

Cisco VPN 3000 Concentrator Series

THE CISCO VPN 3000 CONCENTRATOR SERIES ALLOWS CORPORATIONS TO TAKE FULL ADVANTAGE OF THE UNPRECEDENTED COST SAVINGS, FLEXIBILITY, PERFORMANCE, AND RELIABILITY OF REMOTE ACCESS VPN CONNECTIONS.

Corporations use Virtual Private Networks (VPNs) to establish secure, end-to-end private network connections over a public networking infrastructure. VPNs have become the logical solution for remote-access connectivity for two main reasons:

- Deploying a remote-access VPN enables corporations to reduce communications expenses by leveraging the local dial-up infrastructures of Internet service providers.
- Remote Access VPNs allow mobile workers, telecommuters and day extenders to take advantage of broadband connectivity.

To fully realize the benefits of high-performance, remote-access VPNs, a corporation must deploy a robust, highly available VPN solution, and dedicated VPN devices are optimal for this purpose.

The Cisco VPN 3000 Concentrator Series is a best-of-breed, remote-access VPN solution for enterprise-class deployment. A standards-based, easy-to-use VPN client and scalable VPN tunnel termination devices are included as well as a management system that enables corporations to easily install, configure and monitor their remote access VPNs. Incorporating the most-advanced, high-availability capabilities with a unique purpose-built, remote-access architecture, the Cisco VPN 3000 Concentrator allows corporations to build high-performance, scalable, and robust VPN infrastructures to support their mission-critical, remote-access applications. Unique to the industry, it is the only scalable platform to offer components that are field-swappable and can be upgraded by the customer. These components, called Scalable Encryption Processing (SEP) modules, enable users to easily add capacity and throughput. The Cisco VPN 3000 Concentrator supports the widest range of VPN client software implementations, including the

Cisco VPN Client, the Microsoft Windows 2000 L2TP/IPsec Client and Microsoft PPTP for Windows 95, Windows 98, Windows NT 4.0, and Windows 2000.

Five Models

The Cisco VPN 3000 Concentrator is available in four different models to support any business:

Cisco VPN 3005 Concentrator

The Cisco VPN 3005 Concentrator is a VPN platform designed for small- to medium-sized organizations with bandwidth requirements up to full-duplex T1/E1 (4 Mbps maximum performance) and up to 100 simultaneous sessions. Encryption processing is performed in software. The Cisco VPN 3005 does not have built-in upgrade capability.

Cisco VPN 3015 Concentrator

The Cisco VPN 3015 Concentrator is a VPN platform designed for small- to medium-sized organizations with bandwidth requirements up to full-duplex T1/E1 (4 Mbps maximum performance) and up to 100 simultaneous sessions. Like the Cisco VPN 3005, encryption processing is performed in software, but the Cisco VPN 3015 is also field-upgradeable to the Cisco VPN 3030 and 3060 models.

Cisco VPN 3030 Concentrator

The Cisco VPN 3030 Concentrator is a VPN platform designed for medium- to large-sized organizations with bandwidth requirements from full T1/E1 through T3/E3 (50 Mbps maximum performance) and up to 1500 simultaneous sessions. Specialized SEP modules perform hardware-based acceleration. The Cisco VPN 3030 is field-upgradeable to the Cisco VPN 3060. Redundant and non-redundant configurations are available.



Cisco VPN 3060 Concentrator

The Cisco VPN 3060 is a VPN platform designed for large organizations demanding the highest level of performance and reliability, with high-bandwidth requirements from fractional T3 through full T3/E3 or greater (100 Mbps maximum performance) and up to 5000 simultaneous sessions. Specialized SEP modules perform hardware-based acceleration. Redundant and non-redundant configurations are available.

Cisco VPN 3080 Concentrator

The Cisco VPN 3080 Concentrator is optimized to support large enterprise organizations that demand the highest level of performance combined with support for up to

10,000 simultaneous remote access sessions. Specialized SEP modules perform hardware-based acceleration. The VPN 3080 is available in a fully redundant configuration only.

Cisco VPN Client

Simple to deploy and operate, the Cisco VPN Client is used to establish secure, end-to-end encrypted tunnels to the Cisco VPN 3000 Concentrator. This thin design, IPsec-compliant implementation is provided with the Cisco VPN 3000 Concentrator and is licensed for an unlimited number of users. The client can be pre-configured for mass deployments and the initial logons require very little user intervention. VPN access policies are created and stored centrally in the Cisco VPN 3000 Concentrator and pushed to the client when a connection is established.

