

# How to create FDB static entry via NET-SNMP ( DES-3200 )

Please refer to Q-Bridge MIB

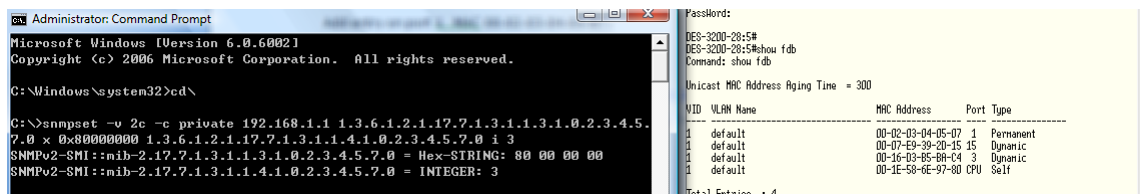
dot1qStaticUnicastTable

## Example 1

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

### Command

```
#snmpset -v 2c -c private 192.168.1.1 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
```



### Description

```
snmpset -v 2c -c private 192.168.1.1 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

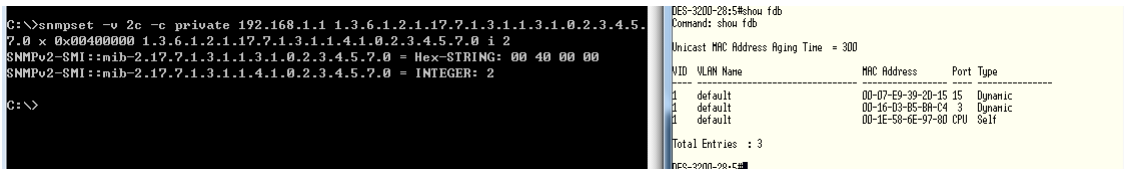
```
# snmpset -v 2c -c private 192.168.1.1 1.3.6.1.2.1.17.7.1.3.1.1.3.1.0.2.3.4.5.7.0 x  
0x00400000 1.3.6.1.2.1.17.7.1.3.1.1.4.1.0.2.3.4.5.7.0 i 2
```

## Example 2

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

### Command

```
#snmpset -v 2c -c private 192.168.1.1 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
```



### Description

snmpset -v 2c -c private 192.168.1.1 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 192.168.1.1 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
```

## Example 3

Show FDB table

### Command

```
# snmpwalk -v 2c -c private 10.90.90.90 1.3.6.1.2.1.17.7.1.2.2.1.3 i 5
```

Description

```
snmpwalk -v 2c -c private 10.90.90.90 1.3.6.1.2.1.17.7.1.2.2.1.3 i 5
```

1 : other(1)

2 : invalid(2)

3 : learned(3)

4 : self(4)

5 : mgmt(5)

## Related OID

The screenshot shows a tree view of OIDs on the left and a detailed view of the selected object on the right.

Property	Value
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.

	<b>Object name</b> <b>Object ID</b> <b>Module</b>	dot1qStaticUnicastEntry 1.3.6.1.2.1.17.7.1.3.1.1 Q-BRIDGE-MIB
	<b>Base syntax</b> <b>Access</b> <b>Status</b> <b>Index</b>	Sequence Not_Accessible Mandatory 1.dot1qFdbId 2.dot1qStaticUnicastAddress 3.dot1qStaticUnicastReceivePort
<b>Parent node</b> <b>First child</b> <b>Description</b>		dot1qStaticUnicastTable dot1qStaticUnicastAddress 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.

	<b>Object name</b> <b>Object ID</b> <b>Module</b>	dot1qStaticUnicastAddress 1.3.6.1.2.1.17.7.1.3.1.1.1 Q-BRIDGE-MIB
	<b>Base syntax</b> <b>Composed syntax</b> <b>Access</b> <b>Status</b> <b>Value list</b>	Octet String MacAddress Not_Accessible Mandatory 1 : 6..6
<b>Parent node</b> <b>First child</b> <b>Description</b>		dot1qStaticUnicastEntry None 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.

