# Internet and Intranet Solutions Products

This chapter provides an overview of the Cisco's Internet and intranet solution products. Cisco Systems has long been supplying organizations with routers and switches to build the Internet and the world's largest, most scalable intranets. Through the addition of new Internet and intranet system and software products, Cisco is now providing end-to-end solutions to the challenges of Internet and intranet usage.

**Note** Documentation for the Internet and intranet solutions products is available in two forms: on a CD-ROM called Cisco Connection Documentation, Enterprise Series and printed books. A CD and hard-copy installation documentation ship with each order, and a configuration note ships with each component ordered. All configuration notes are available on the CD. Additional CDs and a subscription CD update service are also available.

You can also access Cisco technical documentation on the World Wide Web URL http://www.cisco.com. For more information, see the chapter "Documentation" at the end of the catalog.

# Overview of Internet and Intranet Solutions Products

Fulfilling the vision of the Internet and corporate intranets requires tackling challenges such as end-to-end security, TCP/IP access for non-TCP/IP systems, server scalability, and managing an accelerating number of mobile systems. By providing products that augment and complement its router and switching products, Cisco provides complete and integrated end-to-end solutions to these challenging issues.



#### Benefits of Internet and Intranet Solutions

Cisco's Internet and intranet solution products focus on providing end-to-end solutions in the following areas:

- Internet and intranet security Based on the Cisco PIX Firewall and TCP/IP Suite 100 products
- Access to TCP/IP applications by Novell systems Based on the IPeXchange family of IPX-to-IP gateway products
- TCP/IP Networking for Digital's Open VMS Systems Based on Cisco MultiNet for OpenVMS and MultiNet Secure/IP products
- Scalability of TCP/IP application servers Based on Cisco LocalDirector and Cisco DistributedDirector
- Scalable management of plug and play TCP/IP environments Based on Cisco DNS/DHCP Manager and Cisco Server Suite 100

# Server and Client Software

Cisco's Internet and intranet solutions consist of the following products:

- Cisco Server Suite 1000
- Cisco DNS/DHCP Manager
- Cisco MultiNet for OpenVMS
- Cisco Secure/IP for OpenVMS
- Cisco TCP/IP Suite 100
- Cisco TCP/IP Stack 100
- Cisco IPeXchange Internet Gateways



#### Cisco Server Suite 1000

The Cisco Server Suite 1000 is a suite of enhanced TCP/IP server applications that are easily managed and configured with a graphical user interface. These servers, Domain Naming System (DNS), Dynamic Host Configuration Protocol (DHCP), BOOTP, Trivial File Transfer Protocol (TFTP), Network Time Protocol (NTP), and Syslog are the most common TCP/IP servers used in building and maintaining scalable, plug and play TCP/IP networks. With the Cisco Server Suite 1000 administrators can now get a consistent level of network services across both UNIX and Windows NT platforms with an easy-to-use graphical user interface.





# Cisco DNS/DHCP Manager

The Cisco DNS/DHCP Manager is a suite of TCP/IP management applications that manage domain names and synchronize IP addresses between a DHCP server and a DNS server. The Cisco DNS/DHCP Manager includes the Domain Name Manager—a graphical DNS management tool and a DHCP server that dynamically updates DNS with IP addresses assigned to DHCP clients. The Cisco DNS/DHCP Manager also includes a DNS server, TFTP server, NTP, and a Syslog server.

# Cisco MultiNet for OpenVMS

MultiNet for OpenVMS software allows DEC users to upgrade from the proprietary DECnet protocol to TCP/IP. Cisco MultiNet for OpenVMS delivers the entire TCP/IP environment to users on an OpenVMS platform, including Internet, World Wide Web services, LAN and WAN connectivity, electronic mail, tape backup, file transfer, load balancing, improved print services, symmetric multiprocessing, time synchronization, and user authentication. Cisco MultiNet for OpenVMS can seamlessly transform a DECnet or DECnet/OSI network to TCP/IP without user retraining, application recoding, or network downtime. DECnet and DECnet/OSI applications can run directly over TCP/IP without modification. Users continue using commands familiar in the DECnet environment while network administrators migrate their networks to TCP/IP at their own pace. Cisco MultiNet for OpenVMS delivers open networking and unparalleled system reliability and security.

