

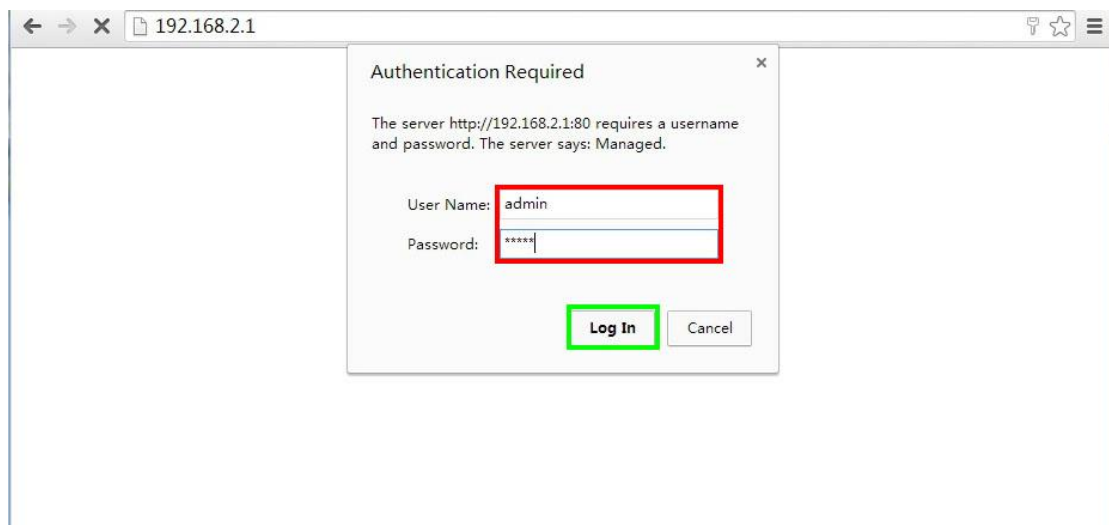


STACKED MULTIPLE SWITCH CONFIGURATION TO WORK WITH MOST 1G VIDEO OVER IP SOLUTIONS

Basic Operations

1. Logging On to the Switches

Connect PC to the switch with a network cable and configure PC's IP address correctly. Enter switch's web login IP address (default is **192.168.2.1**) in a browser and then press **Enter**. The browser will show a dialog box like below:



Operate as follows.

- Input username (default is **“admin”**) and password (default is **“admin”**)

Then click **Log In**.



2. Resetting to Factory Defaults



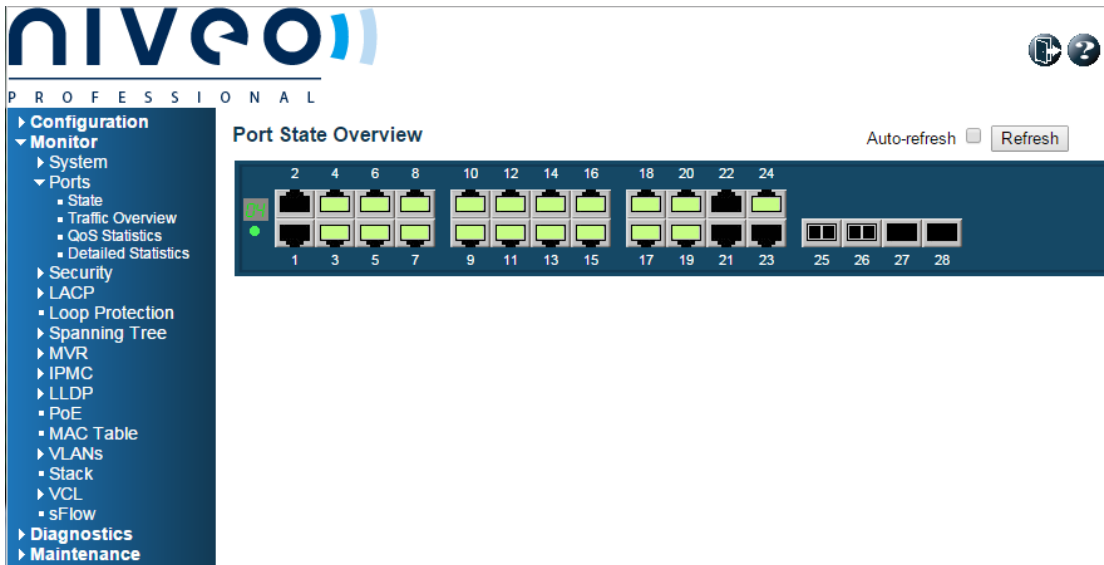
As shown in the figure above, choose **Maintenance -> Factory Defaults**, then click **Yes**, the switch will reset its configuration to factory defaults. Once the resetting finished, the switch will give a report as below:



