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Configuring HP ProCurve 2800 Series for JetNet

All HP ProCurve switches require 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.

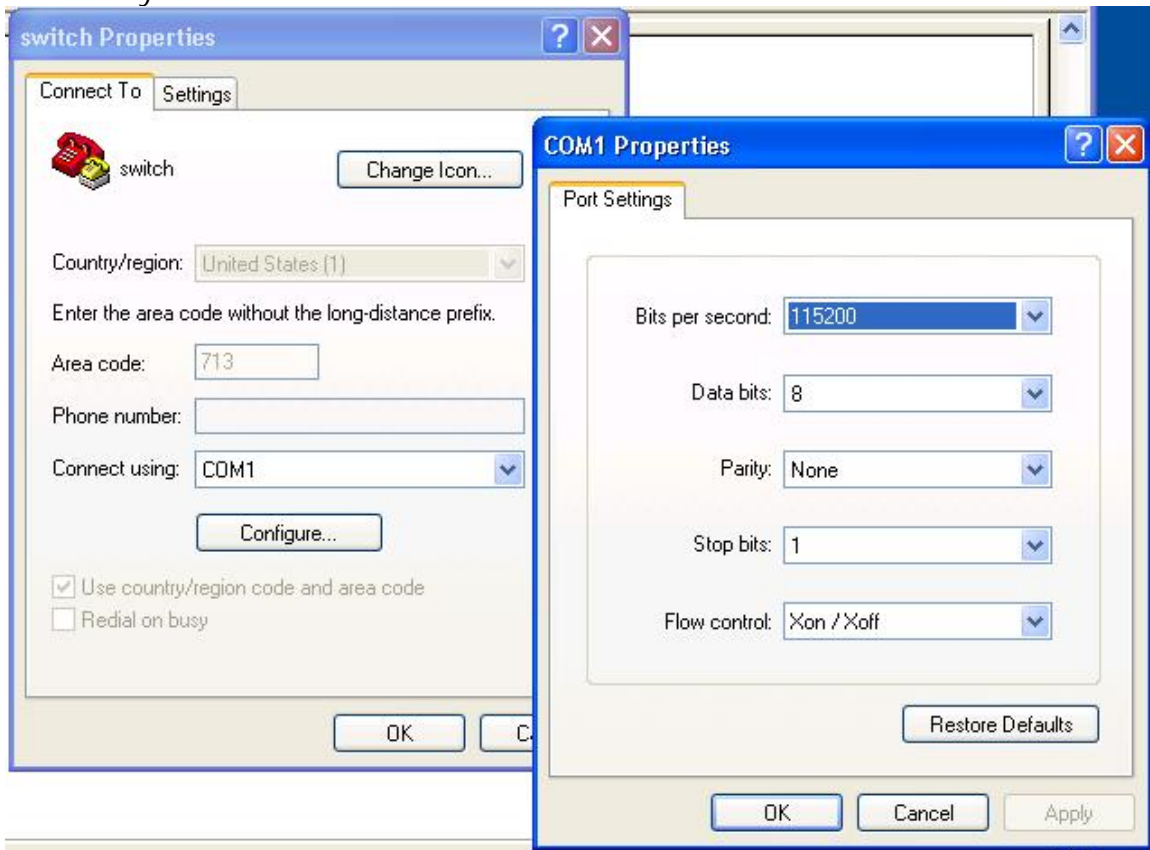
Terminal Configuration

Using the RS-232 cable that was supplied with the switch, plug a laptop or other PC into the Console connection on the front of the switch.

