

D-Link, DES-1210-28/REV. A1

Static MAC

V1.0

Aug 19, 2010

| | |
|----------------------|--|
| MIB Browser | NET-SNMP(Version: 5.4.2.1) |
| MIB File | Enterprise MIB: DES-1210-28_AX-MIB |
| OID | 1.3.6.1.4.1.171.10.75.5.9 |
| Full OID Name | iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).d-link(171).dlink-products(10).dlink-DES1210SeriesProd(75).des-1210-28ax(5).companyStaticMAC(9) |

How to use MIB-Browser –companyStaticGroup

■ The Location of companyStaticMAC OID

The screenshot shows the MIB Browser interface. On the left, a table lists modules and their root IDs. The 'DES-1210-28_AX' module is highlighted with a red box, showing its root ID as 1.3.6.1.4.1.171. On the right, the MIB Tree is displayed, showing a hierarchy from 'iso' to 'd-link' to 'dlink-products' to 'dlink-DES1210SeriesProd' to 'des-1210-28ax'. Under 'des-1210-28ax', the 'companyStaticMAC' node is highlighted with a red box, showing its sub-nodes: 'staticDisableAutoLearn', 'staticAutoLearningList', and 'staticTable'.

| Module | Root ID |
|----------------|------------------|
| BRIDGE-MIB | 1.3.6.1.2.1.17 |
| DES-1210-28_AX | 1.3.6.1.4.1.171 |
| ENTITY-MIB | 1.3.6.1.2.1.47 |
| IANAifType-MIB | 1.3.6.1.2.1.30 |
| IF-MIB | 1.3.6.1.2.1.31 |
| IGMP-STD-MIB | 1.3.6.1.2.1.85 |
| P-BRIDGE-MIB | 1.3.6.1.2.1.17.6 |
| Q-BRIDGE-MIB | 1.3.6.1.2.1.17.7 |
| RFC1155-SMI | 0 |
| RFC-1212 | None |
| RFC1213-MIB | 1.3.6.1.2.1.1 |
| RFC-1215 | None |
| SNMPv2-CONF | None |
| SNMPv2-MIB | 1.3.6.1.6.3.1 |
| SNMPv2-SMI | 0 |
| SNMPv2-TC | None |
| SNMPv2-TM | 1.3.6.1.6.1.1 |

■ staticDisableAutoLearn

:: Command ::

```
snmpwalk -v1 -c public 192.168.0.1 1.3.6.1.4.1.171.10.75.5.9.1
```

| | |
|-----------------|--|
| Object name | staticDisableAutoLearn |
| Object ID | 1.3.6.1.4.1.171.10.75.5.9.1 |
| Module | DES-1210-28_AX |
| Base syntax | Integer |
| Composed syntax | INTEGER |
| Access | Read-Write |
| Status | Current |
| Value list | 1 : on(1) 2 : off(2) |
| Parent node | companyStaticMAC |
| First child | None |
| Description | Set on to disable Auto Learning Excluding Uplink Port and set off to enable Auto Learning. |

■ staticAutoLearningList

:: Command ::

```
snmpwalk -v1 -c public 192.168.0.1 1.3.6.1.4.1.171.10.75.5.9.2
```

| | |
|-----------------|---|
| Object name | staticAutoLearningList |
| Object ID | 1.3.6.1.4.1.171.10.75.5.9.2 |
| Module | DES-1210-28_AX |
| Base syntax | Octet String |
| Composed syntax | PortList |
| Access | Read-Write |
| Status | Current |
| Parent node | companyStaticMAC |
| First child | None |
| Description | The set of the device's member ports that belong to the Static MAC auto learning enable/disable. For example, when Disable Auto Learning is enable, the octet value set up as '# 0x0F 0xFF 0xFF 0xFF' means from port 1 to port 4 are not in auto learning state, the other ports are in auto learning state. It can be set up when Disable Auto Learning is enable. |

■ Static Table

■ staticEntry

| | |
|-------------|--|
| Object name | staticEntry |
| Object ID | 1.3.6.1.4.1.171.10.75.5.9.3.1 |
| Module | DES-1210-28_AX |
| Base syntax | Sequence |
| Access | Not_Accessible |
| Status | Current |
| Index | 1.staticVlanID 2.staticMac 3.staticPort |
| Parent node | staticTable |
| First child | staticVlanID |
| Description | A Static MAC entry containing the mac and forwarding port. |

