

How to read ACL on DGS-3100 via SNMP?

Example:

[1. For IP-TCP]

CLI command:

(dst_ip (255.255.255.255) + dst_port: permit all tcp, source ip=any, destination ip=172.16.30.1, destination port =42)

```
create access_profile profile_id 1 ip tcp destination_ip_mask 255.255.255.255 dst_port_mask ffff
config access_profile profile_id 1 add access_id 1 ip tcp destination_ip 172.16.30.1 dst_port 42 port all permit
```

SNMP Check:

Step 1-3, check the MIB “*qosclimib.mib*”

Step 4, check the MIB “*rlActionAcl.mib*”

Step1) check “rlQosAcITable: 1.3.6.1.4.1.171.10.94.89.89.88.7”

```
C:\>snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.10.94.89.89.88.7
SNMPv2-SMI::enterprises.171.10.94.89.89.88.7.1.2.1 = STRING: "ACL11"
SNMPv2-SMI::enterprises.171.10.94.89.89.88.7.1.2.256 = STRING: "ACL0"
SNMPv2-SMI::enterprises.171.10.94.89.89.88.7.1.2.100001 = STRING: "ACL1"
SNMPv2-SMI::enterprises.171.10.94.89.89.88.7.1.3.1 = INTEGER: 2
SNMPv2-SMI::enterprises.171.10.94.89.89.88.7.1.3.256 = INTEGER: 1
SNMPv2-SMI::enterprises.171.10.94.89.89.88.7.1.3.100001 = INTEGER: 2
SNMPv2-SMI::enterprises.171.10.94.89.89.88.7.1.4.1 = INTEGER: 1
SNMPv2-SMI::enterprises.171.10.94.89.89.88.7.1.4.256 = INTEGER: 1
SNMPv2-SMI::enterprises.171.10.94.89.89.88.7.1.4.100001 = INTEGER: 1
```

1.1) 1 = index id of access_id, which you create under profile id 1.

256 = default index id. The value 256 is given by system, no need to check.

100001 = index id represent of access profile id 1, which you created before.

1.2) ACL11 = rlQosAcIName = access id 1 ; ACL1 = rlQosAcIName = profile id 1

2 = rlQosAcIType = ip(2) ; 1 = rlQosAcIStatus = active(1)

| | | | | | | | | | | | | | | | |
|--|---|-------------|---------------|-----------|----------------------------------|--------|--------------------|-------------|---------------------------|--------|----------------|--------|---------|----------|--|
| <ul style="list-style-type: none"> rlQosAceTable rlQosAcI table <ul style="list-style-type: none"> rlQosAcIEntry <ul style="list-style-type: none"> rlQosAcIIndex rlQosAcIName rlQosAcIType rlQosAcIStatus rlQosAcIAceRefTable rlQosClassMapTable rlQosPolicerTable rlQosPolicyMapTable rlQosPolicyClassRefTable rlQosIfPolicyTable | <table> <tr><td>Object name</td><td>rlQosAcITable</td></tr> <tr><td>Object ID</td><td>1.3.6.1.4.1.171.10.94.89.89.88.7</td></tr> <tr><td>Module</td><td>RADLAN-QOS-CLI-MIB</td></tr> <tr><td>Base syntax</td><td>Sequence Of rlQosAcIEntry</td></tr> <tr><td>Access</td><td>Not_Accessible</td></tr> <tr><td>Status</td><td>Current</td></tr> <tr><td>Sequence</td><td>1:rlQosAcIIndex - Integer 2:rlQosAcIName - Octet String 3:rlQosAcIType - Integer 4:rlQosAcIStatus - Integer</td></tr> </table> | Object name | rlQosAcITable | Object ID | 1.3.6.1.4.1.171.10.94.89.89.88.7 | Module | RADLAN-QOS-CLI-MIB | Base syntax | Sequence Of rlQosAcIEntry | Access | Not_Accessible | Status | Current | Sequence | 1:rlQosAcIIndex - Integer 2:rlQosAcIName - Octet String 3:rlQosAcIType - Integer 4:rlQosAcIStatus - Integer |
| Object name | rlQosAcITable | | | | | | | | | | | | | | |
| Object ID | 1.3.6.1.4.1.171.10.94.89.89.88.7 | | | | | | | | | | | | | | |
| Module | RADLAN-QOS-CLI-MIB | | | | | | | | | | | | | | |
| Base syntax | Sequence Of rlQosAcIEntry | | | | | | | | | | | | | | |
| Access | Not_Accessible | | | | | | | | | | | | | | |
| Status | Current | | | | | | | | | | | | | | |
| Sequence | 1:rlQosAcIIndex - Integer 2:rlQosAcIName - Octet String 3:rlQosAcIType - Integer 4:rlQosAcIStatus - Integer | | | | | | | | | | | | | | |

rlQosAcIType:

