

How to configure Port Control and Port Description for DGS-3420 Series via SNMP

1): **OID for Port control**

The OID is under:

iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).dlink(171).dlink-mgmt(11).dlink-xxxSeries(X).xxxModel(Y).swL2MgmtMIB(2)

dlink-xxxSeries(X): For DGS-3420 series, the (x)=119

xxxModel(Y): DGS-3420-28TC Y=1 OID is 1.3.6.1.4.1.171.11.119.1.2

DGS-3420-28SC Y=2 OID is 1.3.6.1.4.1.171.11.119.2.2

DGS-3420-28PC Y=3 OID is 1.3.6.1.4.1.171.11.119.3.2

DGS-3420-52T Y=4 OID is 1.3.6.1.4.1.171.11.119.4.2

DGS-3420-52P Y=5 OID is 1.3.6.1.4.1.171.11.119.5.2

Y=DES-3420-xxxModel W= port number

config ports <portlist> medium_type >>OID: 1.3.6.1.4.1.171.11.119.Y.2.3.2.1.2 Read-only

Speed >>OID: 1.3.6.1.4.1.171.11.119.Y.2.3.2.1.5.W.1 Read-write

MAC_Notification >>OID: 1.3.6.1.4.1.171.11.119.Y.2.3.2.1.8.W.1 Read-write

flow_control >>OID: 1.3.6.1.4.1.171.11.119.Y.2.3.2.1.6.W.1 Read-write

learning >>OID: 1.3.6.1.4.1.171.11.119.Y.2.3.2.1.7.W.1 Read-write

state >>OID: 1.3.6.1.4.1.171.11.119.Y.2.3.2.1.4.W.1 Read-write

mdix >>OID: 1.3.6.1.4.1.171.11.119.Y.2.3.2.1.10.W.1 Read-write

2): **OID for port description**

>>> **OID: 1.3.6.1.2.1.31.1.1.1.18.W**

For example:

snmpset -v 2c -c private 10.90.90.90 1.3.6.1.2.1.31.1.1.1.18.11 s Test

IF-MIB::ifAlias.11 = STRING: Test

(config ports 11 description Test)

DGS-3420-28TC:admin#show ports 11 description

Command: show ports 11 description

Port State/ Settings Connection Address

MDIX Speed/Duplex/FlowCtrl Speed/Duplex/FlowCtrl Learning

11 Enabled Auto/Disabled Link Down Enabled

Auto

Description: Test

Below are snapshots and OIDs using DGS-3420-28TC as an example

1: Object name swL2PortInfoMediumType

Object OID 1.3.6.1.4.1.171.11.119.1.2.3.2.1.2

Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Only
Status	Current
Value list	1 : copper (1) 2 : fiber (2)
Parent node	swL2PortInfoEntry
First child	None
Description	Indicates the medium type of the port number.

2: Object name swL2PortCtrlAdminState

Object OID 1.3.6.1.4.1.171.11.119.1.2.3.2.1.4

Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Write
Status	Current
Value list	1 : other (1) 2 : disabled (2) 3 : enabled (3)
Parent node	swL2PortCtrlEntry
First child	None
Description	This object decides if the port is enabled or disabled.

3: Object name swL2PortCtrlNwayState

Object OID 1.3.6.1.4.1.171.11.119.1.2.3.2.1.5

Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Write
Status	Current
Value list	1 : other (1) 2 : nway-enabled (2) 3 : nway-disabled-10Mbps-Half (3) 4 : nway-disabled-10Mbps-Full (4) 5 : nway-disabled-100Mbps-Half (5) 6 : nway-disabled-100Mbps-Full (6) 7 : nway-disabled-1Gigabps-Half (7) 8 : nway-disabled-1Gigabps-Full (8) 9 : nway-disabled-1Gigabps-Full-master (9) 10 : nway-disabled-1Gigabps-Full-slave (10)
Parent node	swL2PortCtrlEntry
First child	None
Description	Chose the port speed, duplex mode, and N-Way function mode.

4 : Object name swL2PortCtrlFlowCtrlState
Object OID 1.3.6.1.4.1.171.11.119.1.2.3.2.1.6

Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Write
Status	Current
Value list	1 : other(1) 2 : disabled(2) 3 : enabled(3)
Parent node	swL2PortCtrlEntry
First child	None
Description	The flow control mechanism is different between full duplex mode and half duplex mode. For half duplex mode, the jamming signal is asserted. For full duplex mode, the IEEE 802.3x flow control function sends PAUSE frames and receives PAUSE frames.

5 : Object name swL2PortCtrlLearningState
Object OID 1.3.6.1.4.1.171.11.119.1.2.3.2.1.7

Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Write
Status	Current
Value list	1 : other(1) 2 : disabled(2) 3 : enabled(3)
Parent node	swL2PortCtrlEntry
First child	None
Description	This object decides if the port is locked or not.

6 : Object name swL2PortCtrlMACNotifyState
Object OID 1.3.6.1.4.1.171.11.119.1.2.3.2.1.8

Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Write
Status	Current
Value list	1 : other(1) 2 : disabled(2) 3 : enabled(3)
Parent node	swL2PortCtrlEntry
First child	None
Description	This object sets each port's MAC notification state.

7: Object name swL2PortCtrlMDIXState
Object OID 1.3.6.1.4.1.171.11.119.1.2.3.2.1.10

Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Write
Status	Current
Value list	1 : auto(1) 2 : normal(2) 3 : cross(3)
Parent node	swL2PortCtrlEntry
First child	None
Description	This object configures the MDIX setting of the port.