

Product Overview

This chapter describes the Catalyst 2926 and Catalyst 2926G series switches and contains the following sections:

- Catalyst 2926 Series Switch Description on page 1-2
- Catalyst 2926G Series Switch Description on page 1-4
- Supported Network Management Tools on page 1-6

Note The Catalyst 2926 series switches include the Catalyst 2926T switch and Catalyst 2926F switch. The Catalyst 2926G series switches include the Catalyst 2926GS switch and Catalyst 2926GL switch. Throughout this guide, “Catalyst 2926 and Catalyst 2926G series switches” refers to all Catalyst 2926 and Catalyst 2926G series switches.

The Catalyst 2926 and Catalyst 2926G series switches are fixed-configuration LAN switches that provide high-performance switching between workstations, servers, switches, and routers using the same architecture and software as the Catalyst 5000 family switches. The Catalyst 2926 and Catalyst 2926G series switches include the following features:

- 24 10/100-Mbps Fast Ethernet autosensing switched ports to the desktop
- Two 100-Mbps Fast Ethernet or 1000-Mbps Gigabit Ethernet switched uplink ports for backbone and wiring-closet connections
- Redundant AC-input power supplies

The Catalyst 2926 and Catalyst 2926G series switches are described in the following sections.

For more information on the components of the Catalyst 2926 and Catalyst 2926G series switches, see Chapter 2, “Switch Description.”

Catalyst 2926 Series Switch Description

The Catalyst 2926 series switch is available in two models:

- Catalyst 2926T switch—Uses RJ-45 and media-independent interface (MII) connectors with 100BaseTX Category 5 unshielded twisted-pair (UTP) cabling
- Catalyst 2926F switch—Uses SC connectors with multimode fiber-optic cabling

The Catalyst 2926 series switch fits into a standard 19-inch (48.3-centimeter) rack, and all system connections are accessible from the rear of the chassis. The system includes the following:

- Supervisor engine that provides Layer 2 switching, local and remote management, and two Fast Ethernet uplink ports that support Fast EtherChannel bundling and Inter-Switch Link (ISL) trunking
- 24 10/100-Mbps Fast Ethernet autosensing switched ports
- Dual, load-sharing, redundant AC-input power supplies that provide uninterrupted system operation

The Catalyst 2926 series switch delivers more than 1 million packets-per-second throughput across a 1.2-Gbps, media-independent switching fabric. This switching fabric supports wire-speed switching for the 10/100-Mbps Fast Ethernet interfaces.

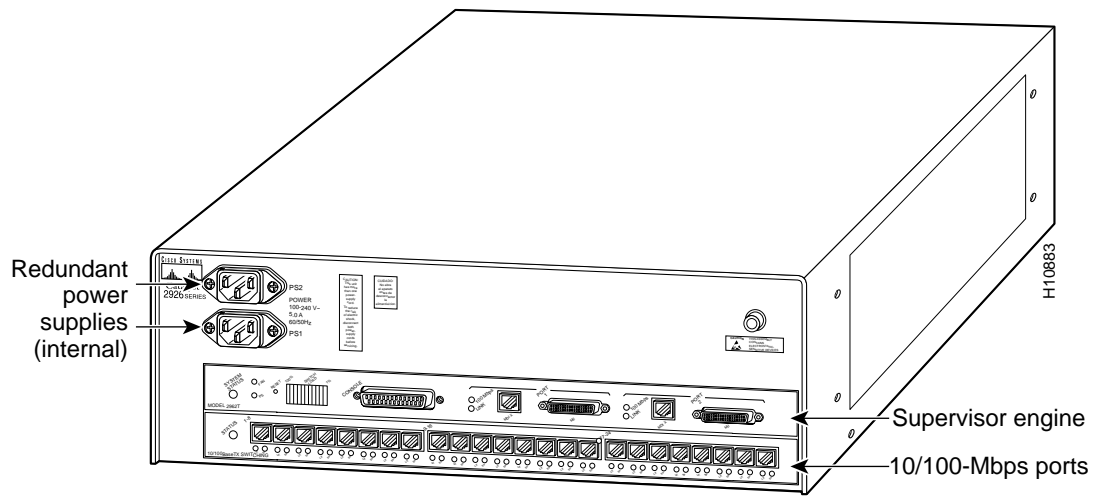
The supervisor engine performs the following functions:

- Controls data access to the backplane, prioritizes traffic, maintains up to 16,000 active Media Access Control (MAC) addresses in the bridge lookup table, and monitors system status
- Provides a common management path (separate from the data path) that delivers configuration information for the module, gathers performance information, and updates operational software information
- Supports up to 1000 virtual local-area networks (VLANs) network wide

The Catalyst 2926 series switch requires supervisor engine software release 2.4(3) or greater.

