

How to set IGMP snooping with SNMP command

Follow the commands below.

1. enable IGMP snooping globally

```
$ snmpset -c private -v 2c 192.168.1.24  
1.3.6.1.4.1.171.11.70.3.2.1.2.2.0 i 3
```

2. enable VLAN 1 IGMP snooping and it's querier with IGMP version 2

```
$ snmpset -c private -v 2c 192.168.1.24  
1.3.6.1.4.1.171.11.70.3.2.11.3.1.9.1 i 3  
1.3.6.1.4.1.171.11.70.3.2.11.3.1.11.1 i 3  
1.3.6.1.4.1.171.11.70.3.2.11.3.1.13.1 i 2
```

Please refer the following the description for IGMP snooping

Object name	swL2DevCtrlIGMPSnooping
Object ID	1.3.6.1.4.1.171.11.70.3.2.1.2.2
Module	DGS3450-L2MGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Write
Status	Current
Value list	1 : other(1) 2 : disabled(2) 3 : enabled(3)
Parent node	swL2DevCtrl
First child	None
Description	This object indicates layer 2 Internet Group Management Protocol (IGMP) capture function is enabled or disabled.

Object name	swL2IGMPCtrlTable
Object ID	1.3.6.1.4.1.171.11.70.3.2.11.3
Module	DGS3450-L2MGMT-MIB
Base syntax	Sequence Of swL2IGMPCtrlEntry
Access	Not_Accessible
Status	Current
Sequence	1:swL2IGMPCtrlVid - Integer 2:swL2IGMPQueryInterval - Integer 3:swL2IGMPMaxResponseTime - Integer 4:swL2IGMPRobustness - Integer 5:swL2IGMPLastMemberQueryInterval - Integer 6:swL2IGMPHostTimeout - Integer 7:swL2IGMPRouteTimeout - Integer 8:swL2IGMPLeaveTimer - Integer 9:swL2IGMPQueryState - Integer 10:swL2IGMPCurrentState - Integer 11:swL2IGMPCtrlState - Integer 12:swL2IGMPFastLeaveState - Integer 13:swL2IGMPQueryVersion - Integer 14:swL2IGMPReportSuppression - Integer
Parent node	swL2IGMPMgmt
First child	swL2IGMPCtrlEntry
Description	The table controls the Vlan's IGMP function. Its scale depends on current VLAN state (swL2VlanInfoStatus). If VLAN is disabled mode, there is only one entry in the table, with index 1. If VLAN is in Port-Base or 802.1q mode, the number of entries can be up to 12, with index range from 1 to 12.

Object name	swL2IGMPCtrlEntry
Object ID	1.3.6.1.4.1.171.11.70.3.2.11.3.1
Module	DGS3450-L2MGMT-MIB
Base syntax	Sequence
Access	Not_Accessible
Status	Current
Index	1.swL2IGMPCtrlVid
Parent node	swL2IGMPCtrlTable
First child	swL2IGMPCtrlVid
Description	The entry in IGMP control table (swL2IGMPCtrlTable). The entry is effective only when IGMP capture switch (swL2DevCtrlIGMPSnooping) is enabled.

<ul style="list-style-type: none"> swL2PortSecurityMgmt swL2TrunkMgmt swL2MirrorMgmt swL2IGMPPMgmt <ul style="list-style-type: none"> swL2IGMPMaxSupportedVlans swL2IGMPMaxGroupNumPerVlan swL2IGMPCtrlTable <ul style="list-style-type: none"> swL2IGMPCtrlEntry <ul style="list-style-type: none"> swL2IGMPCtrlVid swL2IGMPQueryInterval swL2IGMPMaxResponseTime swL2IGMPRobustness swL2IGMPLastMemberQueryInterv. swL2IGMPHostTimeout swL2IGMPRouteTimeout swL2IGMPLeaveTimer swL2IGMPQueryState swL2IGMPCurrentState 	Object name swL2IGMPCtrlVid Object ID 1.3.6.1.4.1.171.11.70.3.2.11.3.1.1 Module DGS3450-L2MGMT-MIB
	Base syntax Integer Composed syntax INTEGER Access Read-Only Status Current Value list 1 : 0..65535 Parent node swL2IGMPCtrlEntry First child None Description This object indicates the IGMP control entry's VLAN id. If VLAN is disabled, the Vid is always 0 and cannot be changed by management users. If VLAN is in Port-Base mode, the Vid is arranged from 1 to 12, fixed form. If VLAN is in 802.1q mode, the Vid setting can vary from 1 to 4094 by management user, and the Vid in each entry must be unique in the IGMP Control Table.