&

rlQosAcIStatus:

| | |
|-----------------|--|
| Object name | rlQosAcIType |
| Object ID | 1.3.6.1.4.1.171.10.94.89.89.88.7.1.3 |
| Module | RADLAN-QOS-CLI-MIB |
| Base syntax | Integer |
| Composed syntax | AcIObjectType |
| Access | Read-Create |
| Status | Current |
| Value list | 1 : mac(1) 2 : ip(2) 3 : ipv6(3) |
| Parent node | rlQosAcIEntry |
| First child | None |
| Description | ACL Type. |

| | |
|-----------------|---|
| Object name | rlQosAcIStatus |
| Object ID | 1.3.6.1.4.1.171.10.94.89.89.88.7.1.4 |
| Module | RADLAN-QOS-CLI-MIB |
| 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 | rlQosAcIEntry |
| First child | None |
| Description | The status of a table entry. It is used to delete/Add an entry from this table. |

Step2) check “rIQosAceTidxTable: 1.3.6.1.4.1.171.10.94.89.89.88.31”

```
C:\>snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.10.94.89.89.88.31
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.3.1.60 = INTEGER: 1
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.3.256.20 = INTEGER: 1
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.3.100001.40 = INTEGER: 1
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.4.1.60 = INTEGER: 2
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.4.256.20 = INTEGER: 5
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.4.100001.40 = INTEGER: 2
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.5.1.60 = INTEGER: 5
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.5.256.20 = INTEGER: 0
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.5.100001.40 = INTEGER: 2
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.6.1.60 = INTEGER: 0
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.6.256.20 = INTEGER: 0
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.6.100001.40 = INTEGER: 0
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.7.1.60 = INTEGER: 0
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.7.256.20 = INTEGER: 0
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.7.100001.40 = INTEGER: 0
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.8.1.60 = INTEGER: 6
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.8.256.20 = INTEGER: 0
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.8.100001.40 = INTEGER: 3
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.9.1.60 = INTEGER: 7
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.9.256.20 = INTEGER: 0
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.9.100001.40 = INTEGER: 4
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.10.1.60 = INTEGER: 0
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.10.256.20 = INTEGER: 0
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.10.100001.40 = INTEGER: 0
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.11.1.60 = INTEGER: 0
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.11.256.20 = INTEGER: 0
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.11.100001.40 = INTEGER: 0
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.12.1.60 = INTEGER: 0
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.12.256.20 = INTEGER: 0
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.12.100001.40 = INTEGER: 0
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.13.1.60 = INTEGER: 1
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.13.256.20 = INTEGER: 1
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.13.100001.40 = INTEGER: 1
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.14.1.60 = INTEGER: 1
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.14.256.20 = INTEGER: 1
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.14.100001.40 = INTEGER: 1
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.15.1.60 = ""
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.15.256.20 = ""
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.15.100001.40 = ""
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.16.1.60 = INTEGER: 1
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.16.256.20 = INTEGER: 1
SNMPv2-SMI::enterprises.171.10.94.89.89.88.31.1.16.100001.40 = INTEGER: 1
```

- 2.1) 1.60= 1 means ACL11, 60 is a random value which given by system
256.20= 256 means ACL0, 20 is a random value which given by system
100001.40= 100001 means ACL1, 40 is a random value which given by system

2.2) Let's ignore the default one (ACL0, 256), check the ACL1 and ACL11 in this OID:

31.1.4.1.60 = INTEGER: 2 and **31.1.4.100001.40 = INTEGER: 2**

31.1.4 means “**rlQosAceTidxType**”, and **INTEGER: 2** means “**ip-TCP(2)**”

2.3) **31.1.5** to **31.1.12** are for “**rlQosAceTidxTuple1**” to “**rlQosAceTidxTuple8**”, each Tuple have different values, let's see how to read those values:

In this example, you can see there are values when display “**31.1.5**”, “**31.1.8**”, and “**31.1.9**”, you need to remember those INTEGER values, and check out what's stand for at **step 3)**:

31.1.5.1.60 = INTEGER: 5 and **31.1.5.100001.40 = INTEGER: 2**

31.1.8.1.60 = INTEGER: 6 and **31.1.8.100001.40 = INTEGER: 3**

31.1.9.1.60 = INTEGER: 7 and **31.1.9.100001.40 = INTEGER: 4**

2.4) **31.1.13** means “**rlQosAceTidxAccount**”, **INTEGER 1** means “**disable(1)**”

2.5) **31.1.14** means “**rlQosAceTidxStatus**”, **INTEGER: 1** means “**active(1)**”

2.6) **31.1.16** means “**rlQosAceTidxTimeRangelsActive**”, **INTEGER: 1** means “**true(1)**”