	<b>Object name</b> <b>Object ID</b> <b>Module</b>	dot1qStaticUnicastReceivePort 1.3.6.1.2.1.17.7.1.3.1.1.2 Q-BRIDGE-MIB
	<b>Base syntax</b> <b>Composed syntax</b> <b>Access</b> <b>Status</b> <b>Value list</b>	Integer INTEGER Not_Accessible Mandatory 1 : 0..65535
<b>Parent node</b> <b>First child</b> <b>Description</b>		dot1qStaticUnicastEntry None 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.

	<b>Object name</b> <b>Object ID</b> <b>Module</b>	dot1qStaticUnicastAllowedToGoTo 1.3.6.1.2.1.17.7.1.3.1.1.3 Q-BRIDGE-MIB
	<b>Base syntax</b> <b>Composed syntax</b> <b>Access</b> <b>Status</b>	Octet String PortList Read-Write Mandatory
<b>Parent node</b> <b>First child</b> <b>Description</b>		dot1qStaticUnicastEntry None 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.

<ul style="list-style-type: none"> <li>dot1qStaticUnicastTable             <ul style="list-style-type: none"> <li>dot1qStaticUnicastEntry                 <ul style="list-style-type: none"> <li>dot1qStaticUnicastAddress</li> <li>dot1qStaticUnicastReceivePort</li> <li>dot1qStaticUnicastAllowedToGoTo</li> <li><b>dot1qStaticUnicastStatus</b></li> </ul> </li> </ul> </li> <li>dot1qStaticMulticastTable             <ul style="list-style-type: none"> <li>dot1qStaticMulticastEntry                 <ul style="list-style-type: none"> <li>dot1qStaticMulticastAddress</li> <li>dot1qStaticMulticastReceivePort</li> <li>dot1qStaticMulticastStaticEgressPorts</li> <li>dot1qStaticMulticastForbiddenEgressPorts</li> <li>dot1qStaticMulticastStatus</li> </ul> </li> </ul> </li> <li>dot1qVlan             <ul style="list-style-type: none"> <li>dot1qVlanNumDeletes</li> <li>dot1qVlanCurrentTable                 <ul style="list-style-type: none"> <li>dot1qVlanCurrentEntry                     <ul style="list-style-type: none"> <li>dot1qVlanTimeMark</li> <li>dot1qVlanIndex</li> <li>dot1qVlanFdbId</li> <li>dot1qVlanCurrentEgressPorts</li> <li>dot1qVlanCurrentUntaggedPorts</li> <li>dot1qVlanStatus</li> <li>dot1qVlanCreationTime</li> </ul> </li> </ul> </li> <li>dot1qVlanStaticTable                 <ul style="list-style-type: none"> <li>dot1qVlanStaticEntry                     <ul style="list-style-type: none"> <li>dot1qVlanStaticName</li> <li>dot1qVlanStaticEgressPorts</li> <li>dot1qVlanForbiddenEgressPorts</li> </ul> </li> </ul> </li> </ul> </li> </ul>	<p>Object name: dot1qStaticUnicastStatus</p> <p>Object ID: 1.3.6.1.2.1.17.7.1.3.1.1.4</p> <p>Module: Q-BRIDGE-MIB</p> <p>Base syntax: Integer</p> <p>Composed syntax: INTEGER</p> <p>Access: Read-Write</p> <p>Status: Mandatory</p> <p>Value list:</p> <ul style="list-style-type: none"> <li>1 : other(1)</li> <li>2 : invalid(2)</li> <li>3 : permanent(3)</li> <li>4 : deleteOnReset(4)</li> <li>5 : deleteOnTimeout(5)</li> </ul> <p>Parent node: dot1qStaticUnicastEntry</p> <p>First child: None</p> <p>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.</p>