<ul style="list-style-type: none"> swL2PortSecurityMgmt swL2TrunkMgmt swL2MirrorMgmt swL2IGMPPMgmt <ul style="list-style-type: none"> swL2IGMPMaxSupportedVlans swL2IGMPMaxGroupNumPerVlan swL2IGMPCtrlTable <ul style="list-style-type: none"> swL2IGMPCtrlEntry <ul style="list-style-type: none"> swL2IGMPCtrlVid swL2IGMPQueryInterval swL2IGMPMaxResponseTime swL2IGMPRobustness swL2IGMPLastMemberQueryInterv. swL2IGMPHostTimeout swL2IGMPRouteTimeout swL2IGMPLeaveTimer swL2IGMPQueryState swL2IGMPCurrentState 	Object name swL2IGMPQueryInterval Object ID 1.3.6.1.4.1.171.11.70.3.2.11.3.1.2 Module DGS3450-L2MGMT-MIB
	Base syntax Integer Composed syntax INTEGER Access Read-Write Status Current Value list 1 : 1..65535 Parent node swL2IGMPCtrlEntry First child None Description The frequency at which IGMP Host-Query packets are transmitted on this switch.

<ul style="list-style-type: none"> swL2PortSecurityMgmt swL2TrunkMgmt swL2MirrorMgmt swL2IGMPPMgmt <ul style="list-style-type: none"> swL2IGMPMaxSupportedVlans swL2IGMPMaxGroupNumPerVlan swL2IGMPCtrlTable <ul style="list-style-type: none"> swL2IGMPCtrlEntry <ul style="list-style-type: none"> swL2IGMPCtrlVid swL2IGMPQueryInterval swL2IGMPMaxResponseTime swL2IGMPRobustness swL2IGMPLastMemberQueryInterv. swL2IGMPHostTimeout swL2IGMPRouteTimeout swL2IGMPLeaveTimer swL2IGMPQueryState swL2IGMPCurrentState 	Object name swL2IGMPMaxResponseTime Object ID 1.3.6.1.4.1.171.11.70.3.2.11.3.1.3 Module DGS3450-L2MGMT-MIB
	Base syntax Integer Composed syntax INTEGER Access Read-Write Status Current Value list 1 : 1..25 Parent node swL2IGMPCtrlEntry First child None Description The maximum query response time on this switch.

<ul style="list-style-type: none"> swL2PortSecurityMgmt swL2TrunkMgmt swL2MirrorMgmt swL2IGMPPMgmt <ul style="list-style-type: none"> swL2IGMPMaxSupportedVlans swL2IGMPMaxGroupNumPerVlan swL2IGMPCtrlTable <ul style="list-style-type: none"> swL2IGMPCtrlEntry <ul style="list-style-type: none"> swL2IGMPCtrlVid swL2IGMPQueryInterval swL2IGMPMaxResponseTime swL2IGMPRobustness swL2IGMPLastMemberQueryInterv. swL2IGMPHostTimeout swL2IGMPRouteTimeout swL2IGMPLeaveTimer swL2IGMPQueryState swL2IGMPCurrentState 	Object name swL2IGMPRobustness Object ID 1.3.6.1.4.1.171.11.70.3.2.11.3.1.4 Module DGS3450-L2MGMT-MIB
	Base syntax Integer Composed syntax INTEGER Access Read-Write Status Current Value list 1 : 1..255 Parent node swL2IGMPCtrlEntry First child None Description The Robustness Variable allows tuning for the expected packet loss on a subnet. If a subnet is expected to be lossy, the Robustness Variable may be increased. IGMP is robust to (Robustness Variable-1) packet losses.