# Cisco Secure/IP for OpenVMS

An optional package for Cisco MultiNet for OpenVMS, this product prevents TCP/IP networked systems from unauthorized user access. It simplifies security management by providing a single OpenVMS utility for managing hand-held tokens, supporting the leading token-based products in the market today.

# Cisco TCP/IP Suite 100

Cisco TCP/IP Suite 100 offers a "data center" level of reliability, performance, and features down to the desktop, and is available on Windows 3.x, and Windows 95. Cisco TCP/IP Suite 100 includes a network files system (NFS) client; Telnet with TN3270, TN5250, and VT420 emulation; and FTP file transfer. Also included are Pronto mail and the enhanced Mosaic Web browser as well as enhanced security features.

# Cisco TCP/IP Stack 100

Cisco TCP/IP Stack 100 delivers the fastest TCP/IP performance for Windows 3.x and Windows 95. Cisco TCP/IP Stack 100 is a 32-bit virtual device driver implementation that delivers high performance and WINSOCK 1.1 compatibility. The Stack includes an SNMP agent and supports Ethernet, Token Ring, FDDI, dial-up, and ISDN interfaces. Online documentation and the unique Configuration Wizard ensure smooth installation and ease of use.



# Cisco IPeXchange Internet Gateways for Windows NT and NetWare

Cisco's IPeXchange Internet Gateways provide secure Internet access for Novell LANs. They allow you to run TCP/IP services (for example Web Services, Telnet, and e-mail) on IPX networks. Software versions of the Gateway operate on a PC and are offered for either the NetWare, or Windows NT platform. They provide translation between the Novell IPX and TCP/IP protocol suites.

# **Internet Systems**

Cisco's Internet systems consist of the following hardware products:

- IPeXchange 1000 series
- Cisco PIX Firewall
- Cisco LocalDirector
- Cisco DistributedDirector

# IPeXchange 1000 Series

The IPeXchange 1000 series products provide a Novell IPX to TCP/IP translation gateway in a systems package. Three Cisco IPeXchange 1000 series hardware platforms are available. The IPeXchange 1003 and IPeXchange 1004 support Ethernet-to-Integrated Services Digital Network (ISDN) connectivity. The IPeXchange 1005 supports Ethernet-to-Frame Relay or Ethernet-to-leased line connectivity. All Cisco IPeXchange 1000 series Internet Gateways support Point-to-Point Protocol (PPP), compression, and several other powerful features for optimizing WAN bandwidth and costs.

# **Cisco PIX Firewall**

Cisco PIX Firewall combines hardware and software to provide full firewall protection that completely conceals the architecture of an internal network from the outside world. The PIX Firewall is based on address translation that solves both security concerns and issues surrounding IP address shortages. PIX Firewall allows secure access to the Internet from within existing private networks as well as the ability to expand and reconfigure TCP/IP networks without being concerned about availability of IP addresses.

#### **Cisco LocalDirector**

Cisco LocalDirector is a device that dynamically load-balances traffic between multiple collocated servers to ensure timely access and response to requests. It is independent of domain name servers and applications. Rather, it functions as a front end to a group of servers, balancing traffic demands between servers and speeding user access to server-based applications. Servers can be added and removed transparently, but to end users LocalDirector provides the appearance of a single, "virtual" server.



#### Cisco DistributedDirector

Like LocalDirector, Cisco's DistributedDirector performs load distribution tasks, but DistributedDirector distributes sessions over geographically dispersed servers using the intelligence in the internetwork. DistributedDirector takes into account the relative topological distance between the client and server to determine the best server. To users, it appears that there is only one server. This means that end users need only a single URL or subdomain name to access a geographically distributed set of servers.

Note that Cisco LocalDirector and Cisco DistributedDirector are complimentary solutions that can be used together to provide a complete Internet service scalability solution.

# A Comprehensive Solution

Together with the Cisco Internetwork Operating System (Cisco IOS) software, Cisco Internet and intranet solution products allow you to maximize the capabilities of your intranet while providing access to Internet services. And because Cisco offers a complete, end-to-end solution, you can enter the world of "virtual" business at your own pace with the specific Internet solutions your business needs.



