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Configuring Netgear GSM7224 for JetNet Audio Networking

The Netgear GSM7224 requires setup before being connected to a JetStream. The switch has both a web interface and a command line interface (CLI). We will use the CLI for setup because it is faster and easier to enable IGMP Snooping than using the web interface.

What is IGMP Snooping?

The purpose of Internet Group Management Protocol (IGMP) Snooping is to restrain multicast traffic on a switched network. By default, a LAN switch (even so-called "smart" switches) floods multicast traffic within the broadcast domain. Each networked audio source on a JetStream is a multicast stream, and each source is transmitting whether someone is listening to it or not. IGMP Snooping looks to see if anyone has requested a stream and if so it passes it on only to the port that has asked for it. By acting as a "traffic cop" IGMP Snooping keeps the network segment from running out of bandwidth.

How To Configure The Switch

Plug a laptop or other PC into the Console connection on the front of the switch, using a 9 pin serial cable.

The Netgear GSM7224 has all ports set to belong to VLAN 1 by default. This document assumes that this default VLAN will be used and that the switch will only be used for the audio network.

Launch HyperTerminal or other terminal program and configure as follows:

- Baud Rate: 9600 bps
- Data bits: 8
- Parity: none

- Stop bit: 1
- Flow control: none

Connect and hit **Enter** a couple of times. You should be prompted to log in.

1. At the **User:** prompt, enter the username **admin**, then press **Enter**. At the password prompt, hit **Enter** again; the switch is shipped with a blank password.
2. Type **Enable** to access the privileged mode and press **Enter**. (again, the password is blank).
3. Type **network protocol none** and press **Enter** to reset the network settings.
4. Type **network parms <<Management IP>> <<Subnet Mask>>** and hit **Enter**. For example: **network parms 192.168.87.1 255.255.255.0**
5. Type **config** and hit **Enter**. The prompt will change to **(GSM7224) (config) #**.
6. Type **ip igmpsnoping** and press **Enter**.
7. Type **ip igmpsnoping unknown-multicast filter** and press **Enter**.
8. Type **ip igmpsnoping interfacemode** and press **Enter**.
9. Type **exit** and press **Enter**. The prompt will change to **(GSM7224) #**.
10. Type **vlan database** and press **Enter**. The prompt will change to **(GSM7224) (vlan) #**.
11. Type **ip igmp 1** and press **Enter**. This command activates IGMP on all the ports in VLAN 1.
12. Type **ip igmpsnoping querier 1** and press **Enter**. This command activates the Querier for VLAN 1.
13. Type **exit** and press **Enter**. The prompt will change to **(GSM7224) #**.
14. Type **copy system:running-config nvram:startupconfig** and press **Enter**. This saves the running configuration to non-volatile RAM so the switch will remember these settings after a power cycle.

You may now end the terminal session. Setup is complete.