

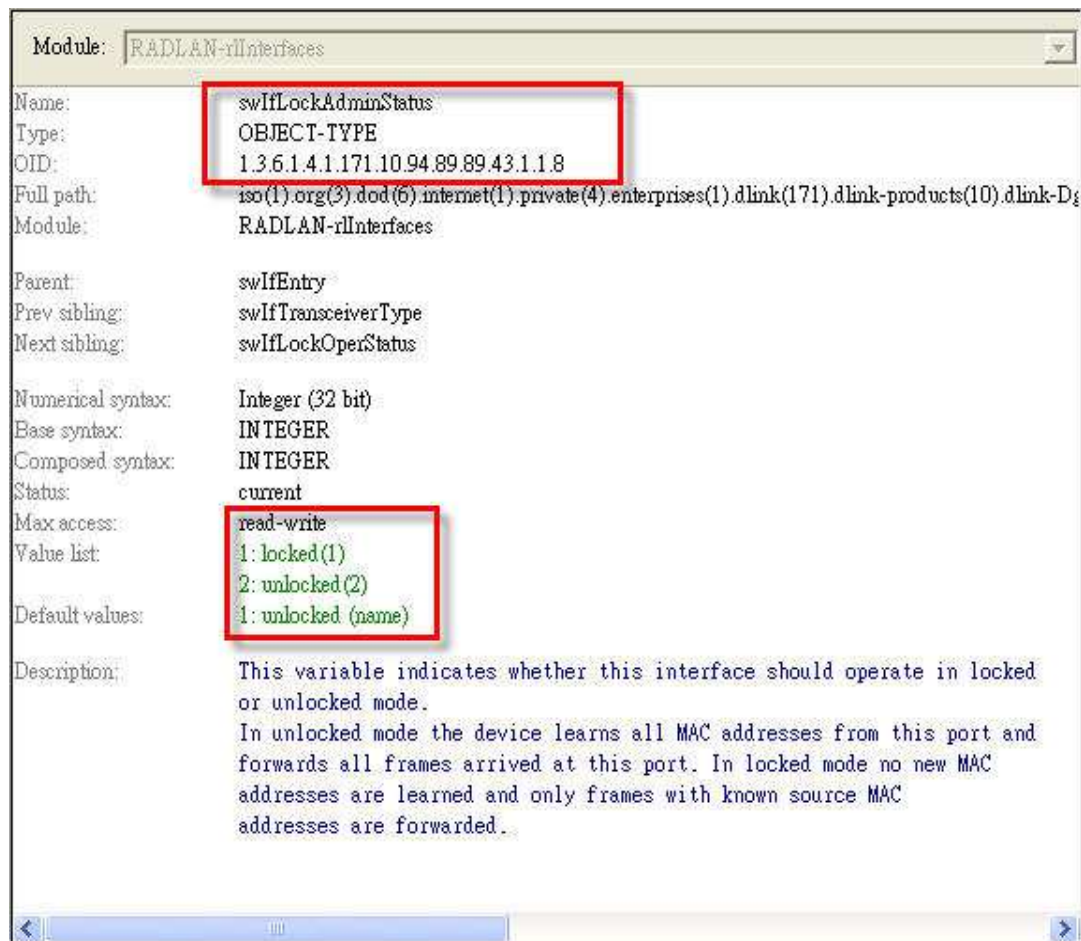
How to set “Port Security” on DGS-3100 series via NetSNMP?

[Firmware & MIB version]

3.00.43

[MIB]

OIDs for “Port Security” are defined in “rlinterfaces.mib” { RADLAN-rlInterfaces MIB }



The screenshot shows a window titled "Module: RADLAN-rlInterfaces". The main content area displays the following information for the variable `swIfLockAdminStatus`:

- Name: `swIfLockAdminStatus`
- Type: `OBJECT-TYPE`
- OID: `1.3.6.1.4.1.171.10.94.89.89.43.1.1.8`
- Full path: `iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).dlink(171).dlink-products(10).dlink-Dgs(100).swIfLockAdminStatus`
- Module: `RADLAN-rlInterfaces`
- Parent: `swIfEntry`
- Prev sibling: `swIfTransceiverType`
- Next sibling: `swIfLockOperStatus`
- Numerical syntax: `Integer (32 bit)`
- Base syntax: `INTEGER`
- Composed syntax: `INTEGER`
- Status: `current`
- Max access: `read-write`
- Value list:
 - `1: locked(1)`
 - `2: unlocked(2)`
- Default values:
 - `1: unlocked (name)`
- Description:

This variable indicates whether this interface should operate in locked or unlocked mode. In unlocked mode the device learns all MAC addresses from this port and forwards all frames arrived at this port. In locked mode no new MAC addresses are learned and only frames with known source MAC addresses are forwarded.

