Cisco 4000 Series Routers Mid-Range Routing for Regional Office Ethernet LAN and Token Ring LAN Connectivity

THE CISCO 4000 SERIES ROUTERS ARE HIGHLY COST-EFFECTIVE, MODULAR PLATFORMS THAT REDUCE NETWORK COSTS AND COMPLEXITY BY AGGREGATING MULTIPLE LANS INTO A SINGLE MULTIPROTOCOL NETWORK. CISCO 4000 SERIES ROUTERS OFFER INCREASED SECURITY THROUGH PACKET FILTERING BETWEEN LANS AND PROVIDE THE BANDWIDTH RESERVATION FEATURES AND PERFORMANCE REQUIRED FOR ADVANCED APPLICATIONS SUCH AS LAN-TO-ASYNCHRONOUS TRANSFER MODE (ATM) ACCESS, IBM DATA-LINK SWITCHING (DLSW), ADVANCED PEER-TO-PEER NETWORKING (APPN), AND VIDEOCONFERENCING.

This series of routers provides regional offices with a broad range of capabilities and features across its two models: Cisco 4500-M and Cisco 4700-M. Each model offers Flash memory that stores the powerful Cisco Internetwork Operating System (Cisco IOS®) software and slots for optional network processor modules (NPMs)—individual removable cards used for external network connections including Ethernet, Token Ring, Fast Ethernet, ATM, Fiber Distributed Data Interface (FDDI), High-Speed Serial Interface (HSSI), Integrated Services Digital Network (ISDN), Basic Rate Interface (BRI) and Primary Rate Interface (PRI), E1/T1 serial, and high-density, low-speed serial.

The Cisco 4500-M is a midrange router with a 100-MHz reduced instruction set (RISC) CPU for supporting high-density/low-speed or mid-density/high-speed LAN and WAN connectivity. The top-of-the-line Cisco 4700-M router, with its 133-MHz RISC CPU, delivers 30-50 percent more processing performance than the Cisco 4500-M. In addition to providing better support of high-speed media than the 4500-M, it has the reserve to excel in compute intensive tasks such as data compression, data encryption, tunneling, policy/security, protocol conversion applications, and IBM protocols.

These midrange routers are ideal for several regional office environments. For example, many multi-regional offices have a mixture of legacy and LAN traffic and want to connect to servers or mainframe hosts at larger sites. The Cisco 4500-M can convert legacy protocols to IP protocols, prioritize traffic, and provide ISDN BRI connectivity. These offices often act as central repositories for data and applications accessed by smaller remote sites and mobile users, and the Cisco 4500-M router gives them the multiple WAN ports necessary for this aggregation. Regional offices with multiple backbone networks such as FDDI and ATM often need to link them with a router for increased security and control, or they need to translate traffic between dissimilar LANs such as Token Ring and Ethernet. The Cisco 4700-M router gives them high performance for these processor-intensive applications with a processing power reserve for the future.

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Features/Benefits at a Glance

The Cisco 4000 series includes two routers, each designed for different regional office demands and levels of functionality.

Cisco 4500-M Modular Router

- A 100-MHz, 64-bit IDT Orion RISC processor that excels in processor-intensive router operations
- Three slots for adding NPMs (see Table 1)
- Protocol translation between Telnet, local-area transport (LAT), and X.25 for internetworking nonhomogeneous environments
- 16 MB of main DRAM (upgradable to 32 MB), 4 MB of system Flash, 4 MB of boot Flash, and 4 MB of shared DRAM

Cisco 4700-M Modular Router

- A 133-MHz, 64-bit IDT RISC processor and a 512-KB secondary memory cache
- Brings access performance to high-demand applications such as LAN-to-ATM or LAN-to-FDDI access, and IBM internetworking
- Three slots for adding NPMs (see Table 1)
- 16 MB of main DRAM (upgradable to 64 MB), 4 MB of system Flash, 4 MB of boot Flash, and 4 MB of shared DRAM
- Delivers processing speeds required for future technologies

For More Information on Cisco, Contact:

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Or contact your local Cisco office
World Wide Web URL: http://www.cisco.com

Number of Network Processor Modules Supported			
	Cisco 4500–M	Cisco 4700–M	Product Number
2 Ethernet Ports	3	3	NP-2E-FDX
6 Ethernet Ports	3	3	NP-6E
1 Token Ring Port	3	3	NP-1RV2
2 Token Ring Ports	3	3	NP-2R
1 Fast Ethernet Port	2	2	NP-1FE
1 ATM Port DS3/E3	2	2	NP-1A-DS3, NP-1A-E3
1 ATM Port OC-3	1	1	NP-1A-MM, NP-1A-SM, NP-1A-SM-LR
1 FDDI Port	2	2	NP-1F-D-MM, NP-1F-S-M, NP-1F-D-SS
1 HSSI Port	2	2	NP-1HSSI
1 Ch/ISDN PRI Port (T1 or E1)	2	2	NP-CT1, NP-CE1U, NP-CE1B
4 ISDN BRI Ports	2	2	NP-4B
8 ISDN BRI Ports	2	2	NP-8B
2 Serial Ports	3	3	NP-2T
4 Serial Ports	3	3	NP-4T
2 Serial and 16 A/S Ports	2	2	NP-2T16S-V.35, NP-2T16S-X21, NP-2T16S-RS232, NP-2T16S-232V35, NP-2T16S-232X21
4 G.703 Ports	3	3	NP-4GB, NP-4GU

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