

Configuring SNMP v1/v2/v3 in Magnum 6K and 10K Series switches

Step 1: Configuring SNMP v1 in Magnum 6K and 10K switches using Command Line Access (CLI)

The basic SNMP v1 parameters can be set by referring to the section on System Parameters.

```
Magnum6K25#set snmp type=v1
Magnum6K25#snmp <enter>
Magnum6K25 (snmp)##community write=private read=public trap=private
Magnum6K25 (snmp)##mgrip <add | delete> ip=<ip_address_of_manager_station>
Magnum6K25 (snmp)##traps <add | delete>
type=<Snmp|Rmon|Snmp,Rmon|Enterprise|Snmp,Enterprise|Rmon,Enterprise|All>
ip=<ip_address_of_trap_station>
Magnum6K25 (snmp)##authentraps enable
Magnum6K25 (snmp)##save
```

Step 2: Verification of SNMP v1 configuration

```
Magnum 6KQ(snmp)##show snmp
```

SNMP CONFIGURATION INFORMATION

```
-----
SNMP Get Community Name : public
SNMP Set Community Name : private
SNMP Trap Community Name : public
AuthenTrapsEnableFlag   : enabled
SNMP Access Status      : enabled
```

SNMP MANAGERS INFO

```
-----
IP Address = 172.17.10.20
```

SNMP TRAP STATIONS INFO

```
-----
IP Address = 172.17.10.20 Trap Type = All
```

Configuring SNMP v2

To configure a switch for SNMPv2c, we first need to change the snmp type on the switch to 'All'. Configuring the Garrettcom switch for communicating with the SNMP server on SNMP v2c, involves the following steps:

- a) Set SNMP type to "All".
- b) Configure Com2Sec ID.

c)Configure Group names and specify SNMP version using the model keyword in the command and assign Com2Sec IDs to the Group names.

d)Add “view”.

e)Configure Access to the groups by assigning the “view” and type of access i.e. read write etc.

Magnum6K25# set snmp type=all

Magnum6K25# snmpv3

The next step involves defining the read and read-write communities. These are defined through the com2sec command that configures the secname and the community name.

Magnum6K25(snmpv3)## com2sec add id=1 secname=GCI-ro source=default community=garrettcom

The above command configures the read-only community.

Magnum6K25(snmpv3)## com2sec add id=2 secname=GCI-rw source=default community=garrettcom

The above command configures the read-write community.

Verification of SNMP v2 configuration

Magnum 6K25(snmpv3)##show-com2sec

ID Sec. Name Source Community

```
=====
```

1	GCI-ro	default	Garrettcom
2	GCI-rw	default	Garrettcom
3	--	--	--
4	--	--	--
5	--	--	--
6	--	--	--
7	--	--	--
8	--	--	--
9	--	--	--
10	--	--	--

Then associate the com2sec ids to the group ids. Only one com2sec id can be assigned to a single group.

Magnum6K25(snmpv3)## group add id=1 groupname=GGCI-ro model=v2c com2secid=1

Magnum6K25(snmpv3)## group add id=2 groupname=GGCI-rw model=v2c com2secid=2

Magnum 6K25(snmpv3)##show-group

ID Group Name Sec. Model Com2Sec ID

```
=====
```

1	GGCI-ro	v2c	1
2	GGCI-rw	v2c	2
3	--	--	--
4	--	--	--
5	--	--	--

```

6 --      --      --
7 --      --      --
8 --      --      --
9 --      --      --
10 --     --      --

```

After associating the groups with com2sec ids, next step involves defining the “view”. This is done by the view command.

Magnum6K25(snmpv3)## view add id=1 viewname=all type=included subtree=.1 mask=ff

Magnum 6KQ(snmpv3)##show-view

ID	View Name	Type	Subtree	Mask
1	all	included	.1	ff
2	--	--	--	--
3	--	--	--	--
4	--	--	--	--
5	--	--	--	--
6	--	--	--	--
7	--	--	--	--
8	--	--	--	--
9	--	--	--	--
10	--	--	--	--

Then define the access associated with the groups and their respective com2sec ids.

Magnum6K25(snmpv3)## access add id=1 accessname=GGCI-ro model=v2c level=noauth prefix=exact read=1 write=none notify=none

Magnum6K25(snmpv3)## access add id=1 accessname=GGCI-rw model=v2c level=noauth prefix=exact read=none write=1 notify=none

Magnum 6KQ(snmpv3)##show-access

ID	View Name	Model	Level	R/View	W/View	N/View	Context	Prefix
1	GGCI-ro	v2c	noauth	1	none	none	""	exact
2	GGCI-rw	v2c	noauth	none	1	none	""	exact
3	--	--	--	--	--	--	--	--
4	--	--	--	--	--	--	--	--
5	--	--	--	--	--	--	--	--
6	--	--	--	--	--	--	--	--
7	--	--	--	--	--	--	--	--
8	--	--	--	--	--	--	--	--

```
9 --      -- -- -- -- -- --
10 --     -- -- -- -- -- --
```

```
=====
Magnum6K25(snmpv3)## save
```

```
Magnum6K25(snmpv3)## exit
```

Configuring SNMP v3 in Magnum 6K and 10K switches using CLI

Configuring SNMPv3

Configuring the switch for SNMPv3 is the same as configuring the switch for SNMPv2c. Instead of using community names, USM user names are used for authentication between the SNMP manager and the SNMP node. Below is a sample configuration, where a USM user is defined with read only access and uses authentication with no privacy option.

```
Magnum6K25(snmpv3)## user add id=1 username=<name> usertype=readonly  
authpass=<pass-phrase> level=auth subtree=.1
```

Similarly, we can define a user with read-only access that uses authentication with privacy

```
Magnum6K25(snmpv3)## user add id=1 username=<name> usertype=readonly  
authpass=<pass-phrase> privpass=<pass-phrase> level=priv subtree=.1
```

```
Magnum6K25(snmpv3)## com2sec add id=1 secname=<user_name>> source=default
```

The user_name variable is the username created via the "user" command above.

```
Magnum6K25(snmpv3)## group add id=1 groupname=GGCI-ro model=usm com2secid=1
```

```
Magnum6K25(snmpv3)## view add id=1 viewname=all type=included subtree=.1 mask=ff
```

```
Magnum6K25(snmpv3)## access add id=1 accessname=GGCI-ro model=usm prefix=exact  
read=1 write=none notify=none
```

```
Magnum6K25(snmpv3)## exit
```

```
Magnum6K25# save
```