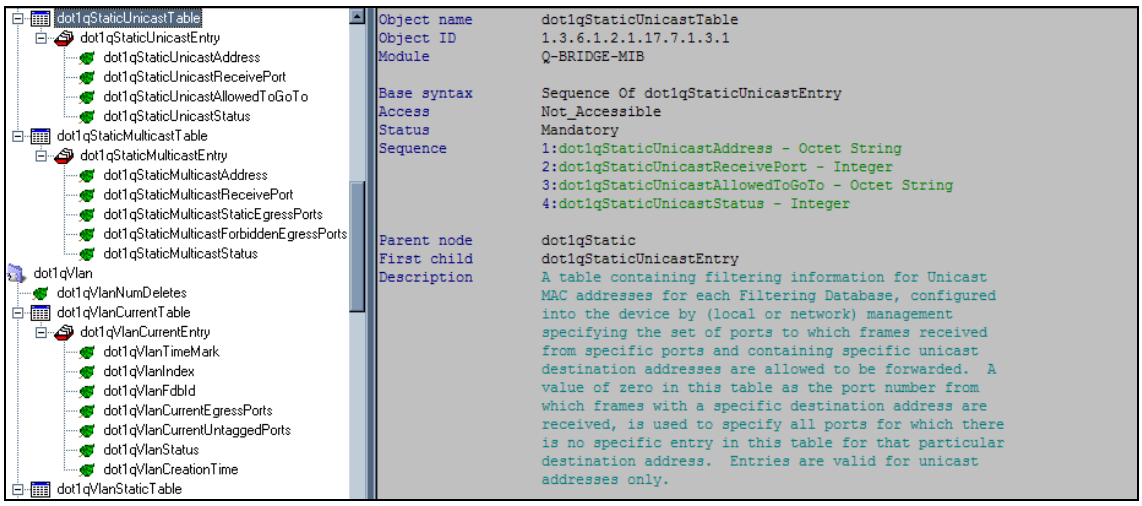
|00|40|00|00|

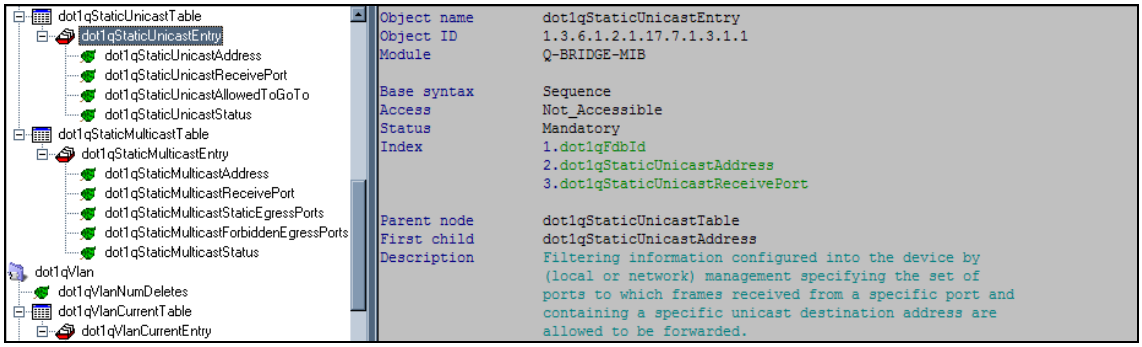
| 00000000 | 01000000 | 00000000 | 00000000 |