The Cisco VPN 3000 Concentrator Series Features

	Cisco VPN 3005	Cisco VPN 3015	Cisco VPN 3030	Cisco VPN 3060	Cisco VPN 3080
Simultaneous Users	100	100	1500	5000	10,000
Maximum LAN-to-LAN Sessions	100	100	500	1000	1000
Encryption Throughput	4 Mbps	4 Mbps	50 Mbps	100 Mbps	100 Mbps
Encryption Method	Software	Software	Hardware	Hardware	Hardware
Encryption (SEP) Module	0	0	1	2	4
Redundant SEP	N/A	N/A	Option	Option	Yes
Available Expansion Slots	0	4	3	2	N/A
Upgrade Capability	No	Yes	Yes	N/A	N/A
System Memory	32 MB (fixed)	64 MB	128 MB	256 MB	256 MB
T1 WAN Module	Fixed option	Option	Option	Option	Option
Hardware Configuration	1U, Fixed	2U, Scalable	2U, Scalable	2U, Scalable	2U
Dual Power Supply	Single	Option	Option	Option	Yes
Client License	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited

The Cisco VPN 3000 Concentrator Series supports the entire range of enterprise applications.

The Cisco VPN 3000 Concentrator Series Features and Benefits

Product Highlights

High-Performance, Distributed-Processing Architecture

- Cisco SEP modules provide hardware-based encryption, ensuring consistent performance throughout the rated capacity (Cisco VPN 3030 - 3080).
- Large-scale tunneling support provided for IPsec, PPTP and L2TP/IPsec connections.

Scalability (Cisco VPN 3015-3060)

- Modular design (four expansion slots) provides investment protection, redundancy and a simple upgrade path.
- System architecture is designed to supply consistent, high-availability performance.
- All digital design provides the highest reliability and 24-hour continuous operation.
- Robust instrumentation package provides run-time monitoring and alerts.
- Microsoft compatibility offers large-scale client deployment and seamless integration with related systems.

Security

- Full support of current and emerging security standards allows for integration of external authentication systems and interoperability with third-party products.
- Firewall capabilities through stateless packet filtering and address translation to assure the required security of a corporate LAN.
- User and group level management offers maximum flexibility.

High Availability

- Redundant subsystems and multi-chassis fail-over capabilities ensure maximum system uptime.
- Extensive instrumentation and monitoring capabilities provide network managers with real-time system status and early-warning alerts.

Robust Management

- The Cisco VPN 3000 Concentrators can be managed using any standard Web browser (HTTP or HTTPS), as well as by Telnet, Secure Telnet, SSH, and via a console port.
- Configuration and monitoring capability is provided for both the enterprise and the service provider.

- Access levels are configurable by user and groups, allowing easy configuration and maintenance of security policies.

Cisco VPN 3000 Concentrator Series Technical Summary

Hardware

Processor

- Motorola PowerPC Processor

Memory

- Redundant system images (Flash)
- Variable memory options (see chart)

Encryption

- Cisco VPN 3005, 3015—Software encryption
- Cisco VPN 3030-3080—Hardware encryption

Embedded LAN Interfaces

- Cisco VPN 3005—Two auto-sensing, full-duplex 10/100BaseTX Fast Ethernet (public/untrusted, private/trusted)
- Cisco VPN 3015-3080—Three auto-sensing, full-duplex 10/100BaseTX Fast Ethernet (public/untrusted, private/trusted and DMZ)

Instrumentation

- Cisco VPN 3005 Front panel—Unit status indicator
- Cisco VPN 3005 Rear panel—Status light-emitting diodes (LED) for Ethernet ports
- Cisco VPN 3015-3080 Front panel—Status LEDs for system, expansion modules, power supplies, Ethernet modules, fan
- Cisco VPN 3015-3080 Rear panel—Status LEDs for Ethernet modules, expansion modules, power supplies
- Cisco VPN 3015-3080—Activity monitor displays number of sessions, aggregate throughput, or CPU utilization; push-button selectable