Figure 1-1 shows the Catalyst 2926 series switch with 155W power supply. Figure 1-2 shows the Catalyst 2926 series switch with 175W power supply with power factor correction (PFC). (Catalyst 2926T switch shown in both figures.)

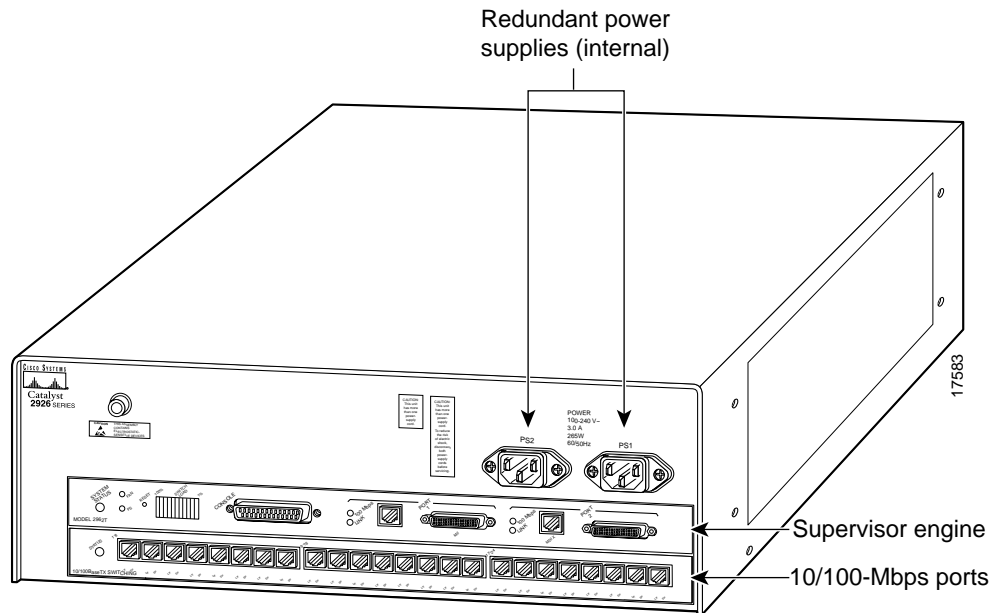
Figure 1-1 Catalyst 2926 Series Switch with 155W Power Supply



Note All subsequent illustrations of the Catalyst 2926 series switch in this guide show the 175W power supply with PFC.

Catalyst 2926G Series Switch Description

Figure 1-2 Catalyst 2926 Series Switch with 175W Power Supply with PFC



Catalyst 2926G Series Switch Description

The Catalyst 2926G series switch is available in two models:

- Catalyst 2926GS switch—1000BaseSX uplink ports with shortwave fiber transceivers
- Catalyst 2926GL switch—1000BaseLX/LH uplink ports with longwave/long-haul fiber transceivers

The Catalyst 2926G series switch fits into a standard 19-inch (48.3-centimeter) rack, and all system connections are accessible from the rear of the chassis. (See Figure 1-3.) The system includes the following:

- Supervisor engine that provides hardware support for up to 1024 VLANs, two Flash PC card slots, dual 1000BaseSX or 1000BaseLX/LH ports, and a NetFlow Feature Card (NFFC)

Note Throughout this publication, the term PC card is used in place of the term PCMCIA card.