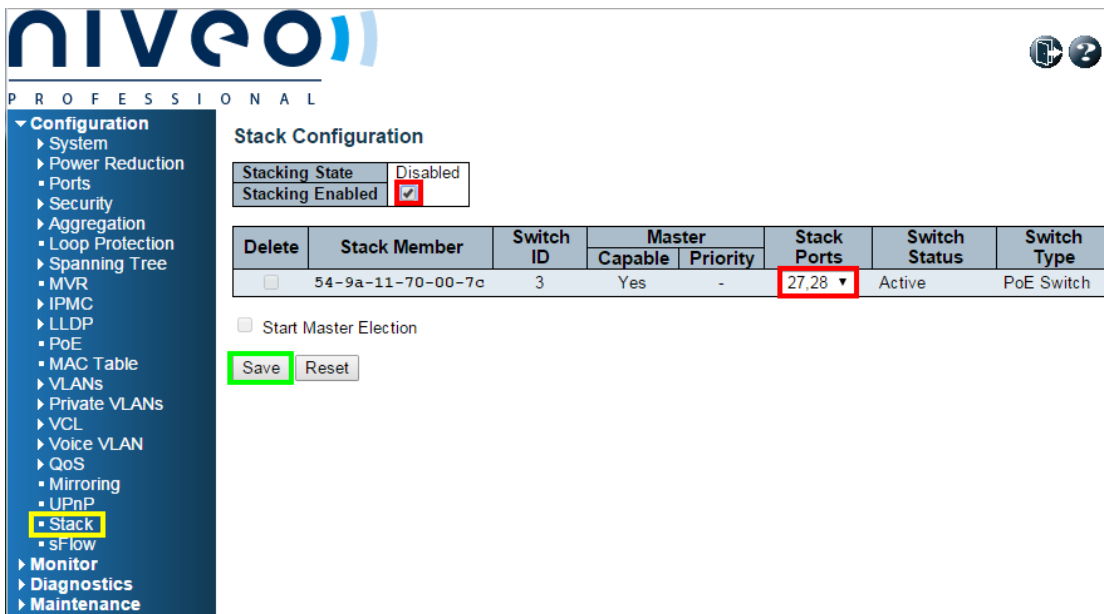
3. Configuration for Switch Stack

Some Niveo switches support stacking switch networking. In this chapter, we'll provide the configuration guide with the example of NGSM24G4S. To guarantee the result, before you start to configure, please make sure every switch is not connected with any other switch.