<ul style="list-style-type: none"> swL2PortSecurityMgmt swL2TrunkMgmt swL2MirrorMgmt swL2IGMPPMgmt <ul style="list-style-type: none"> swL2IGMPMaxSupportedVlans swL2IGMPMaxGroupNumPerVlan swL2IGMPCtrlTable <ul style="list-style-type: none"> swL2IGMPCtrlEntry <ul style="list-style-type: none"> swL2IGMPCtrlVid swL2IGMPQueryInterval swL2IGMPMaxResponseTime swL2IGMPRobustness swL2IGMPLastMemberQueryInterval swL2IGMPHostTimeout swL2IGMPRouteTimeout swL2IGMPLeaveTimer swL2IGMPQueryState swL2IGMPCurrentState 	Object name swL2IGMPLastMemberQueryInterval Object ID 1.3.6.1.4.1.171.11.70.3.2.11.3.1.5 Module DGS3450-L2MGMT-MIB
	Base syntax Integer Composed syntax INTEGER Access Read-Write Status Current Value list 1 : 1..25 Parent node swL2IGMPCtrlEntry First child None Description The Last Member Query Interval is the Max Response Time inserted into Group-Specific Queries sent in response to Leave Group messages, and is also the amount of time between Group-Specific Query messages.

<ul style="list-style-type: none"> swL2PortSecurityMgmt swL2TrunkMgmt swL2MirrorMgmt swL2IGMPMgmt <ul style="list-style-type: none"> swL2IGMPMaxSupportedVlans swL2IGMPMaxIpGroupNumPerVlan swL2IGMPCtrlTable <ul style="list-style-type: none"> swL2IGMPCtrlEntry <ul style="list-style-type: none"> swL2IGMPCtrlVid swL2IGMPQueryInterval swL2IGMPMaxResponseTime swL2IGMPRobustness swL2IGMPLastMemberQueryInterv. swL2IGMPHostTimeout swL2IGMPRouteTimeout swL2IGMPLeaveTimer 	Object name	swL2IGMPHostTimeout
	Object ID	1.3.6.1.4.1.171.11.70.3.2.11.3.1.6
	Module	DG33450-L2NGMT-MIB
	Base syntax	Integer
	Composed syntax	INTEGER
	Access	Read-Write
	Status	Current
	Value list	1 : 1..16711450
	Parent node	swL2IGMPCtrlEntry
	First child	None
Description	The timer value for sending IGMP query packet when none was sent by the host in the LAN. The timer works in per-VLAN basis. Our device will be activated to send the query message if the timer is expired. Please reference RFC2236-1997.	

<ul style="list-style-type: none"> swL2PortSecurityMgmt swL2TrunkMgmt swL2MirrorMgmt swL2IGMPMgmt <ul style="list-style-type: none"> swL2IGMPMaxSupportedVlans swL2IGMPMaxIpGroupNumPerVlan swL2IGMPCtrlTable <ul style="list-style-type: none"> swL2IGMPCtrlEntry <ul style="list-style-type: none"> swL2IGMPCtrlVid swL2IGMPQueryInterval swL2IGMPMaxResponseTime swL2IGMPRobustness swL2IGMPLastMemberQueryInterv. swL2IGMPHostTimeout swL2IGMPRouteTimeout swL2IGMPLeaveTimer 	Object name	swL2IGMPRouteTimeout
	Object ID	1.3.6.1.4.1.171.11.70.3.2.11.3.1.7
	Module	DG33450-L2NGMT-MIB
	Base syntax	Integer
	Composed syntax	INTEGER
	Access	Read-Write
	Status	Current
	Value list	1 : 1..16711450
	Parent node	swL2IGMPCtrlEntry
	First child	None
Description	The Router Timeout is how long a host must wait after hearing a Query before it may send any IGMPv2 messages.	