The screenshot shows a network device configuration interface. On the left, a tree of MIB objects is displayed, including 'rlQosAceTidxTable', 'rlQosAceTidxEntry', 'rlQosAceTidxAcclIndex', 'rlQosAceTidxIndex', 'rlQosAceTidxAction', 'rlQosAceTidxType', 'rlQosAceTidxTuple1' through 'rlQosAceTidxTuple8', 'rlQosAceTidxAccount', 'rlQosAceTidxStatus', 'rlQosAceTidxTimeRange', 'rlQosAceTidxTimeRangelsActive', 'rlQosDscpToDpTable', 'rlQosStatistics', 'rlQosMibVersion', 'rlQosDscpQueueDefaultMapTable', 'rlQosClassifierUtilization', 'rlQosPortToProfileMappingTable', 'rlQosTimeBasedAcclTable', 'rlQosTimeBasedAcclPeriodicTable', 'rlQosCPUSafeGuardEnable', 'SNMPv1 Traps', 'No Traps', 'Type Assignments', and 'Percents'. On the right, the details for the 'rlQosAceTidxTable' are shown. The table has an Object name of 'rlQosAceTidxTable', Object ID of '1.3.6.1.4.1.171.10.94.89.89.31', and Module of 'RADLAN-QOS-CLI-MIB'. The Base syntax is 'Sequence Of rlQosAceTidxEntry', Access is 'Not_Accessible', Status is 'Current', and Sequence is '1:rlQosAceTidxAcclIndex - Integer, 2:rlQosAceTidxIndex - Integer, 3:rlQosAceTidxAction - Integer, 4:rlQosAceTidxType - Integer, 5:rlQosAceTidxTuple1 - Integer, 6:rlQosAceTidxTuple2 - Integer, 7:rlQosAceTidxTuple3 - Integer, 8:rlQosAceTidxTuple4 - Integer, 9:rlQosAceTidxTuple5 - Integer, 10:rlQosAceTidxTuple6 - Integer, 11:rlQosAceTidxTuple7 - Integer, 12:rlQosAceTidxTuple8 - Integer, 13:rlQosAceTidxAccount - Integer, 14:rlQosAceTidxStatus - Integer, 15:rlQosAceTidxTimeRange - Octet String, 16:rlQosAceTidxTimeRangelsActive - Integer'. The Parent node is 'iso', First child is 'rlQosAceTidxEntry', and Description is 'This table specifies ACE table with two index information'.

rlQoSaceTidxAction:

| | |
|-----------------|---|
| Object name | rlQosAceTidxAction |
| Object ID | 1.3.6.1.4.1.171.10.94.89.89.31.1.3 |
| Module | RADLAN-QOS-CLI-MIB |
| Base syntax | Integer |
| Composed syntax | AceActionType |
| Access | Read-Create |
| Status | Current |
| Value list | 1 : permit(1) 2 : deny(2) 3 : deny-DisablePort(3) |
| Parent node | rlQosAceTidxEntry |
| First child | None |
| Description | ACE Action to take. |

rlQosAceTidxType:

| | |
|-----------------|---|
| Object name | rlQosAceTidxType |
| Object ID | 1.3.6.1.4.1.171.10.94.89.89.88.31.1.4 |
| Module | RADLAN-QOS-CLI-MIB |
| Base syntax | Integer |
| Composed syntax | AceObjectType |
| Access | Read-Create |
| Status | Current |
| Value list | 1 : ip(1) 2 : ip-TCP(2) 3 : ip-UDP(3) 4 : ip-Offset(4) 5 : mac(5) 6 : mac-Offset(6) 7 : ip-ICMP(7) 8 : ip-IGMP(8) 9 : ipv6(9) 10 : ipv6-TCP(10) 11 : ipv6-UDP(11) 12 : ipv6-Offset(12) 13 : ipv6-ICMP(13) |
| Parent node | rlQosAceTidxEntry |
| First child | None |
| Description | ACE Type |

rlQosAceTidxAccount:

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| | |
|-----------------|---|
| Object name | rlQosAceTidxAccount |
| Object ID | 1.3.6.1.4.1.171.10.94.89.89.88.31.1.13 |
| Module | RADLAN-QOS-CLI-MIB |
| Base syntax | Integer |
| Composed syntax | BinaryStatus |
| Access | Read-Create |
| Status | Current |
| Value list | 1 : disable(1) 2 : enable(2) |
| Parent node | rlQosAceTidxEntry |
| First child | None |
| Description | ACE Accounting state. When set to 'enabled' than appropriate statistic's counter is provided for an ACE. For Broadcom ASICs this counter shows number of matched with ACE criteria packets. For Marvell ASICs TBD. |

rlQosAceTidxStatus:

| | |
|-----------------|---|
| Object name | rlQosAceTidxStatus |
| Object ID | 1.3.6.1.4.1.171.10.94.89.89.88.31.1.14 |
| Module | RADLAN-QOS-CLI-MIB |
| 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 | rlQosAceTidxEntry |
| First child | None |
| Description | The status of a table entry. It is used to delete/Add an entry from this table. |