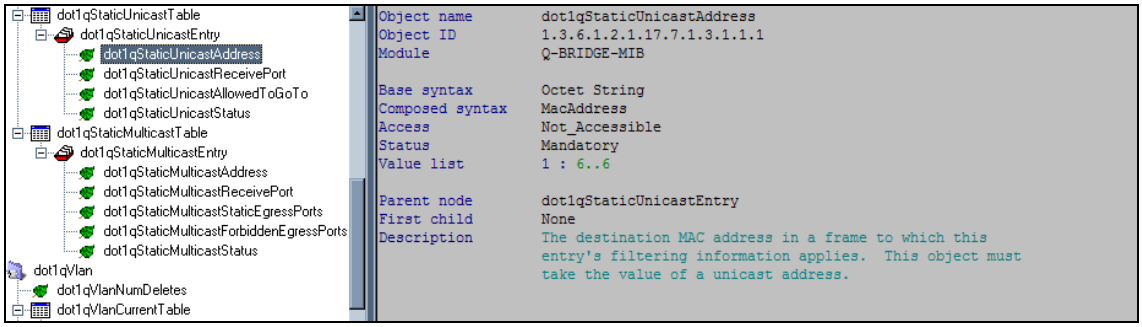
Delete the entry

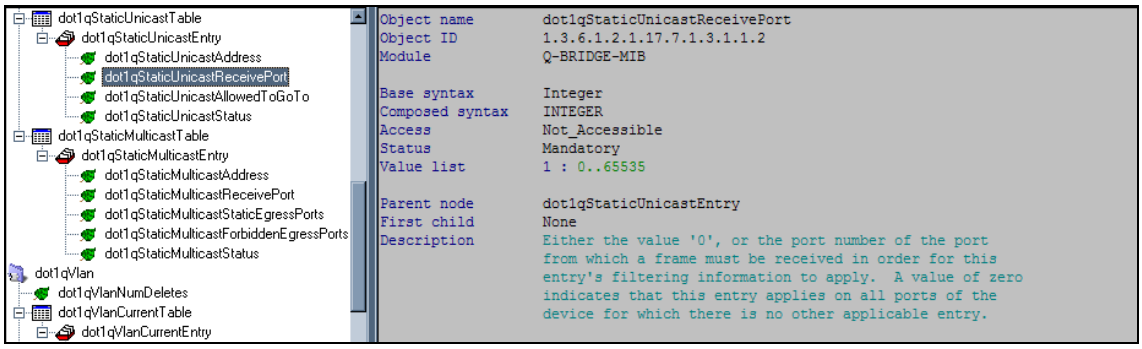
#snmpset -v 2c -c private 10.90.90.90 1.3.6.1.2.1.17.7.1.3.1.1.3.1.0.12.13.14.15.17.0 x 0x00400000 1.3.6.1.2.1.17.7.1.3.1.1.4.1.0.12.13.14.15.17.0 i 2

Related OID


dot1qStaticUnicastTable
dot1qStaticUnicastEntry
dot1qStaticUnicastAddress
dot1qStaticUnicastReceivePort
dot1qStaticUnicastAllowedToGoTo
dot1qStaticUnicastStatus
dot1qStaticMulticastTable
dot1qStaticMulticastEntry
dot1qStaticMulticastAddress
dot1qStaticMulticastReceivePort
dot1qStaticMulticastStaticEgressPorts
dot1qStaticMulticastForbiddenEgressPorts
dot1qStaticMulticastStatus
dot1qVlan
dot1qVlanNumDeletes
dot1qVlanCurrentTable
dot1qVlanCurrentEntry
dot1qVlanTimeMark
dot1qVlanIndex
dot1qVlanFdbId
dot1qVlanCurrentEgressPorts
dot1qVlanCurrentUntaggedPorts
dot1qVlanStatus
dot1qVlanCreationTime
dot1qVlanStaticTable
Object name dot1qStaticUnicastTable
Object ID 1.3.6.1.2.1.17.7.1.3.1
Module Q-BRIDGE-MIB
Base syntax Sequence Of dot1qStaticUnicastEntry
Access Not_Accessible
Status Mandatory
Sequence 1:dot1qStaticUnicastAddress - Octet String
2:dot1qStaticUnicastReceivePort - Integer
3:dot1qStaticUnicastAllowedToGoTo - Octet String
4:dot1qStaticUnicastStatus - Integer
Parent node dot1qStatic
First child dot1qStaticUnicastEntry
Description A table containing filtering information for Unicast MAC addresses for each Filtering Database, configured into the device by (local or network) management specifying the set of ports to which frames received from specific ports and containing specific unicast destination addresses are allowed to be forwarded. A value of zero in this table as the port number from which frames with a specific destination address are received, is used to specify all ports for which there is no specific entry in this table for that particular destination address. Entries are valid for unicast addresses only.


dot1qStaticUnicastTable
dot1qStaticUnicastEntry
dot1qStaticUnicastAddress
dot1qStaticUnicastReceivePort
dot1qStaticUnicastAllowedToGoTo
dot1qStaticUnicastStatus
dot1qStaticMulticastTable
dot1qStaticMulticastEntry
dot1qStaticMulticastAddress
dot1qStaticMulticastReceivePort
dot1qStaticMulticastStaticEgressPorts
dot1qStaticMulticastForbiddenEgressPorts
dot1qStaticMulticastStatus
dot1qVlan
dot1qVlanNumDeletes
dot1qVlanCurrentTable
dot1qVlanCurrentEntry
Object name dot1qStaticUnicastEntry
Object ID 1.3.6.1.2.1.17.7.1.3.1.1
Module Q-BRIDGE-MIB
Base syntax Sequence
Access Not_Accessible
Status Mandatory
Index 1.dot1qFdbId
2.dot1qStaticUnicastAddress
3.dot1qStaticUnicastReceivePort
Parent node dot1qStaticUnicastTable
First child dot1qStaticUnicastAddress
Description Filtering information configured into the device by (local or network) management specifying the set of ports to which frames received from a specific port and containing a specific unicast destination address are allowed to be forwarded.