<ul style="list-style-type: none"> swL2PortSecurityMgmt swL2TrunkMgmt swL2MirrorMgmt swL2IGMPMgmt <ul style="list-style-type: none"> swL2IGMPMaxSupportedVlans swL2IGMPMaxIpGroupNumPerVlan swL2IGMPCtrlTable <ul style="list-style-type: none"> swL2IGMPCtrlEntry <ul style="list-style-type: none"> swL2IGMPCtrlVid swL2IGMPQueryInterval swL2IGMPMaxResponseTime swL2IGMPRobustness swL2IGMPLastMemberQueryInterv. swL2IGMPHostTimeout swL2IGMPRouteTimeout swL2IGMPLeaveTimer swL2IGMPQueryState 	Object name	swL2IGMPLeaveTimer
	Object ID	1.3.6.1.4.1.171.11.70.3.2.11.3.1.8
	Module	DG33450-L2NGMT-MIB
	Base syntax	Integer
	Composed syntax	INTEGER
	Access	Read-Write
	Status	Current
	Value list	1 : 1..16711450
	Parent node	swL2IGMPCtrlEntry
	First child	None
Description	When a querier receives a Leave Group message for a group that has group members on the reception interface, it sends Group-Specific Queries every swL2IGMPLeaveTimer to the group being left.	

<ul style="list-style-type: none"> swL2PortSecurityMgmt swL2TrunkMgmt swL2MirrorMgmt swL2IGMPMgmt <ul style="list-style-type: none"> swL2IGMPMaxSupportedVlans swL2IGMPMaxIpGroupNumPerVlan swL2IGMPCtrlTable <ul style="list-style-type: none"> swL2IGMPCtrlEntry <ul style="list-style-type: none"> swL2IGMPCtrlVid swL2IGMPQueryInterval swL2IGMPMaxResponseTime swL2IGMPRobustness swL2IGMPLastMemberQueryInterv. swL2IGMPHostTimeout swL2IGMPRouteTimeout swL2IGMPLeaveTimer swL2IGMPQueryState swL2IGMPCurrentState 	Object name	swL2IGMPQueryState
	Object ID	1.3.6.1.4.1.171.11.70.3.2.11.3.1.9
	Module	DG33450-L2NGMT-MIB
	Base syntax	Integer
	Composed syntax	INTEGER
	Access	Read-Write
	Status	Current
	Value list	1 : other(1) 2 : disabled(2) 3 : enabled(3)
	Parent node	swL2IGMPCtrlEntry
	First child	None
Description	This object decide the IGMP query enabled or disabled.	

<ul style="list-style-type: none"> swL2IGMPCtrlTable <ul style="list-style-type: none"> swL2IGMPCtrlEntry <ul style="list-style-type: none"> swL2IGMPCtrlVid swL2IGMPQueryInterval swL2IGMPMaxResponseTime swL2IGMPRobustness swL2IGMPLastMemberQueryInterv. swL2IGMPHostTimeout swL2IGMPRouteTimeout swL2IGMPLeaveTimer swL2IGMPQueryState swL2IGMPCurrentState swL2IGMPCtrlState swL2IGMPFastLeaveState swL2IGMPQueryVersion swL2IGMPReportSuppression 	Object name	swL2IGMPCurrentState
	Object ID	1.3.6.1.4.1.171.11.70.3.2.11.3.1.10
	Module	DG33450-L2NGMT-MIB
	Base syntax	Integer
	Composed syntax	INTEGER
	Access	Read-Only
	Status	Current
	Value list	1 : other(1) 2 : querier(2) 3 : non-querier(3)
	Parent node	swL2IGMPCtrlEntry
	First child	None
Description	This object indicates the current IGMP query state.	