rlQosAceTidxTimeRangelsActive:

| | |
|-----------------|---|
| Object name | rlQosAceTidxTimeRangeIsActive |
| Object ID | 1.3.6.1.4.1.171.10.94.89.89.88.31.1.16 |
| Module | RADLAN-QOS-CLI-MIB |
| Base syntax | Integer |
| Composed syntax | TruthValue |
| Access | Read-Only |
| Status | Current |
| Value list | 1 : true(1) 2 : false(2) |
| Parent node | rlQosAceTidxEntry |
| First child | None |
| Description | ACE time range is rule active state shows is ACE currently active or not. |

Step3) check “rlQosTupleEntry: 1.3.6.1.4.1.171.10.94.89.89.88.5.1”

```
C:\>snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.10.94.89.89.88.5.1
SNMPv2-SMI::enterprises.171.10.94.89.89.88.5.1.2.2 = INTEGER: 1
SNMPv2-SMI::enterprises.171.10.94.89.89.88.5.1.2.3 = INTEGER: 3
SNMPv2-SMI::enterprises.171.10.94.89.89.88.5.1.2.4 = INTEGER: 9
SNMPv2-SMI::enterprises.171.10.94.89.89.88.5.1.2.5 = INTEGER: 1
SNMPv2-SMI::enterprises.171.10.94.89.89.88.5.1.2.6 = INTEGER: 3
SNMPv2-SMI::enterprises.171.10.94.89.89.88.5.1.2.7 = INTEGER: 9
SNMPv2-SMI::enterprises.171.10.94.89.89.88.5.1.3.2 = INTEGER: 0
SNMPv2-SMI::enterprises.171.10.94.89.89.88.5.1.3.3 = INTEGER: 0
SNMPv2-SMI::enterprises.171.10.94.89.89.88.5.1.3.4 = INTEGER: 0
SNMPv2-SMI::enterprises.171.10.94.89.89.88.5.1.3.5 = INTEGER: 0
SNMPv2-SMI::enterprises.171.10.94.89.89.88.5.1.3.6 = INTEGER: 0
SNMPv2-SMI::enterprises.171.10.94.89.89.88.5.1.3.7 = INTEGER: 42
SNMPv2-SMI::enterprises.171.10.94.89.89.88.5.1.4.2 = Hex-STRING: 06 FF
SNMPv2-SMI::enterprises.171.10.94.89.89.88.5.1.4.3 = Hex-STRING: 00 00 00 00 00 00 00 00
SNMPv2-SMI::enterprises.171.10.94.89.89.88.5.1.4.4 = Hex-STRING: 00 00
SNMPv2-SMI::enterprises.171.10.94.89.89.88.5.1.4.5 = Hex-STRING: 06 FF
SNMPv2-SMI::enterprises.171.10.94.89.89.88.5.1.4.6 = Hex-STRING: AC 10 1E 01 00 00 00 00
SNMPv2-SMI::enterprises.171.10.94.89.89.88.5.1.4.7 = Hex-STRING: 00 00
SNMPv2-SMI::enterprises.171.10.94.89.89.88.5.1.5.2 = INTEGER: 1
SNMPv2-SMI::enterprises.171.10.94.89.89.88.5.1.5.3 = INTEGER: 1
SNMPv2-SMI::enterprises.171.10.94.89.89.88.5.1.5.4 = INTEGER: 1
SNMPv2-SMI::enterprises.171.10.94.89.89.88.5.1.5.5 = INTEGER: 1
SNMPv2-SMI::enterprises.171.10.94.89.89.88.5.1.5.6 = INTEGER: 1
SNMPv2-SMI::enterprises.171.10.94.89.89.88.5.1.5.7 = INTEGER: 1
```

- let's go back to step 3.3

31.1.5.1.60 = INTEGER: 5 and 31.1.5.100001.40 = INTEGER: 2

31.1.8.1.60 = INTEGER: 6 and 31.1.8.100001.40 = INTEGER: 3

31.1.9.1.60 = INTEGER: 7 and 31.1.9.100001.40 = INTEGER: 4

⇒ So you can see

31.1.5= 5 & 2, when check the table above, they stand for “INTEGER: 1” = protocol(1)

31.1.8= 6 & 3, when check the table above, they stand for “INTEGER: 3”= ip-dest(3)

31.1.9= 7 & 4, when check the table above, they stand for “INTEGER: 9”= tcp-port-dest(9)

⇒ Also

31.1.5= 5 & 2, when check the table above, they stand for “Hex-STRING: 06 FF”, its no meaning when you create the profile of “IP”.