Software

Client Software Compatibility

- Cisco VPN Client (IPsec) for Windows 95, 98, ME, NT 4.0, 2000, XP, including centralized split-tunneling control, LAN access and data compression
- Microsoft PPTP/MPPE/MPPC
- Microsoft L2TP/IPsec for Windows 2000/XP
- MovianVPN[®] (Certicom) Handheld VPN Client with ECC

Tunneling Protocols

- IPsec, PPTP, L2TP, L2TP/IPsec, NAT Transparent IPsec

Encryption/Authentication

- IPsec Encapsulating Security Payload (ESP) using DES/3DES (56/168-bit) with MD5 or SHA, MPPE using 40/128-bit RC4

Key Management

- Internet Key Exchange (IKE)

Routing Protocols

- RIP, RIP2, OSPF, Static, Automatic endpoint discovery, Network Address Translation (NAT), Classless Interdomain Routing (CIDR)

Third-Party Compatibility

- Certicom, iPass Ready, Funk Steel Belted RADIUS certified, NTS TunnelBuilder VPN Client (Mac and Windows), Microsoft Internet Explorer, Netscape Communicator, Entrust, GTE Cybertrust, Baltimore, RSA Keon

High Availability

- VRRP protocol for multi-chassis redundancy and fail-over
- Destination pooling for client-based fail-over and connection re-establishment
- Redundant SEP modules (optional), power supplies, and fans (Cisco VPN 3015 - 3080)

Management

Configuration

- Embedded management interface is accessible via console port, Telnet, SSH, and Secure HTTP
- Administrator access is configurable for five levels of authorization. Authentication can be performed externally via TACACS+
- Role-based management policy separates functions for service provider and end-user management

Monitoring

- Event logging and notification via e-mail (SMTP)
- Automatic FTP backup of event logs
- SNMP MIB-II support
- Configurable SNMP traps
- Syslog output
- System status
- Session data
- General statistics

Security

Authentication and Accounting Servers

- Support for redundant external authentication servers:
 - RADIUS (Remote Authentication Dial-In User Service)
 - Microsoft NT Domain authentication
 - RSA Security Dynamics (SecurID Ready)
- Internal Authentication server for up to 100 users
- X.509v3 Digital Certificates
- RADIUS accounting
- TACACS+ Administrative user authentication

Internet-Based Packet Filtering

- Source and destination IP address
- Port and protocol type
- Fragment protection
- FTP session filtering

Policy Management

- By individual user or group
 - Filter profiles
 - Idle and maximum session timeouts
 - Time and day access control
 - Tunneling protocol and security authorization profiles
 - IP Pool
- Authentication Servers

Technical Specifications

Ports

- Console port-Asynchronous serial (DB-9)

Physical Characteristics

Concentrator	Cisco VPN 3005	Cisco VPN 3015	Cisco VPN 3030	Cisco VPN 3060	Cisco VPN 3080
Height	1.75" (4.45cm)	3.5" (8.89cm)	3.5" (8.89cm)	3.5" (8.89cm)	3.5" (8.89cm)
Width	17.5" (44.45cm)	17.5" (4.45cm)	17.5" (4.45cm)	17.5" (4.45cm)	17.5" (4.45cm)
Depth	11.5" (29.21cm)	14.5" (36.83cm)	14.5" (36.83cm)	14.5" (36.83cm)	14.5" (36.83cm)
Weight	8.5 lbs(3.9kg)	27 lbs(12.3kg)	28 lbs(12.7kg)	33 lbs(15kg)	33 lbs(15kg)

Power Type and Requirements

Concentrator	Cisco VPN 3005	Cisco VPN 3015 - 3080
Nominal	15 watts (51.22BTU/hr)	35 watts (119.50BTU/hr)
Maximum	25 watts (85.36BTU/hr)	50 watts (170.72BTU/hr)
Input Voltage	100-240VAC	100-240VAC
Frequency	50/60 Hz	50/60 Hz
Power Factor Correction	Universal	Universal

Environmental

- Temperature: 32° to 131° F (0° to 55° C) operating; -4° to 176° F (-40° to 70° C) non-operating
- Humidity: 0 to 95 percent non-condensing

Regulatory Compliance

- CE Marking

Safety

- UL 1950, CSA

EMC

- FCC Part 15 (CFR 47) Class A, EN 55022 Class A, EN 50082-1, AS/NZS 3548 Class A, VCCI Class A



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