dot1qStaticUnicastTable
dot1qStaticUnicastEntry
dot1qStaticUnicastAddress
dot1qStaticUnicastReceivePort
dot1qStaticUnicastAllowedToGoTo
dot1qStaticUnicastStatus
dot1qStaticMulticastTable
dot1qStaticMulticastEntry
dot1qStaticMulticastAddress
dot1qStaticMulticastReceivePort
dot1qStaticMulticastStaticEgressPorts
dot1qStaticMulticastForbiddenEgressPorts
dot1qStaticMulticastStatus
dot1qVlan
dot1qVlanNumDeletes
dot1qVlanCurrentTable
Object name dot1qStaticUnicastAddress
Object ID 1.3.6.1.2.1.17.7.1.3.1.1.1
Module Q-BRIDGE-MIB
Base syntax Octet String
Composed syntax MacAddress
Access Not_Accessible
Status Mandatory
Value list 1 : 6..6
Parent node dot1qStaticUnicastEntry
First child None
Description The destination MAC address in a frame to which this entry's filtering information applies. This object must take the value of a unicast address.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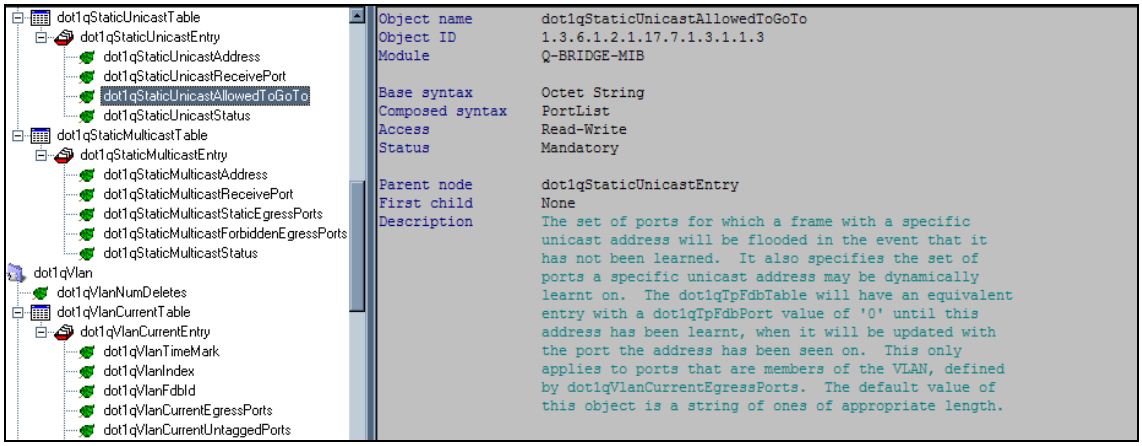
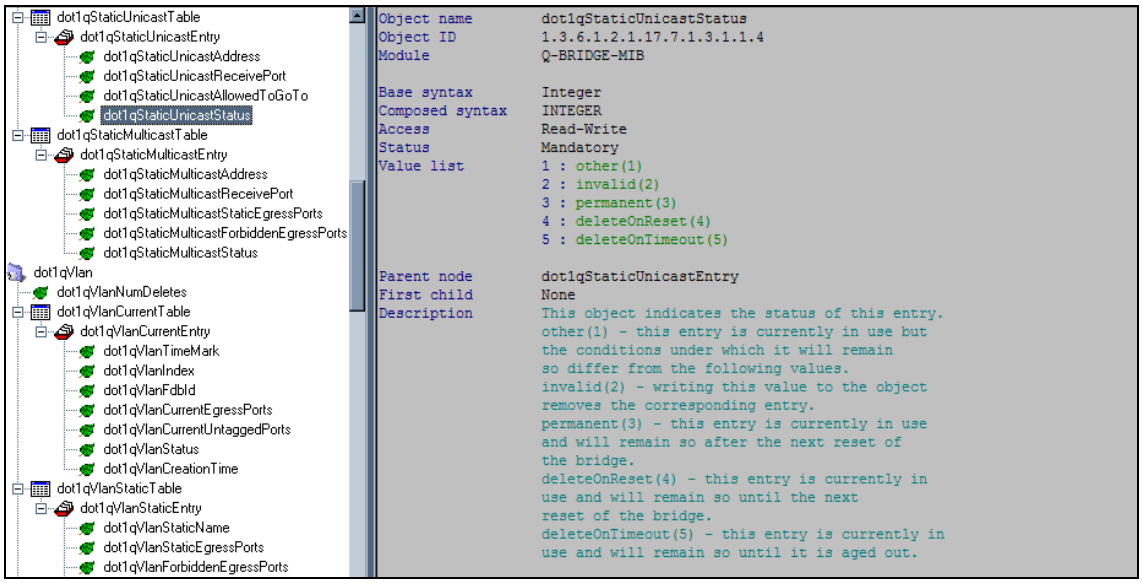
dot1qStaticUnicastEntry
dot1qStaticUnicastAddress
dot1qStaticUnicastReceivePort
dot1qStaticUnicastAllowedToGoTo
dot1qStaticUnicastStatus
dot1qStaticMulticastTable
dot1qStaticMulticastEntry
dot1qStaticMulticastAddress
dot1qStaticMulticastReceivePort
dot1qStaticMulticastStaticEgressPorts
dot1qStaticMulticastForbiddenEgressPorts
dot1qStaticMulticastStatus
dot1qVlan
dot1qVlanNumDeletes
dot1qVlanCurrentTable
dot1qVlanCurrentEntry
Object name dot1qStaticUnicastReceivePort
Object ID 1.3.6.1.2.1.17.7.1.3.1.1.2
Module Q-BRIDGE-MIB
Base syntax Integer
Composed syntax INTEGER
Access Not_Accessible
Status Mandatory
Value list 1 : 0..65535
Parent node dot1qStaticUnicastEntry
First child None
Description Either the value '0', or the port number of the port from which a frame must be received in order for this entry's filtering information to apply. A value of zero indicates that this entry applies on all ports of the device for which there is no other applicable entry.