1. Stack configuration



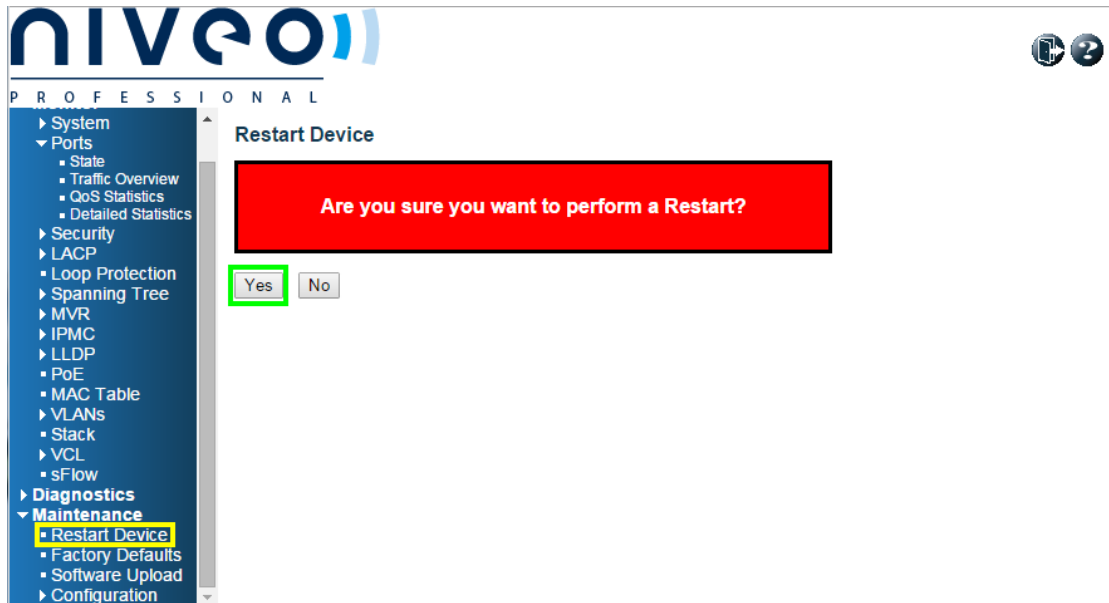
As shown in the above figure, after you log in to a Niveo NGSM24G4S switch which is not in a stack, there is only one switch in the **port state overview** page. To enable the stack feature, please operate as following steps:



As shown in the figure above, choose **Configuration -> Stack**, configure as below:

- 1 Check **Stacking Enabled**
- 2 Select **27,28** for **Stack Ports**

Then click **Save**. The switch will prompt rebooting to make the stack take effect.



As shown in the figure above, choose **Maintenance** -> **Restart Device**, then click **Yes**. The switch will reboot to activate the stack feature.

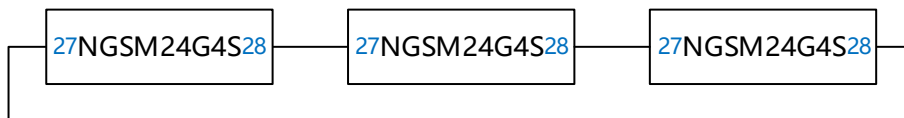
Now, please log in to another switch and repeat this step, until the stack feature is activated in all switches.

2. Connect all switches in the stack

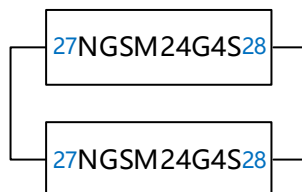
To make the switch stack work, you must connect the stack ports with the special stack cables. For the Niveo NGSM24G4S switch, multimode optical fiber with SFP+ transceivers can be used as stack cable. If your switches are other model, please query Niveo to get the detail specification for the corresponding stack cable.

Please use a stack cable to connect the previous switch's port 27 to the next switch's port 28 and connect the last switch's port 27 to the first switch's port 28.

The final effect is shown below:

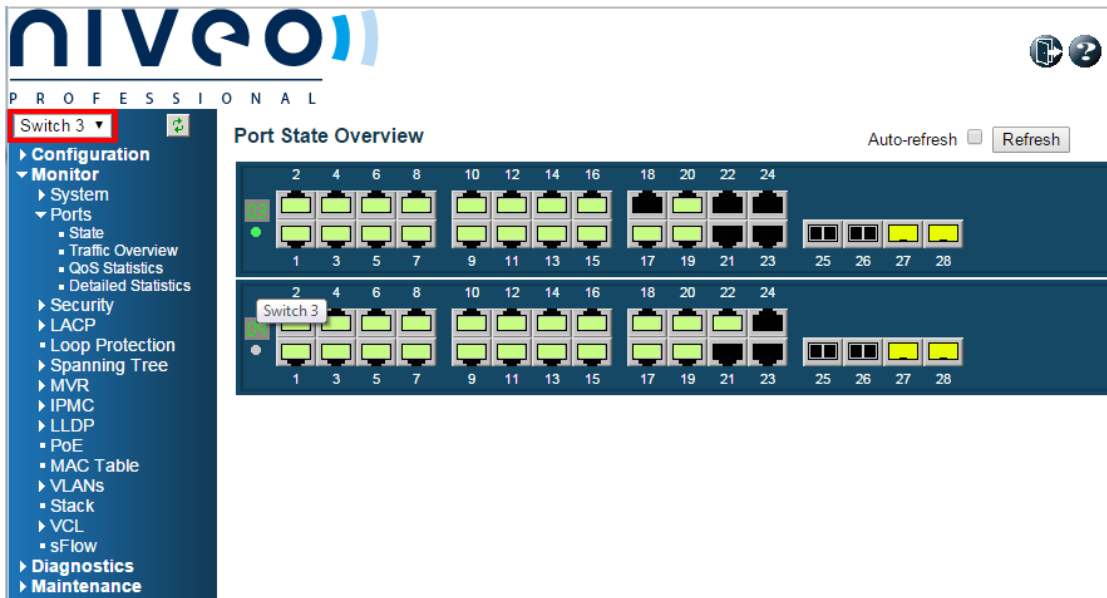


All switches form a ring topology. If only two switches in the stack, the topology will be simpler:



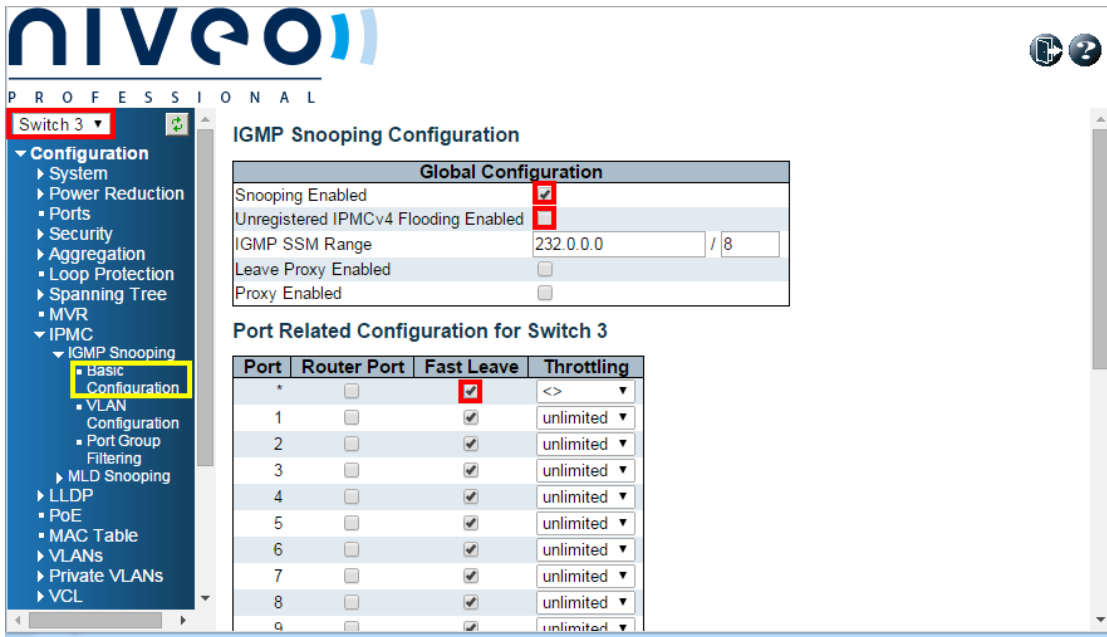
In the previous step, port 27 and 28 are designated as stack ports, if you choose other ports as stack ports, please change the ports connected by the stack cable accordingly.

After the stack wiring is completed, you can log in the switch stack again:



As shown in the above figure, all switches in the stack can be seen in the **Port State Overview** page. Furthermore, at the top left corner, the web server shows a dropdown list which include all stacked switches. In some configuration pages, by this list, you can choose different switch as current operation object.

