

How to configure Asymmetric VLAN via Net-SNMP (DES-1210-28)

1. Enable Asymmetric VLAN

```
snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.10.75.5.7.5.0 i 1
```

The screenshot shows the Net-SNMP MIB browser interface. On the left, a tree view shows the hierarchy: dot1qVlanManagementId > dot1qVlanAsyOnOff. On the right, the properties for the selected object are displayed:

Object name	dot1qVlanAsyOnOff
Object ID	1.3.6.1.4.1.171.10.75.5.7.5
Module	DES-1210-28_AX
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Write
Status	Current
Value list	1 : enabled(1) 2 : disabled(2)
Parent node	companyDot1qVlanGroup
First child	None
Description	Enable/Disable IEEE 802.1Q Asymmetric VLAN

2. Create VLAN 2

```
snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.10.75.5.7.6.1.5.2 i 4
```

3. Create VLAN 3

```
snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.10.75.5.7.6.1.5.3 i 4
```

2 - VID

3 - VID

The screenshot shows the Net-SNMP MIB browser interface. On the left, a tree view shows the hierarchy: dot1qVlanTable > dot1qVlanEntry > dot1qVlanRowStatus. On the right, the properties for the selected object are displayed:

Object name	dot1qVlanRowStatus
Object ID	1.3.6.1.4.1.171.10.75.5.7.6.1.5
Module	DES-1210-28_AX
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	dot1qVlanEntry
First child	None
Description	The status of a row in dot1qVlanTable. By setting this object, new entries can be created in dot1qVlanTable and existing entries can be removed from dot1qVlanTable. It can be used as specified in the SNMP v2 standard.

4. Assign port 1-24 to VLAN 2

```
snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.10.75.5.7.6.1.2.2 x FFFFFFF000000000
```

```
snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.10.75.5.7.6.1.4.2 x FFFFFFF000000000
```

5. Assign port 1,25-28 to VLAN 3

```
snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.10.75.5.7.6.1.2.3 x 800000F000000000
```

```
snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.10.75.5.7.6.1.4.3 x 800000F000000000
```

2 - VID

3 - VID

Object name: dot1qVlanEgressPorts
 Object ID: 1.3.6.1.4.1.171.10.75.5.7.6.1.2
 Module: DES-1210-28_AX

Base syntax: Octet String
 Composed syntax: PortList
 Access: Read-Create
 Status: Current

Parent node: dot1qVlanEntry
 First child: None
 Description: The set of ports which are permanently assigned to the egress list for this VLAN by management. Changes to a bit in this object affect the per-port per-VLAN Registrar control for Registration Fixed for the relevant GVRP state machine on each port. A port may not be added in this set if it is already a member of the set of ports in dot1qVlanForbiddenEgressPorts. The default value of this object is a string of zeros of appropriate length, indicating not fixed.

Object name: dot1qVlanUntaggedPorts
 Object ID: 1.3.6.1.4.1.171.10.75.5.7.6.1.4
 Module: DES-1210-28_AX

Base syntax: Octet String
 Composed syntax: PortList
 Access: Read-Create
 Status: Current

Parent node: dot1qVlanEntry
 First child: None
 Description: The set of ports which should transmit egress packets for this VLAN as untagged. The default value of this object for the default VLAN (dot1qVlanIndex = 1) is a string of appropriate length including all ports. There is no specified default for other VLANs. If a device agent cannot support the set of ports being set then it will reject the set operation with an error. An example might be if a manager attempts to set more than one VLAN to be untagged on egress where the device does not support this IEEE 802.1Q option.

6. Check the VLAN status

IEEE 802.1Q Asymmetric VLAN Configuration

Asymmetric VLAN [\[Example \]](#) Enabled Disabled Apply

Note: After enabling Asymmetric VLAN by clicking the "Apply" button, users can configure PVID in the following window.

(Maximum Entries : 256)

VID	VLAN Name	Untagged VLAN Ports	Tagged VLAN Ports	VLAN Rename	Delete VID
1		01,02,03,04,05,06,07,08, 09,10,11,12,13,14,15,16, 17,18,19,20,21,22,23,24, 25,26,27,28		Rename	Delete VID
2		01,02,03,04,05,06,07,08, 09,10,11,12,13,14,15,16, 17,18,19,20,21,22,23,24		Rename	Delete VID
3		01,25,26,27,28		Rename	Delete VID

7. Modify VLAN PVID

```
snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.10.75.5.7.7.1.1.2 u 2
```

:

```
snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.10.75.5.7.7.1.1.24 u 2
```

```
snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.10.75.5.7.7.1.1.25 u 3
```

:

```
snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.10.75.5.7.7.1.1.28 u 3
```

2 – port number

2 – PVID

8. Check PVID status

Port	01	02	03	04	05	06	07	08	09	10	11	12	13	14
PVID	1	2	2	2	2	2	2	2	2	2	2	2	2	2
Port	15	16	17	18	19	20	21	22	23	24	25	26	27	28
PVID	2	2	2	2	2	2	2	2	2	2	3	3	3	3

9. Verification

With this configuration, port2~24 can communicate with port1, port25~28 can also communicate with port1, but port2~24 can't communicate with port 25~28