31.1.8= 6 & 3, when check the table above, they stand for:

- 31.1.8.1.60 = INTEGER 6 = ACL11 = “Hex-STRING: AC 10 1E 01 00 00 00 00”

AC 10 1E 01 = the hex of IP 172.16.30.1;

00 00 00 00 = subnet mask 255.255.255.255 (calculation: 255-255 =0)

- 31.1.8.1.100001.40 = INTEGER 3 = ACL1 = “Hex-STRING: 00 00 00 00 00 00 00 00”

Because this is the profile id 1, so only the subnet mask value is meaning:

00 00 00 00 = subnet mask 255.255.255.255 (calculation: 255-255 =0)

31.1.9= 7 & 4, when check the table above, they stand for

- 31.1.9.1.60 = INTEGER 7 = ACL11 = "INTEGER: 42"

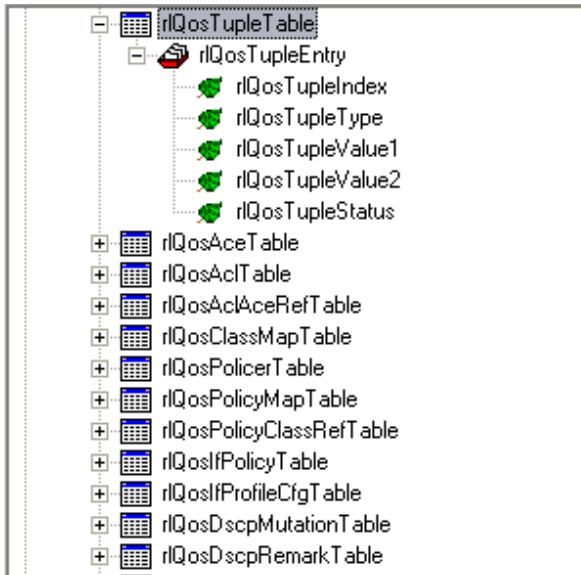
42 = tcp-port-dest = hex of TCP port "42"

- 31.1.9.1.100001.40 = INTEGER 4 = ACL1 = "INTEGER: 0"

Because this is the profile id 1, there is no TCP Port value of this part, so it is "0"

⇒ Final:

1.5 = INTEGER: 1= rIQosTupleStatus = "active(1)"

| | | | | | | | | | | | | | | | | | | | | | |
|--|--|-------------|-----------------|-----------|----------------------------------|--------|--------------------|-------------|-----------------------------|--------|----------------|--------|---------|----------|--|-------------|-----|-------------|-----------------|-------------|--|
|  | <table><tr><td>Object name</td><td>rIQosTupleTable</td></tr><tr><td>Object ID</td><td>1.3.6.1.4.1.171.10.94.89.89.88.5</td></tr><tr><td>Module</td><td>RADLAN-QOS-CLI-MIB</td></tr><tr><td>Base syntax</td><td>Sequence Of rIQosTupleEntry</td></tr><tr><td>Access</td><td>Not_Accessible</td></tr><tr><td>Status</td><td>Current</td></tr><tr><td>Sequence</td><td>1:rIQosTupleIndex - Integer 2:rIQosTupleType - Integer 3:rIQosTupleValue1 - Integer 4:rIQosTupleValue2 - Octet String 5:rIQosTupleStatus - Integer</td></tr><tr><td>Parent node</td><td>iso</td></tr><tr><td>First child</td><td>rIQosTupleEntry</td></tr><tr><td>Description</td><td>This table specifies Tuple Table information</td></tr></table> | Object name | rIQosTupleTable | Object ID | 1.3.6.1.4.1.171.10.94.89.89.88.5 | Module | RADLAN-QOS-CLI-MIB | Base syntax | Sequence Of rIQosTupleEntry | Access | Not_Accessible | Status | Current | Sequence | 1:rIQosTupleIndex - Integer 2:rIQosTupleType - Integer 3:rIQosTupleValue1 - Integer 4:rIQosTupleValue2 - Octet String 5:rIQosTupleStatus - Integer | Parent node | iso | First child | rIQosTupleEntry | Description | This table specifies Tuple Table information |
| Object name | rIQosTupleTable | | | | | | | | | | | | | | | | | | | | |
| Object ID | 1.3.6.1.4.1.171.10.94.89.89.88.5 | | | | | | | | | | | | | | | | | | | | |
| Module | RADLAN-QOS-CLI-MIB | | | | | | | | | | | | | | | | | | | | |
| Base syntax | Sequence Of rIQosTupleEntry | | | | | | | | | | | | | | | | | | | | |
| Access | Not_Accessible | | | | | | | | | | | | | | | | | | | | |
| Status | Current | | | | | | | | | | | | | | | | | | | | |
| Sequence | 1:rIQosTupleIndex - Integer 2:rIQosTupleType - Integer 3:rIQosTupleValue1 - Integer 4:rIQosTupleValue2 - Octet String 5:rIQosTupleStatus - Integer | | | | | | | | | | | | | | | | | | | | |
| Parent node | iso | | | | | | | | | | | | | | | | | | | | |
| First child | rIQosTupleEntry | | | | | | | | | | | | | | | | | | | | |
| Description | This table specifies Tuple Table information | | | | | | | | | | | | | | | | | | | | |

rIQosTupleType:

&

rIQosTupleStatus:

| | |
|-----------------|---|
| Object name | rIQosTupleType |
| Object ID | 1.3.6.1.4.1.171.10.94.89.89.88.5.1.2 |
| Module | RADLAN-QOS-CLI-MIB |
| Base syntax | Integer |
| Composed syntax | ClassTupleType |
| Access | Read-Create |
| Status | Current |
| Value list | 1 : protocol(1) 2 : ip-src(2) 3 : ip-dest(3) 4 : dscp(4) 5 : ip-precedence(5) 6 : udp-port-src(6) 7 : udp-port-dest(7) 8 : tcp-port-src(8) 9 : tcp-port-dest(9) 10 : mac-src(10) 11 : mac-dest(11) 12 : vlan(12) 13 : in-port(13) 14 : out-port(14) 15 : general(15) 16 : vpt(16) 17 : ether-type(17) 18 : tcp-flags(18) 19 : icmp-type(19) 20 : icmp-code(20) 21 : igmp-type(21) 22 : inner-vlan(22) 23 : ipv6-src(23) 24 : ipv6-dest(24) |

| | |
|-----------------|---|
| Object name | rIQosTupleStatus |
| Object ID | 1.3.6.1.4.1.171.10.94.89.89.88.5.1.5 |
| Module | RADLAN-QOS-CLI-MIB |
| 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 | rIQosTupleEntry |
| First child | None |
| Description | The status of a table entry. It is used to delete/Add an entry from this table. |

Step4) Check the port number

In this example, we set the “port all” permit on access_id 1, so we need to check this values in other MIB:”
rlActionAcl.mib”:

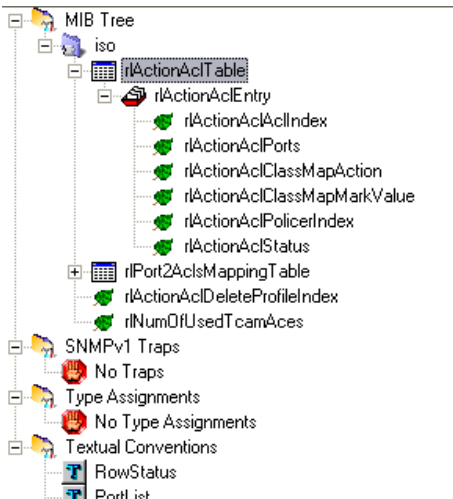
```
C:\>snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.10.94.89.89.130.1.1
SNMPv2-SMI::enterprises.171.10.94.89.89.130.1.1.2.1 = Hex-STRING: FF FF FF 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
SNMPv2-SMI::enterprises.171.10.94.89.89.130.1.1.3.1 = INTEGER: 1
SNMPv2-SMI::enterprises.171.10.94.89.89.130.1.1.4.1 = INTEGER: 0
SNMPv2-SMI::enterprises.171.10.94.89.89.130.1.1.5.1 = INTEGER: 0
SNMPv2-SMI::enterprises.171.10.94.89.89.130.1.1.6.1 = INTEGER: 1
```

- FF FF FF: means port all.

For example: so port 1 is 80 00 00, port 2 is C0 00 00....etc.

And there are so many 00 00 00 behind that's because DGS-3100 support stacking, so that's the way to display the stacking member's port numbers.

- 1.3.1 = INTEGER: 1 means “none(1)”
1.6.1 = INTEGER: 1 means “active(1)”



| | |
|-------------|--|
| Object name | rlActionAclTable |
| Object ID | 1.3.6.1.4.1.171.10.94.89.89.130.1 |
| Module | RADLAN-ACTION-ACL-MIB |
| Base syntax | Sequence Of rlActionAclEntry |
| Access | Read-Write |
| Status | Current |
| Sequence | 1:rlActionAclAcIndex - Integer 2:rlActionAclPorts - Octet String 3:rlActionAclClassMapAction - Integer 4:rlActionAclClassMapMarkValue - Integer 5:rlActionAclPolicerIndex - Integer 6:rlActionAclStatus - Integer |
| Parent node | iso |
| First child | rlActionAclEntry |
| Description | This table holds the group membership information and the group/ports status |

rlActionAclClassMapAction: & rlActionAclStatus:

| | |
|-----------------|---|
| Object name | rlActionAclClassMapAction |
| Object ID | 1.3.6.1.4.1.171.10.94.89.89.130.1.1.3 |
| Module | RADLAN-ACTION-ACL-MIB |
| Base syntax | Integer |
| Composed syntax | ClassMapAction |
| Access | Read-Write |
| Status | Current |
| Value list | 1 : none(1) 2 : setIP-Precedence(2) 3 : setDSCP(3) 4 : setQueue(4) 5 : setCos(5) 6 : trustCos(6) 7 : trustDSCP(7) 8 : trustTCP-UDPport(8) 9 : trustCosDscp(9) |
| Parent node | rlActionAclEntry |
| First child | None |
| Description | Action to perform on data base for ACL (add/remove) |

| | |
|-----------------|---|
| Object name | rlActionAclStatus |
| Object ID | 1.3.6.1.4.1.171.10.94.89.89.130.1.1.6 |
| Module | RADLAN-ACTION-ACL-MIB |
| 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 | rlActionAclEntry |
| First child | None |
| Description | The index of profile to perform the action |

Others:

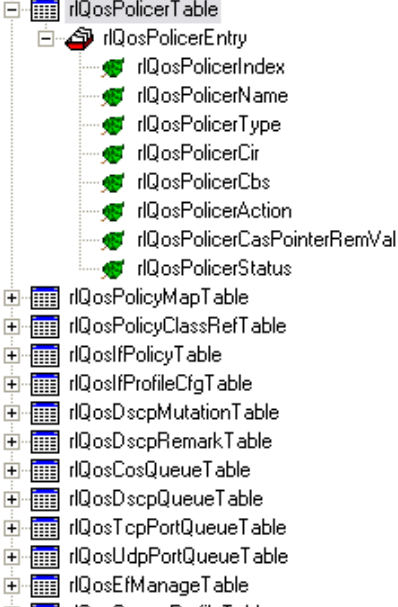
If you have set **rate limit** on CLI, then you need to check the values in OID *rlQosPolicerTable*, for example:

CLI:

```
create access_profile profile_id 1 ip tcp destination_ip_mask 255.255.255.255 dst_port_mask ffff
config access_profile profile_id 1 add access_id 1 ip tcp destination_ip 172.16.30.1 dst_port 42 rate_limit 64 port 1 permit
```

SNMP:

```
C:\>snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.10.94.89.89.88.10
SNMPv2-SMI::enterprises.171.10.94.89.89.88.10.1.2.1 = STRING: "1"
SNMPv2-SMI::enterprises.171.10.94.89.89.88.10.1.2.2 = STRING: "2"
SNMPv2-SMI::enterprises.171.10.94.89.89.88.10.1.2.3 = STRING: "3"
SNMPv2-SMI::enterprises.171.10.94.89.89.88.10.1.3.1 = INTEGER: 2
SNMPv2-SMI::enterprises.171.10.94.89.89.88.10.1.3.2 = INTEGER: 2
SNMPv2-SMI::enterprises.171.10.94.89.89.88.10.1.3.3 = INTEGER: 2
SNMPv2-SMI::enterprises.171.10.94.89.89.88.10.1.4.1 = Gauge32: 64
SNMPv2-SMI::enterprises.171.10.94.89.89.88.10.1.4.2 = Gauge32: 64
SNMPv2-SMI::enterprises.171.10.94.89.89.88.10.1.4.3 = Gauge32: 64
SNMPv2-SMI::enterprises.171.10.94.89.89.88.10.1.5.1 = Gauge32: 64000
SNMPv2-SMI::enterprises.171.10.94.89.89.88.10.1.5.2 = Gauge32: 64000
SNMPv2-SMI::enterprises.171.10.94.89.89.88.10.1.5.3 = Gauge32: 64000
SNMPv2-SMI::enterprises.171.10.94.89.89.88.10.1.6.1 = INTEGER: 2
SNMPv2-SMI::enterprises.171.10.94.89.89.88.10.1.6.2 = INTEGER: 2
SNMPv2-SMI::enterprises.171.10.94.89.89.88.10.1.6.3 = INTEGER: 2
SNMPv2-SMI::enterprises.171.10.94.89.89.88.10.1.7.1 = INTEGER: 0
SNMPv2-SMI::enterprises.171.10.94.89.89.88.10.1.7.2 = INTEGER: 0
SNMPv2-SMI::enterprises.171.10.94.89.89.88.10.1.7.3 = INTEGER: 0
SNMPv2-SMI::enterprises.171.10.94.89.89.88.10.1.8.1 = INTEGER: 1
SNMPv2-SMI::enterprises.171.10.94.89.89.88.10.1.8.2 = INTEGER: 1
SNMPv2-SMI::enterprises.171.10.94.89.89.88.10.1.8.3 = INTEGER: 1
```