dot1qStaticUnicastTable
dot1qStaticUnicastEntry
dot1qStaticUnicastAddress
dot1qStaticUnicastReceivePort
dot1qStaticUnicastAllowedToGoTo
dot1qStaticUnicastStatus
dot1qStaticMulticastTable
dot1qStaticMulticastEntry
dot1qStaticMulticastAddress
dot1qStaticMulticastReceivePort
dot1qStaticMulticastStaticEgressPorts
dot1qStaticMulticastForbiddenEgressPorts
dot1qStaticMulticastStatus
dot1qVlan
dot1qVlanNumDeletes
dot1qVlanCurrentTable
dot1qVlanCurrentEntry
dot1qVlanTimeMark
dot1qVlanIndex
dot1qVlanFdbId
dot1qVlanCurrentEgressPorts
dot1qVlanCurrentUntaggedPorts
Object name dot1qStaticUnicastAllowedToGoTo
Object ID 1.3.6.1.2.1.17.7.1.3.1.1.3
Module Q-BRIDGE-MIB
Base syntax Octet String
Composed syntax PortList
Access Read-Write
Status Mandatory
Parent node dot1qStaticUnicastEntry
First child None
Description The set of ports for which a frame with a specific unicast address will be flooded in the event that it has not been learned. It also specifies the set of ports a specific unicast address may be dynamically learnt on. The dot1qTpFdbTable will have an equivalent entry with a dot1qTpFdbPort value of '0' until this address has been learnt, when it will be updated with the port the address has been seen on. This only applies to ports that are members of the VLAN, defined by dot1qVlanCurrentEgressPorts. The default value of this object is a string of ones of appropriate length.


dot1qStaticUnicastTable
dot1qStaticUnicastEntry
dot1qStaticUnicastAddress
dot1qStaticUnicastReceivePort
dot1qStaticUnicastAllowedToGoTo
dot1qStaticUnicastStatus
dot1qStaticMulticastTable
dot1qStaticMulticastEntry
dot1qStaticMulticastAddress
dot1qStaticMulticastReceivePort
dot1qStaticMulticastStaticEgressPorts
dot1qStaticMulticastForbiddenEgressPorts
dot1qStaticMulticastStatus
dot1qVlan
dot1qVlanNumDeletes
dot1qVlanCurrentTable
dot1qVlanCurrentEntry
dot1qVlanTimeMark
dot1qVlanIndex
dot1qVlanFdbId
dot1qVlanCurrentEgressPorts
dot1qVlanCurrentUntaggedPorts
dot1qVlanStatus
dot1qVlanCreationTime
dot1qVlanStaticTable
dot1qVlanStaticEntry
dot1qVlanStaticName
dot1qVlanStaticEgressPorts
dot1qVlanForbiddenEgressPorts
Object name dot1qStaticUnicastStatus
Object ID 1.3.6.1.2.1.17.7.1.3.1.1.4
Module Q-BRIDGE-MIB
Base syntax Integer
Composed syntax INTEGER
Access Read-Write
Status Mandatory
Value list 1 : other(1)
2 : invalid(2)
3 : permanent(3)
4 : deleteOnReset(4)
5 : deleteOnTimeout(5)
Parent node dot1qStaticUnicastEntry
First child None
Description This object indicates the status of this entry.
other(1) - this entry is currently in use but the conditions under which it will remain so differ from the following values.
invalid(2) - writing this value to the object removes the corresponding entry.
permanent(3) - this entry is currently in use and will remain so after the next reset of the bridge.
deleteOnReset(4) - this entry is currently in use and will remain so until the next reset of the bridge.
deleteOnTimeout(5) - this entry is currently in use and will remain so until it is aged out.