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<ul style="list-style-type: none"> <li>dot1qFdbEntry             <ul style="list-style-type: none"> <li>dot1qFdbId</li> <li>dot1qFdbDynamicCount</li> </ul> </li> <li>dot1qTpFdbTable             <ul style="list-style-type: none"> <li>dot1qTpFdbEntry                 <ul style="list-style-type: none"> <li>dot1qTpFdbAddress</li> <li>dot1qTpFdbPort</li> <li><b>dot1qTpFdbStatus</b></li> </ul> </li> </ul> </li> <li>dot1qTpGroupTable             <ul style="list-style-type: none"> <li>dot1qTpGroupEntry                 <ul style="list-style-type: none"> <li>dot1qTpGroupAddress</li> <li>dot1qTpGroupEgressPorts</li> <li>dot1qTpGroupLearned</li> </ul> </li> </ul> </li> <li>dot1qForwardAllTable             <ul style="list-style-type: none"> <li>dot1qForwardAllEntry                 <ul style="list-style-type: none"> <li>dot1qForwardAllPorts</li> <li>dot1qForwardAllStaticPorts</li> <li>dot1qForwardAllForbiddenPorts</li> </ul> </li> </ul> </li> <li>dot1qForwardUnregisteredTable             <ul style="list-style-type: none"> <li>dot1qForwardUnregisteredEntry                 <ul style="list-style-type: none"> <li>dot1qForwardUnregisteredPorts</li> <li>dot1qForwardUnregisteredStaticPorts</li> <li>dot1qForwardUnregisteredForbiddenPorts</li> </ul> </li> </ul> </li> <li>dot1qStatic             <ul style="list-style-type: none"> <li>dot1qStaticUnicastTable                 <ul style="list-style-type: none"> <li>dot1qStaticUnicastEntry                     <ul style="list-style-type: none"> <li>dot1qStaticUnicastAddress</li> <li>dot1qStaticUnicastReceivePort</li> <li>dot1qStaticUnicastAllowedToGoTo</li> <li>dot1qStaticUnicastStatus</li> </ul> </li> </ul> </li> <li>dot1qStaticMulticastTable                 <ul style="list-style-type: none"> <li>dot1qStaticMulticastEntry                     <ul style="list-style-type: none"> <li>dot1qStaticMulticastAddress</li> <li>dot1qStaticMulticastReceivePort</li> <li>dot1qStaticMulticastStaticEgressPorts</li> <li>dot1qStaticMulticastForbiddenEgressPorts</li> <li>dot1qStaticMulticastStatus</li> </ul> </li> </ul> </li> </ul> </li> <li>dot1qVlan</li> </ul>	<p>Object name: dot1qTpFdbStatus</p> <p>Object ID: 1.3.6.1.2.1.17.7.1.2.2.1.3</p> <p>Module: Q-BRIDGE-MIB</p> <p>Base syntax: Integer</p> <p>Composed syntax: INTEGER</p> <p>Access: Read-Only</p> <p>Status: Current</p> <p>Value list:</p> <ul style="list-style-type: none"> <li>1 : other(1)</li> <li>2 : invalid(2)</li> <li>3 : learned(3)</li> <li>4 : self(4)</li> <li>5 : mgmt(5)</li> </ul> <p>Parent node: dot1qTpFdbEntry</p> <p>First child: None</p> <p>Description: The status of this entry. The meanings of the values are: other(1) - none of the following. This may include the case where some other MIB object (not the corresponding instance of dot1qTpFdbPort, nor an entry in the dot1qStaticUnicastTable) is being used to determine if and how frames addressed to the value of the corresponding instance of dot1qTpFdbAddress are being forwarded. invalid(2) - this entry is no longer valid (e.g., it was learned but has since aged out), but has not yet been flushed from the table. learned(3) - the value of the corresponding instance of dot1qTpFdbPort was learned and is being used. self(4) - the value of the corresponding instance of dot1qTpFdbAddress represents one of the device's addresses. The corresponding instance of dot1qTpFdbPort indicates which of the device's ports has this address. mgmt(5) - the value of the corresponding instance of dot1qTpFdbAddress is also the value of an existing instance of dot1qStaticAddress.</p>
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