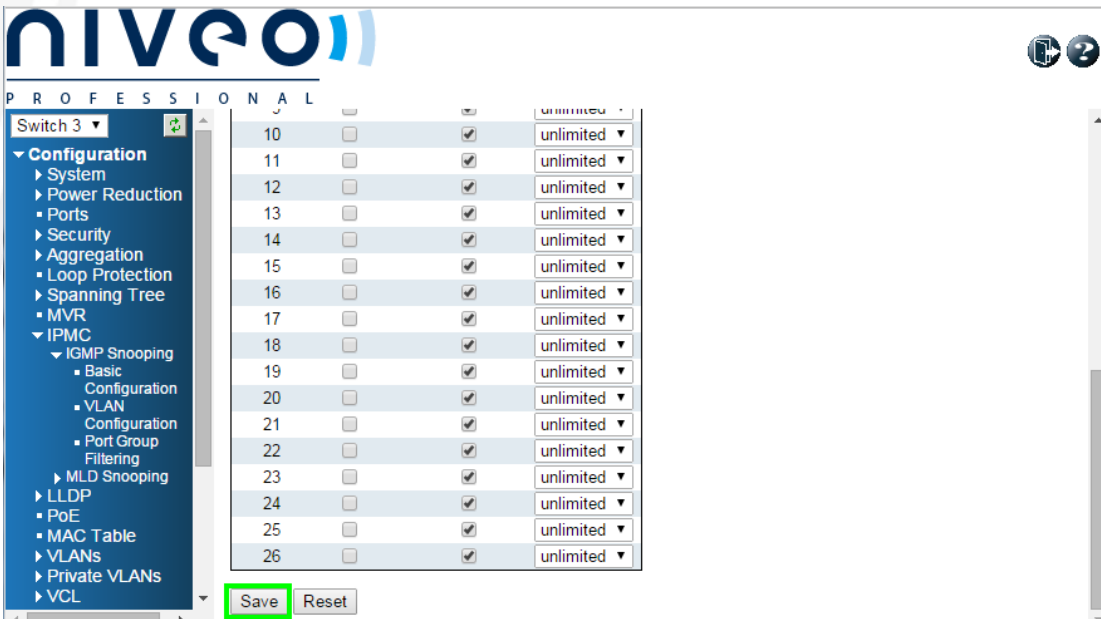
1. Basic configuration



As shown in the figure above, choose **Configuration -> IPMC -> IGMP Snooping -> Basic Configuration**, then operate as below.

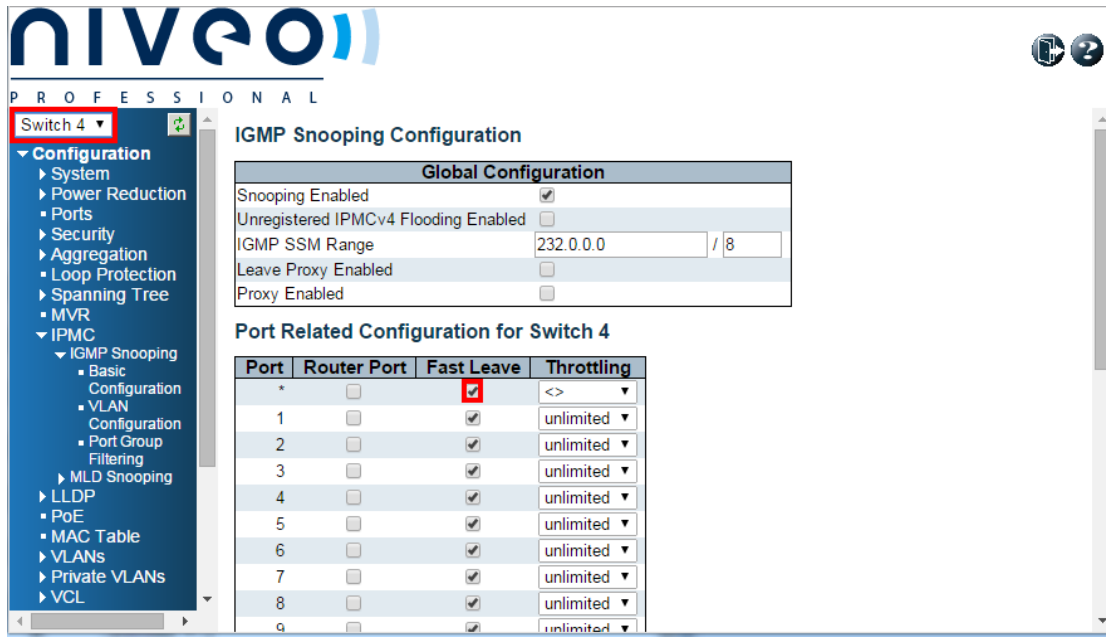
- ❏ Choose the first stacked switch (**Switch 3** for this example) in the switch list at the top left corner
- ❏ Check for **Snooping Enabled**
- ❏ Uncheck for **Unregistered IPMCv4 Flooding Enabled**
- ❏ Check the cell corresponding to the column **Fast Leave** in the first row of the list

