

How to use NET-SNMP – IGMP Snooping

1. Enable Multicast Filtering

```
# snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.10.94.89.89.55.1.0 i 1
```

2. Enable IGMP Snooping

```
# snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.10.94.89.89.55.2.2.0 i 1
```

1 → True

3. Change Host Timeout and Route Timeout

```
# snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.10.94.89.89.55.2.3.0 i 260  
1.3.6.1.4.1.171.10.94.89.89.55.2.4.0 i 300
```

4. Enable IGMP Snooping in the VLAN

```
# snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.10.94.89.89.55.2.7.1.2.1 i 1
```

1 → Port Number

IGMP Snooping-Forwarding

Object name	rIgmPsnOopMembershipTable
Object ID	1.3.6.1.4.1.171.10.94.89.89.55.2.11
Module	RADLAN-rlBrGMulticast-MIB
Base syntax	Sequence Of rIgmPsnOopMembershipEntry
Access	Not_Accessible
Status	Current
Sequence	1:rIgmPsnOopMembershipVlanTag - Gauge 2:rIgmPsnOopMembershipGroupIpAddress - IP Address 3:rIgmPsnOopMembershipSourceIpAddress - IP Address 4:rIgmPsnOopMembershipIncPortlist - Octet String 5:rIgmPsnOopMembershipExcPortlist - Octet String 6:rIgmPsnOopMembershipExpiryTime - Integer 7:rIgmPsnOopMembershipCompatibilityMode - Integer
Parent node	rIgmPsnOop
First child	rIgmPsnOopMembershipEntry
Description	The table listing the IP multicast memberships.

```
# snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.10.94.89.89.55.2.11
```

OID for IGMP Snooping

Module:	RADLAN-rlBrgMulticast-MIB
Name:	rlMacMulticastEnable
Type:	OBJECT-TYPE
OID:	1.3.6.1.4.1.171.10.94.89.89.55.1
Full path:	iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).dlin
Module:	RADLAN-rlBrgMulticast-MIB
Parent:	rlMacMulticast
Next sibling:	rlIcmpSnoop
Numerical syntax:	Integer (32 bit)
Base syntax:	INTEGER
Composed syntax:	TruthValue
Status:	current
Max access:	read-write
Description:	Enable/Disable MAC Multicast bridging in the d

Module:	RADLAN-rlBrgMulticast-MIB
Name:	rlIcmpSnoopEnable
Type:	OBJECT-TYPE
OID:	1.3.6.1.4.1.171.10.94.89.89.55.2.2
Full path:	iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).dlin
Module:	RADLAN-rlBrgMulticast-MIB
Parent:	rlIcmpSnoop
Prev sibling:	rlIcmpSnoopMibVersion
Next sibling:	rlIcmpSnoopHostAgingTime
Numerical syntax:	Integer (32 bit)
Base syntax:	INTEGER
Composed syntax:	TruthValue
Status:	current
Max access:	read-write
Description:	Enable/Disable IGMP Snooping in the switch.

Module: RADLAN-rBrgMulticast-MIB	
Name:	rIlgmpSnoopHostAgingTime
Type:	OBJECT-TYPE
OID:	1.3.6.1.4.1.171.10.94.89.89.55.2.3
Full path:	iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).dlink(17)
Module:	RADLAN-rBrgMulticast-MIB
Parent:	rIlgmpSnoop
Prev sibling:	rIlgmpSnoopEnable
Next sibling:	rIlgmpSnoopRouterAgingTime
Numerical syntax:	Integer (32 bit)
Base syntax:	INTEGER
Composed syntax:	INTEGER
Status:	current
Max access:	read-write
Size list:	1: 0..2147483647
Default values:	1: 260 (int)
Units:	seconds
Description:	The amount of time that should pass before aging c an entry in the rIlgmpSnoopGroupTable will be aged

Module: RADLAN-rBrgMulticast-MIB	
Name:	rIlgmpSnoopRouterAgingTime
Type:	OBJECT-TYPE
OID:	1.3.6.1.4.1.171.10.94.89.89.55.2.4
Full path:	iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).dlink(17)
Module:	RADLAN-rBrgMulticast-MIB
Parent:	rIlgmpSnoop
Prev sibling:	rIlgmpSnoopHostAgingTime
Next sibling:	rIlgmpSnoopVlanTable
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: 300 (int)
Units:	seconds
Description:	The amount of time that should pass before aging c an entry in the rIlgmpSnoopInterfaceTable will be

D-Link Switch: DGS-3100

Module:	RADLAN-riBrgMulticast-MIB
Name:	rlIcmpSnoopVlanEnable
Type:	OBJECT-TYPE
OID:	1.3.6.1.4.1.171.10.94.89.89.55.2.7.1.2
Full path:	iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).dlink(17)
Module:	RADLAN-riBrgMulticast-MIB
Parent:	rlIcmpSnoopVlanEntry
Prev sibling:	rlIcmpSnoopVlanTag
Next sibling:	rlIcmpSnoopVlanRouterLearn
Numerical syntax:	Integer (32 bit)
Base syntax:	INTEGER
Composed syntax:	TruthValue
Status:	current
Max access:	read-write
Description:	Enable/Disable IGMP Snooping in the vlan.

