

# Troubleshooting

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If the Catalyst 1600 Token Ring switch does not work correctly when the installation is complete, use the procedures described in this appendix to diagnose the cause of the problem.

This chapter describes problems that may occur when you use TrueView Catalyst 1600 Manager to manage the Catalyst 1600. For information about using TrueView Catalyst 1600 Manager, refer to the *TrueView Catalyst 1600 Manager User Guide*.



**Warning** The Catalyst 1600 does not contain any user-serviceable components. Do not open the unit except when installing an option card according to proper instructions. When installing an option card, always observe the safety guidelines.

## Cannot Manage the Catalyst 1600

If you cannot manage a Catalyst 1600 Token Ring switch using TrueView Catalyst 1600 Manager:

- 1 Check the protocol that Catalyst 1600 Manager is using to manage the Catalyst 1600, using the Catalyst 1600 Manager Table.
- 2 Check that the network connecting the management station to the Catalyst 1600 supports the protocol.

## Token Ring Switch Port Fails to Open

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- 3 If the Catalyst 1600 is managed using IP:
  - Check the IP address by reading the LCD panel.

You can set an IP address by connecting a terminal to the serial interface and using the **set bridge ip address** command (see the section “Read/Write Commands” in Chapter 4, “Serial Management”).
  - In TrueView Catalyst 1600 Manager, add the Catalyst 1600 Token Ring switch to the database by specifying the IP address.

## Token Ring Switch Port Fails to Open

If a Token Ring switch port fails to open:

- 1 Make sure the Token Ring switch port is connected to the correct connector on the attached device (see the section “Connecting Devices” in Chapter 2, “Installing the Catalyst 1600 Token Ring Switch”).
- 2 Make sure the port ring speed (4- or 16Mbps) is correct for the ring that is connected to the port. Check the ring speed by reading the port LEDs or LCD panel (see the section “Reading Status Information” in Chapter 3, “Using the Catalyst 1600 Token Ring Switch”).

You can change the ring speed by using TrueView Catalyst 1600 Manager, or by connecting a terminal to the serial interface and using the **set port ifspeed** command (see the section “Read/Write Commands” in Chapter 4, “Serial Management”).

- 3 Make sure the interface mode (node or concentrator) of the Token Ring switch port is appropriate for the attached device. Check the port interface mode by reading the port LEDs or LCD panel (see the section “Reading Status Information” in Chapter 3, “Using the Catalyst 1600 Token Ring Switch”).

You can change the port interface mode by using TrueView Catalyst 1600 Manager, or by connecting a terminal to the serial interface and using the **set port ifmode** command (see the section “Read/Write Commands” in Chapter 4 “Serial Management”).

## Problems Forwarding Source Routed Frames

If there are problems forwarding source routed frames:

- 1 Check that the bridge number of the Catalyst 1600 is a hexadecimal number in the range 0 through F, and that there are no other devices with the same bridge number connecting the same rings. Check the bridge number by reading the LCD panel.

You can change the bridge number by using TrueView Catalyst 1600 Manager, or by connecting a terminal to the serial interface and using the **show bridge characteristics** command (see the section “Read-Only Commands” in Chapter 4 “Serial Management”).

- 2 Check the ring number of each Token Ring switch port, and make sure each port has a different ring number. Check the ring number by reading the LCD panel.

If two Catalyst 1600 devices are connected by their Token Ring switch ports, make sure the ring number is identical for both Token Ring ports.

You can set the ring number by using TrueView Catalyst 1600 Manager, or by connecting a terminal to the serial interface and using the **set port segment** command (see the section “Read/Write Commands” in Chapter 4 “Serial Management”).

- 3 Check that source routing is enabled for the Catalyst 1600 and for the appropriate port. Check the status of source routing by reading the LCD panel.

You can enable or disable source routing for the Catalyst 1600 and each port by using TrueView Catalyst 1600 Manager, or connecting a terminal to the serial interface and using the **enable port srb** command (see the section “Read/Write Commands” in Chapter 4 “Serial Management”).

## Problems Forwarding Source Route Broadcast Frames

If there are problems forwarding source routed frames:

- 1 Check that virtual LANs are configured correctly, and that each Catalyst 1600 has an up-to-date record of virtual LANs. To check the virtual LAN configuration, use TrueView Catalyst 1600 Manager.

Before creating new virtual LANs, make sure you delete the existing virtual LANs that are causing problems forwarding source routing frames.

- 2 Check that the type of station connected to each Token Ring switch port is defined correctly. On IPX and NetBIOS networks, the Catalyst 1600 Token Ring switch uses information about the type of station to block broadcast frames originating on workstation-only rings and destined for other workstation-only rings.

To check the station type for each Token Ring switch port, use TrueView Catalyst 1600 Manager.