Then we need to save the modification.



As shown in the figure above, just scroll the page down and click **Save**.

Now configure another stacked switch.



As shown in the figure above, stay in the page **Configuration -> IPMC -> IGMP Snooping -> Basic Configuration**, then operate as below.

- 1 Choose the second stacked switch (**Switch 4** for this example) in the switch list at the top left corner
- 2 Check the cell corresponding to the column **Fast Leave** in the first row of the list

Then save again.



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Switch 4

- Configuration
 - System
 - Power Reduction
 - Ports
 - Security
 - Aggregation
 - Loop Protection
 - Spanning Tree
 - MVR
 - IPMC
 - IGMP Snooping
 - Basic Configuration
 - VLAN Configuration
 - Port Group Filtering
 - MLD Snooping
 - LLDP
 - PoE
 - MAC Table
 - VLANs
 - Private VLANs
 - VCL

10	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited
11	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited
12	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited
13	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited
14	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited
15	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited
16	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited
17	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited
18	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited
19	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited
20	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited
21	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited
22	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited
23	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited
24	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited
25	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited
26	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited

Save Reset

As shown in the figure above, just scroll the page down and click **Save**.

Please repeat the above steps, until the **Fast Leave** feature is activated in all stacked switches.

2. VLAN configuration

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Switch 3

IGMP Snooping VLAN Configuration

Refresh << >>

Start from VLAN 1 with 20 entries per page.

Delete	VLAN ID	Snooping Enabled	IGMP Querier	Compatibility	RV	QI (sec)	QRI (0.1 sec)	LLQI (0.1 sec)	URI (sec)
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Add New IGMP VLAN

Save Reset

As shown in the figure above, choose **Configuration -> IPMC -> IGMP Snooping -> VLAN Configuration**, click **Add New IGMP VLAN**, then operate as below.



Switch 3

IGMP Snooping VLAN Configuration

Start from VLAN 1 with 20 entries per page.

Delete	VLAN ID	Snooping Enabled	IGMP Querier	Compatibility	RV	QI (sec)	QRI (0.1 sec)	LLQI (0.1 sec)
Delete	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Forced IGMPv2	2	125	100	1

Add New IGMP VLAN

Save Reset

As shown in the figure above, configure as below:

- Set 1 for **VLAN ID**
- Check **Snooping Enabled**
- Check **IGMP Querier**
- Select **Forced IGMPv2** for **Compatibility**

Then click **Save**, the screen will change as below:

Switch 3

IGMP Snooping VLAN Configuration

Start from VLAN 1 with 20 entries per page.

Delete	VLAN ID	Snooping Enabled	IGMP Querier	Compatibility	RV	QI (sec)	QRI (0.1 sec)	LLQI (0.1 sec)
	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Forced IGMPv2	2	125	100	10

Add New IGMP VLAN

Save Reset

As shown in the figure above, a checkbox appears in the **Delete** cell, and other configuration items are the same as what we configured ago.