<ul style="list-style-type: none"> swL2IGMPCtrTable swL2IGMPCtrEntry <ul style="list-style-type: none"> swL2IGMPCtrVid swL2IGMPQueryInterval swL2IGMPMaxResponseTime swL2IGMPRobustness swL2IGMPLastMemberQueryInterv. swL2IGMPHostTimeout swL2IGMPRouteTimeout swL2IGMPLeaveTimer swL2IGMPQueryState swL2IGMPCurrentState swL2IGMPCtrState swL2IGMPFastLeaveState swL2IGMPQueryVersion swL2IGMPReportSuppression 	Object name swL2IGMPCtr1State Object ID 1.3.6.1.4.1.171.11.70.3.2.11.3.1.11 Module DGS3450-L2MGMT-MIB
	Base syntax Integer Composed syntax INTEGER Access Read-Write Status Current Value list 1 : other(1) 2 : disable(2) 3 : enable(3)

<ul style="list-style-type: none"> swL2IGMPCtrTable swL2IGMPCtrEntry <ul style="list-style-type: none"> swL2IGMPCtrVid swL2IGMPQueryInterval swL2IGMPMaxResponseTime swL2IGMPRobustness swL2IGMPLastMemberQueryInterv. swL2IGMPHostTimeout swL2IGMPRouteTimeout swL2IGMPLeaveTimer swL2IGMPQueryState swL2IGMPCurrentState swL2IGMPCtrState swL2IGMPFastLeaveState swL2IGMPQueryVersion swL2IGMPReportSuppression 	Object name swL2IGMPFastLeaveState Object ID 1.3.6.1.4.1.171.11.70.3.2.11.3.1.12 Module DGS3450-L2MGMT-MIB
	Base syntax Integer Composed syntax INTEGER Access Read-Write Status Current Value list 1 : other(1) 2 : disable(2) 3 : enable(3)

<ul style="list-style-type: none"> swL2IGMPCtrTable swL2IGMPCtrEntry <ul style="list-style-type: none"> swL2IGMPCtrVid swL2IGMPQueryInterval swL2IGMPMaxResponseTime swL2IGMPRobustness swL2IGMPLastMemberQueryInterv. swL2IGMPHostTimeout swL2IGMPRouteTimeout swL2IGMPLeaveTimer swL2IGMPQueryState swL2IGMPCurrentState swL2IGMPCtrState swL2IGMPFastLeaveState swL2IGMPQueryVersion swL2IGMPReportSuppression 	Object name swL2IGMPQueryVersion Object ID 1.3.6.1.4.1.171.11.70.3.2.11.3.1.13 Module DGS3450-L2MGMT-MIB
	Base syntax Integer Composed syntax INTEGER Access Read-Write Status Current Value list 1 : 1..3

<ul style="list-style-type: none"> swL2IGMPCtrTable swL2IGMPCtrEntry <ul style="list-style-type: none"> swL2IGMPCtrVid swL2IGMPQueryInterval swL2IGMPMaxResponseTime swL2IGMPRobustness swL2IGMPLastMemberQueryInterv. swL2IGMPHostTimeout swL2IGMPRouteTimeout swL2IGMPLeaveTimer swL2IGMPQueryState swL2IGMPCurrentState swL2IGMPCtrState swL2IGMPFastLeaveState swL2IGMPQueryVersion swL2IGMPReportSuppression 	Object name swL2IGMPReportSuppression Object ID 1.3.6.1.4.1.171.11.70.3.2.11.3.1.15 Module DGS3450-L2MGMT-MIB
	Base syntax Integer Composed syntax INTEGER Access Read-Write Status Current Value list 1 : enabled(1) 2 : disabled(2)