Module:	RADLAN-riBrgMulticast-MIB
Name:	rlIcmpSnoopVlanRouterLearn
Type:	OBJECT-TYPE
OID:	1.3.6.1.4.1.171.10.94.89.89.55.2.7.1.3
Full path:	iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).dlink(17)
Module:	RADLAN-riBrgMulticast-MIB
Parent:	rlIcmpSnoopVlanEntry
Prev sibling:	rlIcmpSnoopVlanEnable
Next sibling:	rlIcmpSnoopVlanHostTimeOut
Numerical syntax:	Integer (32 bit)
Base syntax:	INTEGER
Composed syntax:	TruthValue
Status:	current
Max access:	read-write
Description:	Enable/Disable of Learning of routers in the vlan.

Module:	RADLAN-riBrgMulticast-MIB
Name:	rlIcmpSnoopVlanHostTimeOut
Type:	OBJECT-TYPE
OID:	1.3.6.1.4.1.171.10.94.89.89.55.2.7.1.4
Full path:	iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).dlink(17)
Module:	RADLAN-riBrgMulticast-MIB
Parent:	rlIcmpSnoopVlanEntry
Prev sibling:	rlIcmpSnoopVlanRouterLearn
Next sibling:	rlIcmpSnoopVlanQuerierTimeOut
Numerical syntax:	Integer (32 bit)
Base syntax:	INTEGER
Composed syntax:	INTEGER
Status:	current
Max access:	read-write
Size list:	1: 0..2147483647
Default values:	1: 260 (int)
Units:	seconds
Description:	The amount of time that should pass before aging c an entry in the rlIcmpSnoopMembershipTable for thi

Module:	RADLAN-riBrgMulticast-MIB
Name:	rlIcmpSnoopVlanQuerierTimeOut
Type:	OBJECT-TYPE
OID:	1.3.6.1.4.1.171.10.94.89.89.55.2.7.1.5
Full path:	iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).dlink(17)
Module:	RADLAN-riBrgMulticast-MIB
Parent:	rlIcmpSnoopVlanEntry
Prev sibling:	rlIcmpSnoopVlanHostTimeOut
Next sibling:	rlIcmpSnoopVlanRouterTimeOut
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: 260 (int)
Units:	seconds
Description:	The amount of time where no query is heard until querier is activated

Module: RADLAN-riBrgMulticast-MIB	
Name:	rlIgmPsnOopVlanRouterTimeOut
Type:	OBJECT-TYPE
OID:	1.3.6.1.4.1.171.10.94.89.89.55.2.7.1.6
Full path:	iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).dlink(17
Module:	RADLAN-riBrgMulticast-MIB
Parent:	rlIgmPsnOopVlanEntry
Prev sibling:	rlIgmPsnOopVlanQuerierTimeOut
Next sibling:	rlIgmPsnOopVlanLeaveTimeOut
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: 300 (int)
Units:	seconds
Description:	The amount of time that should pass before aging c a port in the router ports dynamically learnt for this vlan.

Module: RADLAN-riBrgMulticast-MIB	
Name:	rlIgmPsnOopVlanLeaveTimeOut
Type:	OBJECT-TYPE
OID:	1.3.6.1.4.1.171.10.94.89.89.55.2.7.1.7
Full path:	iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).dlink
Module:	RADLAN-riBrgMulticast-MIB
Parent:	rlIgmPsnOopVlanEntry
Prev sibling:	rlIgmPsnOopVlanRouterTimeOut
Next sibling:	rlIgmPsnOopVlanIgmPVersion
Numerical syntax:	Integer (32 bit)
Base syntax:	INTEGER
Composed syntax:	INTEGER
Status:	current
Max access:	read-write
Size list:	1: 0..2147483647
Default values:	1: 10 (int)
Units:	seconds
Description:	The amount of time that should pass before aging an entry in the rlIgmPsnOopMembershipTable for after recieving a leave/exclude message from th the entry.

Module:	RADLAN-rlBrgMulticast-MIB
Name:	rlIcmpSnoopIGMP224ReportsHandle
Type:	OBJECT-TYPE
OID:	1.3.6.1.4.1.171.10.94.89.89.55.2.8
Full path:	iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).dlink(17)
Module:	RADLAN-rlBrgMulticast-MIB
Parent:	rlIcmpSnoop
Prev sibling:	rlIcmpSnoopVlanTable
Next sibling:	rlIcmpSnoopMulticastTvTable
Numerical syntax:	Integer (32 bit)
Base syntax:	INTEGER
Composed syntax:	INTEGER
Status:	current
Max access:	read-write
Value list:	1: allow(1) 2: ignore(2)
Description:	This variable indicates whether to allow IGMP rep 224.0.0.X range when the group address is already