Module: RADLAN-rfInterfaces

Name: swIfLockLimitationMode
Type: OBJECT-TYPE
OID: 1.3.6.1.4.1.171.10.94.89.89.43.1.1.37
Full path: iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).dlink(171).dlink-products(10).dlink-
Module: RADLAN-rfInterfaces

Parent: swIfEntry
Prev sibling: swIfSingleHostViolationAdminTrapFrequency
Next sibling: swIfLockMaxMacAddresses

Numerical syntax: Integer (32 bit)
Base syntax: INTEGER
Composed syntax: INTEGER
Status: current
Max access: read-write
Value list:
1: disabled(1)
2: dynamic(2)
3: secure-permanent(3)
4: secure-delete-on-reset(4)

Description: This variable indicates what is the learning limitation on the locked in
Possible values:
disabled - learning is stopped. The dynamic addresses associated with th
port are not aged out or relearned on other port as long as the port
locked.
dynamic - dynamic addresses can be learned up to the maximum dynamic add
allowed on the port. Relearning and aging of the dynamic addresses a

Module: RADLAN-rfInterfaces

Name: swIfLockMaxMacAddresses
Type: OBJECT-TYPE
OID: 1.3.6.1.4.1.171.10.94.89.89.43.1.1.38
Full path: iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).dlink(171).dlink-products(10).dlink-Dg
Module: RADLAN-rfInterfaces

Parent: swIfEntry
Prev sibling: swIfLockLimitationMode
Next sibling: swIfLockMacAddressesCount

Numerical syntax: Integer (32 bit)
Base syntax: INTEGER
Composed syntax: INTEGER
Status: current
Max access: read-write
Size list:
1: 1.2147483647
Default values:
1: 1 (int)

Description: This variable defines the maximum number of dynamic addresses that
can be associated with the locked interface. It isn't relevant in
disabled limitation mode.

[Configuration]

reset

create snmp community public read_only view Default

create snmp community private read_write view Default

create snmp view Default

[Example]

To configure “Port Security” Port 1 state enable, Lock Limitation Mode to be “permanent” and Max Learning Address to be “3” on DGS-3100-48.

[Test Steps]

Step 1. Configure Max Learning Address to be “**3**” on port **1**.

```
C:\>snmpset -v 2c -c private 10.90.90.90 1.3.6.1.4.1.171.10.94.89.89.43.1.1.38.1 i 3
SNMPv2-SMI::enterprises.171.10.94.89.89.43.1.1.38.1 = INTEGER: 3
```

Step 2. Configure Lock Limitation Mode to be “**permanent**” on port **1**.

```
C:\>snmpset -v 2c -c private 10.90.90.90 1.3.6.1.4.1.171.10.94.89.89.43.1.1.37.1 i 3
SNMPv2-SMI::enterprises.171.10.94.89.89.43.1.1.37.1 = INTEGER: 3
```

Step 3. Configure Port Security state to be “**enable**”.

```
C:\>snmpset -v 2c -c private 10.90.90.90 1.3.6.1.4.1.171.10.94.89.89.43.1.1.8.1 i 1
SNMPv2-SMI::enterprises.171.10.94.89.89.43.1.1.8.1 = INTEGER: 1
```

Before

```
DGS-3100# sh port_se
Command: show
DGS-3100# sh port_security
```

Port	Admin state	Max.Learning	Addr. Lock	Address Mode	Trap interval
1:1	Disabled	1	DeleteOnReset		10
1:2	Disabled	1	DeleteOnReset		10
1:3	Disabled	1	DeleteOnReset		10
1:4	Disabled	1	DeleteOnReset		10
1:5	Disabled	1	DeleteOnReset		10
1:6	Disabled	1	DeleteOnReset		10
1:7	Disabled	1	DeleteOnReset		10
1:8	Disabled	1	DeleteOnReset		10
1:9	Disabled	1	DeleteOnReset		10
1:10	Disabled	1	DeleteOnReset		10
1:11	Disabled	1	DeleteOnReset		10
1:12	Disabled	1	DeleteOnReset		10
1:13	Disabled	1	DeleteOnReset		10
1:14	Disabled	1	DeleteOnReset		10
1:15	Disabled	1	DeleteOnReset		10
1:16	Disabled	1	DeleteOnReset		10
1:17	Disabled	1	DeleteOnReset		10
1:18	Disabled	1	DeleteOnReset		10
1:19	Disabled	1	DeleteOnReset		10

```
DGS-3100# █
```

After

```
DGS-3100# sh port_security
```

Port	Admin state	Max.Learning	Addr. Lock	Address Mode	Trap interval
1:1	Enabled	3	Permanent		10
1:2	Disabled	1	DeleteOnReset		10
1:3	Disabled	1	DeleteOnReset		10
1:4	Disabled	1	DeleteOnReset		10
1:5	Disabled	1	DeleteOnReset		10
1:6	Disabled	1	DeleteOnReset		10
1:7	Disabled	1	DeleteOnReset		10
1:8	Disabled	1	DeleteOnReset		10
1:9	Disabled	1	DeleteOnReset		10
1:10	Disabled	1	DeleteOnReset		10
1:11	Disabled	1	DeleteOnReset		10
1:12	Disabled	1	DeleteOnReset		10
1:13	Disabled	1	DeleteOnReset		10
1:14	Disabled	1	DeleteOnReset		10
1:15	Disabled	1	DeleteOnReset		10
1:16	Disabled	1	DeleteOnReset		10
1:17	Disabled	1	DeleteOnReset		10
1:18	Disabled	1	DeleteOnReset		10
1:19	Disabled	1	DeleteOnReset		10

```
DGS-3100#
```