

APPLICATION NOTE

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Product Family: Networking Hardware Number: AN-NH-004

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Revision: Original

Synopsis:

Industrial networks often have devices that require support for IGMP. IGMP stands for Internet Group Management Protocol. It is a protocol used to manage the membership of Multicast groups. Multicast data allows the same data to be generated once and then received by many users, similar to listeners of an FM radio station.

- 1. Frequently Asked Questions
- 2. IGMP Configuration

Subject: IGMP Configuration

Frequently Asked Questions

Q: Which managed switches support IGMP?

A: All Stride *Managed* switches fully support IGMP.

Q: What versions of IGMP are supported?

A: IGMP V1 and V2.

Q: Do the switches support IGMP Snooping?

A: Yes, the managed switches support both active and passive IGMP Snooping. Active snooping actively controls the flow of multicast data; passive snooping only listens to the IGMP messages on the network.

Q: What are the differences between the multicast suppression modes?

A: The multicast suppression modes suppress packets as follows:

- None

 Multicast packets are sent to all ports unless IGMP is enabled and one or more clients have sent IGMP Report requests.
- IP Multicast Groups—Multicast packets corresponding to IP multicast groups (with MAC addresses starting 01:00:5e) are suppressed unless one or more



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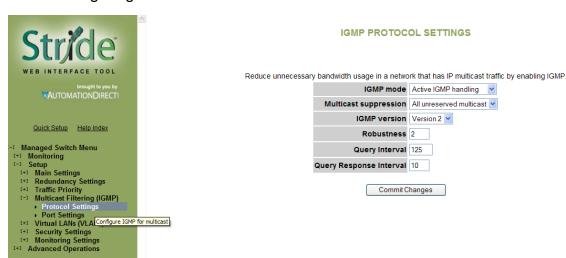
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clients have sent IGMP Report messages. Multicast packets with other addresses (any other packet with a MAC address starting 01) are sent to all ports.

All Unreserved Multicast
–Multicast packets with reserved multicast addresses
(01:80:c2:00:00:0x where x is 0..f) are sent to all ports. All other multicast
packets are suppressed unless one or more clients have sent IGMP Report
messages.

IGMP Configuration

- 1. IGMP is enabled by default.
- 2. Log into the switch from your Web browser. The default username and password are admin/admin.
- 3. From the Managed Switch menu, click on the Setup menu to see the options, and then click on Multicast Filtering (IGMP). Click on Protocol Settings to begin configuring IGMP.



- 4. On the IGMP Protocol Settings page, click on the IGMP mode drop-down list, and select either Active or Passive IGMP handling. View the FAQ for the differences between these two modes. Typically, Active IGMP handling is used.
- 5. Click on the **Multicast suppression** drop-down list to select the suppression mode you want to use. Review the FAQs for the differences between these modes. Typically, **All unreserved multicast** is used.
- Click on the IGMP version drop-down list to select IGMP version you want to use. Commonly, Version 2 is used unless your network administrator has instructed otherwise.
- 7. All other settings are generally left at the defaults unless you have been directed otherwise by your network administrator.



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- 8. Click Commit Changes.
- 9. To view the IGMP Group information, click on the Monitoring menu and then choose Multicast Filtering status. On the IGMP Group Status page, click on the Page drop-down list to select either the IGMP Port Status or IGMP Group Status pages.

Technical

Assistance: If you have questions regarding this Application Note, please contact us at 770-844-4200 for further assistance.