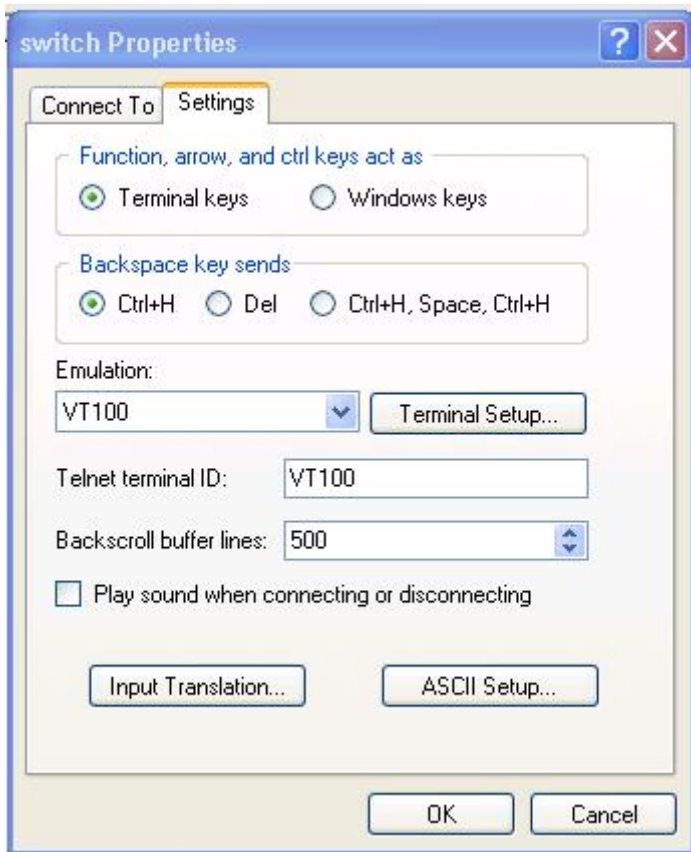


Launch HyperTerminal or other terminal program and configure as follows:

- VT-100 ANSI Emulation
- Any baud rate from 1200 to 115200 (the switch senses the speed)
- 8 data bits, 1 stop bit, no parity, flow control set to Xon/Xoff
- If you are using Windows Terminal, uncheck the "Use Function, Arrow, and Ctrl keys for Windows" option
- If you are using the Hilgraeve HyperTerminal program (supplied with Windows XP) set "Function, arrow, and ctrl keys act as" to "Terminal keys"



(In HyperTerminal, click the Configure button to set the baud rate, BPS, data bits, parity, stop bits, and flow control.)



Direct Console Access

Once the terminal program is set up and connected to the switch, press enter two of three times. You will see the copyright page and the message "Press any key to continue". Press a key and you will then see the switch console command (CLI) prompt, such as:

Procurve Switch 2824#

We are now ready to configure the switch. At the prompt, type **setup** and press enter. The switch setup screen will appear.

```
ProCurve Switch 2824                               19-Jan-1990  8:13:4
===== CONSOLE - MANAGER MODE =====
                          Switch Setup

System Name : ProCurve Switch 2824
System Contact :
Manager Password :                               Confirm Password :
Logon Default : CLI                             Time Zone [0] : 0
Community Name : public                         Spanning Tree Enabled [No] : No

Default Gateway :
Time Sync Method [None] : TIMEP
TimeP Mode [Disabled] : Disabled

IP Config [DHCP/Bootp] : Manual
IP Address : 192.168.7.110
Subnet Mask : 255.255.255.0

Actions->  Cancel      Edit      Save      Help

Enter the IP address of the switch (or VLAN IP interface).
Use arrow keys to change field selection, <Space> to toggle field choices,
and <Enter> to go to Actions.

Connected 0:01:41  VT100  115200 8-N-1  SCROLL  CAPS  NUM  Capture  Print echo
```

Use the Tab key to move to the IP Config [DHCP/Bootp] field and use the space bar to select the Manual option.

Tab to the IP Address field and enter an IP address that is compatible with your network.

Tab to the Subnet Mask field and enter the subnet mask that is compatible with your network.

Press Enter, then S for Save. The configuration screen will exit and you will return to the command line prompt.

Enable IGMP Querier on all VLANs

The default VLAN on this switch is 1. If your audio will be on a different VLAN number, adjust accordingly.

From the standard CLI prompt, type **configure** and hit enter. You will see the config prompt:

```
ProCurve Switch 2824(config)#
```

Type **vlan 1** and hit enter.

Type **ip igmp** and hit enter.

Type **show ip igmp** and hit enter. You will see the IGMP Query table.

IGMP Fast Leave

Enabling IGMP Fast Leave on ports connected to JetStreams will help stop multicast flooding when a JetStream is not using a particular channel. It needs to be enabled per VLAN/port.

The syntax for this command is as follows:

```
setmib hpSwitchIgmpPortForcedLeaveState.<vlan>.<port> -i 1
```

This command should be entered from a VLAN prompt.

For example, if enabling on VLAN 1 and port 2:

```
ProCurve Switch 2824(vlan-1)#
```

```
setmib hpSwitchIgmpPortForcedLeaveState.1.2 -i 1
```

The switch responds with:

```
hpSwitchIgmpPortForcedLeaveState.1.2 = 1
```

Then it returns you to the VLAN prompt.

```
ProCurve Switch 2824(vlan-1)#
```

Save Your Work!

After you have configured everything on the switch, you need to save your work to the permanent Flash memory in the switch, or else it will be lost if power is interrupted.

To save the configuration type **write memory** and press Enter at any CLI prompt.