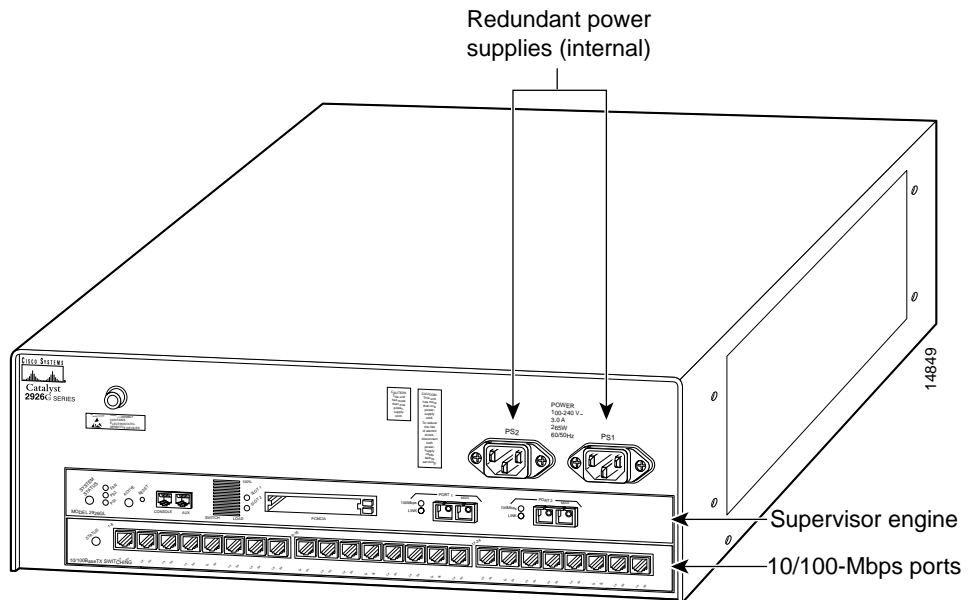
- 24 10/100-Mbps Fast Ethernet autosensing switched ports that support inline rewrite for Layer 3 switching
- Dual, load-sharing, redundant AC-input power supplies that provide uninterrupted system operation

The supervisor engine for the Catalyst 2926G series switch has all the features of the Catalyst 2926 supervisor engine plus these additional features:

- The Flash memory file system—You can use a variety of commands to manage the file system (such as **cd**, **pwd**, **dir**, **delete**, and **copy**).
- Gigabit Ethernet ports—Two 1000BaseSX or 1000BaseLX/LH with SC connectors.

For more information, see Appendix A, “Technical Specifications.”

Figure 1-3 Catalyst 2926G Series Switch



Supported Network Management Tools

Catalyst 2926 and Catalyst 2926G series switches offer network management and control through the CLI or alternative methods, such as CiscoWorks for Switched Internetworks (CWSI) and Simple Network Management Protocol (SNMP). The Catalyst 2926 and Catalyst 2926G series software supports these network management features:

- Traffic management—Remote Monitoring (RMON) statistics provide visibility of your network activity: statistics, history, events, and alarm groups.
- Traffic monitoring—Enhanced Switched Port Analyzer (SPAN) enables you to mirror traffic on any port or VLAN to another Ethernet port (10/100 Mbps) for analysis by a network analyzer or RMON SwitchProbe device.

Supported Network Management Tools

- **Load balancing**—Load balancing using VLANs and spanning-tree on multiple parallel Fast Ethernet ISL trunks allows you to increase capacity and fault tolerance between switches. Dynamic Trunking Protocol (DTP) synchronizes configuration of two interconnected Fast Ethernet interfaces into ISL trunks.
- **VLAN management**—This feature allows you to use Spanning-Tree Protocol over VLAN, ISL, DTP, and VLAN Trunk Protocol (VTP).
- **In-band/out-of-band management**—This feature allows you to perform local out-of-band management through a terminal or modem attached to the EIA/TIA-232 interface, and remote in-band management through SNMP, Telnet client, BOOTP, and Trivial File Transfer Protocol (TFTP).

Note EIA/TIA-232 was known as the recommended standard RS-232 before its acceptance as a standard by the Electronics Industries Association (EIA) and Telecommunications Industry Association (TIA).

- **SNMP management**—This protocol facilitates the exchange of management information between network devices.
- **NVRAM**—Nonvolatile random-access memory (NVRAM) allows you to store configuration data and software images.
- **CiscoWorks management**—CiscoWorks integrated, standards-based management, including CiscoView, TrafficDirector, and VlanDirector.

Supported Network Management Tools
