IP Multicasting

(IGMP Snooping)

Ethernet Switch

<u>ZyNOS 4.0</u>



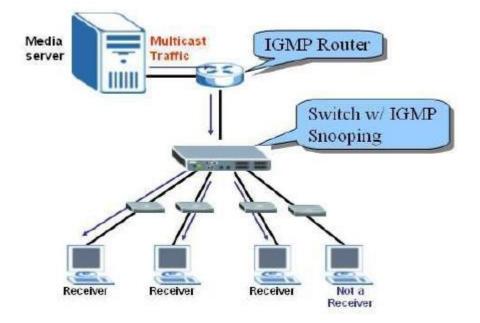
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IP Multicasting

How to setup IGMP snooping in your switch?





IGMP snooping is designed for application with deployment of multicast traffic. It operates on the underlying IGMP mechanism where a layer two switch passively listens to the IGMP Query, Report and Leave (IGMP version 2) packets transmitted between the IGMP router and clients, and collects passing IGMP messages. Also, the switch records the message's group registration information and configures multicasting information accordingly. If the

multicast group information is unknown (not recorded on the switch), the switch discards that multicast traffic. Only the registered clients that join the group will receive multicast stream from the IGMP router. Thus this significantly reduces the multicast traffic forwarded down to the clients. Another advantage of IGMP snooping is that it allows the intermediate switches to learn multicast group information without the need of configuring

them manually.

Configuration of IGMP snooping using web

In this example, we enable the IGMP function on the GS-4024 device (or it has to be a ZyXEL L3 Switch) and connect it to a multimedia server. Also, we enable IGMP snooping function on the ES-3124 Switch or other ZyXEL L2 Switch which support IGMP Snooping to connect to the multimedia clients.

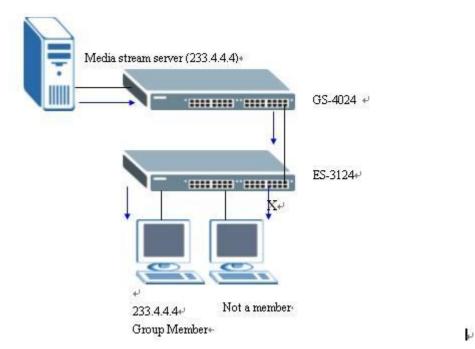


Figure 2: IGMP snooping Example

Step one: In the GS-4024 GUI, click the **IP Application IGMP.** Here, both versions of the the IGMP function can be enabled (IGMP-v1 and IGMP-v2). At this case, we enabled IGMPv2 for both IP Domain.

Figure 3: IGMP Setup

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Step two:In the L2 Switch GUI, click Advanced ApplicationMulticastand then click Multicast Setting to get to the Multicast Setting page.

Figure 4: IGMP Snooping Setup

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Broadcast Storm Control								
Mirroring								
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Port Security								
Classifier								
Policy Rule								
Queuing Method								
VLAN Stacking								
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AAA								
IP Source Guard								
Loop Guard								
VLAN Mapping								
Layer 2 Protocol Tunneling								

Step three: enable IGMP snooping function using the Web-GUI.

ZyXEL

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