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|-------------|-------------------|-----------|-----------------------------------|--------|--------------------|-------------|-------------------------------|--------|----------------|--------|---------|----------|--|-------------|-----|-------------|-------------------|-------------|---|
|  | <table><tr><td>Object name</td><td>rlQosPolicerTable</td></tr><tr><td>Object ID</td><td>1.3.6.1.4.1.171.10.94.89.89.88.10</td></tr><tr><td>Module</td><td>RADLAN-QOS-CLI-MIB</td></tr><tr><td>Base syntax</td><td>Sequence Of rlQosPolicerEntry</td></tr><tr><td>Access</td><td>Not_Accessible</td></tr><tr><td>Status</td><td>Current</td></tr><tr><td>Sequence</td><td>1:rlQosPolicerIndex - Integer 2:rlQosPolicerName - Octet String 3:rlQosPolicerType - Integer 4:rlQosPolicerCir - Gauge 5:rlQosPolicerCbs - Gauge 6:rlQosPolicerAction - Integer 7:rlQosPolicerCasPointerRemVal - Integer 8:rlQosPolicerStatus - Integer</td></tr><tr><td>Parent node</td><td>iso</td></tr><tr><td>First child</td><td>rlQosPolicerEntry</td></tr><tr><td>Description</td><td>This table specifies All the Policers in the system Information</td></tr></table> | Object name | rlQosPolicerTable | Object ID | 1.3.6.1.4.1.171.10.94.89.89.88.10 | Module | RADLAN-QOS-CLI-MIB | Base syntax | Sequence Of rlQosPolicerEntry | Access | Not_Accessible | Status | Current | Sequence | 1:rlQosPolicerIndex - Integer 2:rlQosPolicerName - Octet String 3:rlQosPolicerType - Integer 4:rlQosPolicerCir - Gauge 5:rlQosPolicerCbs - Gauge 6:rlQosPolicerAction - Integer 7:rlQosPolicerCasPointerRemVal - Integer 8:rlQosPolicerStatus - Integer | Parent node | iso | First child | rlQosPolicerEntry | Description | This table specifies All the Policers in the system Information |
| Object name | rlQosPolicerTable | | | | | | | | | | | | | | | | | | | | |
| Object ID | 1.3.6.1.4.1.171.10.94.89.89.88.10 | | | | | | | | | | | | | | | | | | | | |
| Module | RADLAN-QOS-CLI-MIB | | | | | | | | | | | | | | | | | | | | |
| Base syntax | Sequence Of rlQosPolicerEntry | | | | | | | | | | | | | | | | | | | | |
| Access | Not_Accessible | | | | | | | | | | | | | | | | | | | | |
| Status | Current | | | | | | | | | | | | | | | | | | | | |
| Sequence | 1:rlQosPolicerIndex - Integer 2:rlQosPolicerName - Octet String 3:rlQosPolicerType - Integer 4:rlQosPolicerCir - Gauge 5:rlQosPolicerCbs - Gauge 6:rlQosPolicerAction - Integer 7:rlQosPolicerCasPointerRemVal - Integer 8:rlQosPolicerStatus - Integer | | | | | | | | | | | | | | | | | | | | |
| Parent node | iso | | | | | | | | | | | | | | | | | | | | |
| First child | rlQosPolicerEntry | | | | | | | | | | | | | | | | | | | | |
| Description | This table specifies All the Policers in the system Information | | | | | | | | | | | | | | | | | | | | |

rQosPolicerType: &

| | |
|-----------------|---|
| Object name | rQosPolicerType |
| Object ID | 1.3.6.1.4.1.171.10.94.89.89.88.10.1.3 |
| Module | RADLAN-QOS-CLI-MIB |
| Base syntax | Integer |
| Composed syntax | PolicerType |
| Access | Read-Create |
| Status | Current |
| Value list | 1 : single(1) 2 : aggregate(2) 3 : cascade(3) |
| Parent node | rQosPolicerEntry |
| First child | None |
| Description | Policer type |

rQosPolicerAction:

| | |
|-----------------|--|
| Object name | rQosPolicerAction |
| Object ID | 1.3.6.1.4.1.171.10.94.89.89.88.10.1.6 |
| Module | RADLAN-QOS-CLI-MIB |
| Base syntax | Integer |
| Composed syntax | PolicerAction |
| Access | Read-Create |
| Status | Current |
| Value list | 1 : none(1) 2 : drop(2) 3 : remark(3) 4 : explicit-remark(4) 5 : cascadePointer(5) |
| Parent node | rQosPolicerEntry |
| First child | None |
| Description | Out of profile Action. |

rQosPolicerStatus:

| | |
|-----------------|---|
| Object name | rQosPolicerStatus |
| Object ID | 1.3.6.1.4.1.171.10.94.89.89.88.10.1.8 |
| Module | RADLAN-QOS-CLI-MIB |
| 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 | rQosPolicerEntry |
| First child | None |
| Description | The status of a table entry. It is used to delete/Add an entry from this table. |