D-Link Switch: DES-1210-28/REV.A1 MIB File: DES-1210-28-MIB V1.0.0.18

■ Show staticId

:: Command ::

```
snmpwalk -v1 -c public 192.168.0.1 1.3.6.1.4.1.171.10.75.2.21.3.1.1
```

| | |
|-----------------|--|
| Object name | staticId |
| Object ID | 1.3.6.1.4.1.171.10.75.2.21.3.1.1 |
| Module | DES-1228-MIB |
| Base syntax | Integer |
| Composed syntax | INTEGER |
| Access | Read-Only |
| Status | Mandatory |
| Parent node | staticEntry |
| First child | None |
| Description | The Static MAC identifier. A maximum of 60 Static MACs is supported. The value must be from 1 to 60 |

■ staticVlanID

```
snmpwalk -v1 -c public 192.168.0.1 1.3.6.1.4.1.171.10.75.5.9.3.1.1
```

| | |
|-----------------|--------------------------------------|
| Object name | staticVlanID |
| Object ID | 1.3.6.1.4.1.171.10.75.5.9.3.1.1 |
| Module | DES-1210-28_AX |
| Base syntax | Integer |
| Composed syntax | INTEGER |
| Access | Read-Only |
| Status | Current |
| Parent node | staticEntry |
| First child | None |
| Description | The VLAN ID of the static MAC entry. |

■ staticMac

```
snmpwalk -v1 -c public 192.168.0.1 1.3.6.1.4.1.171.10.75.5.9.3.1.2
```

| | |
|-----------------|---|
| Object name | staticMac |
| Object ID | 1.3.6.1.4.1.171.10.75.5.9.3.1.2 |
| Module | DES-1210-28_AX |
| Base syntax | Octet String |
| Composed syntax | MacAddress |
| Access | Read-Only |
| Status | Current |
| Value list | 1 : 6..6 |
| Parent node | staticEntry |
| First child | None |
| Description | The MAC address associated of the static MAC entry. |

■ staticPort

snmpwalk -v1 -c public 192.168.0.1 1.3.6.1.4.1.171.10.75.5.9.3.1.3

```
Object name      staticPort
Object ID       1.3.6.1.4.1.171.10.75.5.9.3.1.3
Module          DES-1210-28_AX

Base syntax     Integer
Composed syntax INTEGER
Access          Read-Only
Status          Current

Parent node     staticEntry
First child     None
Description     The forwarding port of the static MAC entry.
```

■ staticStatus

snmpwalk -v1 -c public 192.168.0.1 1.3.6.1.4.1.171.10.75.5.9.3.1.4

```
Object name      staticStatus
Object ID       1.3.6.1.4.1.171.10.75.5.9.3.1.4
Module          DES-1210-28_AX

Base syntax     Integer
Composed syntax RowStatus
Access          Read-Write
Status          Current
Value list      1 : active(1)
                2 : notInService(2)
                3 : notReady(3)
                4 : createAndGo(4)
                5 : createAndWait(5)
                6 : destroy(6)

Parent node     staticEntry
First child     None
Description     The status of an entry in the Static MAC Table. Only a subset
                of the rowstatus variables (active, createAndGo, destroy)
                are available. The trunk member port can not set up static MAC.
```

■ Example of Static MAC setting

* Assume at first the default Static MAC function is disabled. We want to enable Static MAC function:

snmpset -v1 -c private 192.168.0.1 1.3.6.1.4.1.171.10.75.2.21.1.0 **i 1**

i → INTEGER

1 → enabled(1)

D-Link Switch: DES-1210-28/REV.A1 **MIB File:** DES-1210-28-MIB V1.0.0.18

*** If we want to create one static MAC (i.e. 00-00-00-00-00-05) on port 10 in Vlan ID 2:**

Step 1.

```
snmpset -v 2c -c private 10.90.90.90 1.3.6.1.4.1.171.10.75.5.9.3.1.4.2.0.0.0.0.5.10 i "4"
```

2 → Static ID number

0.0.0.0.5 → MAC address

10 → Port Number

i → INTEGER

4 → createAndGo(4)

***If we want to delete static MAC, use the following command:**

```
snmpset -v 2c -c private 10.90.90.90 1.3.6.1.4.1.171.10.75.5.9.3.1.4.2.0.0.0.0.5.10 i "6"
```

6 → destroy(6)