Router-Based SSL VPN: An Industry First
Value-Added Security Services in Cisco IOS Software

Integrated Router Security Solutions

Comprehensive network security features in Cisco routers help companies protect their infrastructures, devices, and important information, while reducing costs
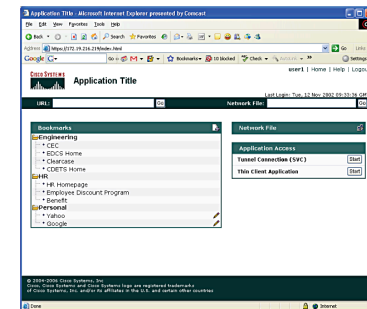
Cisco IOS® SSL VPN integrates with routing features on a converged data, voice, and wireless platform to offer remote-access connectivity for small to medium-sized businesses

Using SSL VPN, companies can securely and transparently extend their networks to any Internet-enabled location. Cisco IOS SSL VPN supports clientless access to applications such as HTML-based intranet content, e-mail, network file shares, and Citrix. It also supports traditional full tunnel access with the Cisco SSL VPN Client, enabling full network access remotely to virtually any application. Cisco Secure Desktop, as part of SSL VPN, offers data theft prevention even on noncorporate devices. Cisco Router and Security Device Manager (SDM) eases SSL VPN deployment and performs real-time monitoring and management of SSL VPN sessions.

Unlike products from other vendors, which require multiple devices and management systems, Cisco IOS SSL VPN is a single-box solution. An integrated solution is easier to learn, deploy, provision, manage, and maintain, and will have higher availability.
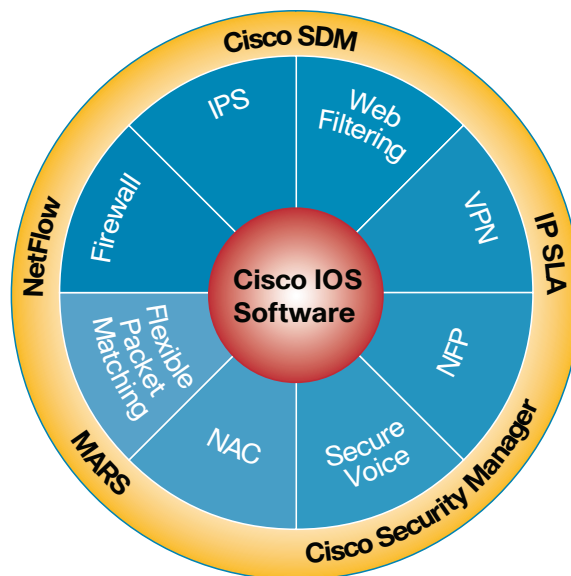
- Delivers clientless and SSL-tunneling client access methods, enabling the appropriate level of application access based on the deployment environment
- Works with integrated services router features, such as other VPN technologies, firewalls, and IPSs
- Simplifies monitoring and management with Cisco SDM
- Supports Citrix, Microsoft Outlook Web Access, and Common Internet File System (CIFS)
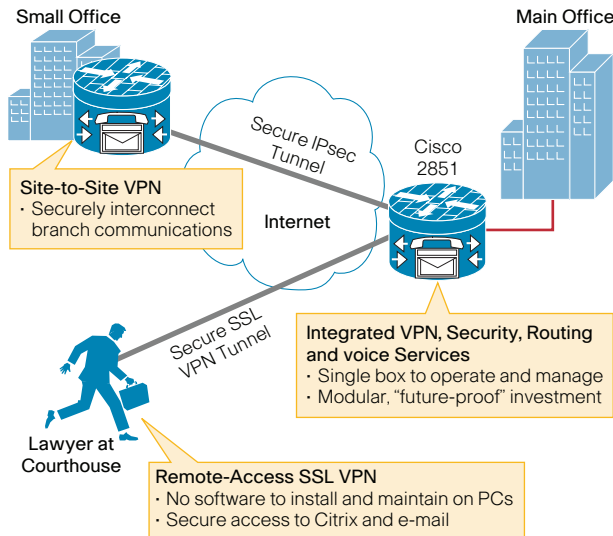- Provides advanced endpoint security with Cisco Secure Desktop

Features	Benefits
Advanced Endpoint Security	Cisco Secure Desktop offers preconnection security posture assessment and seeks to minimize data such as cookies, browser history, temporary files, and downloaded content from being left behind after an SSL VPN session terminates.
Broad Application Support for SSL VPN	The Cisco IOS SSL VPN solution offers extensive application support through its dynamically downloaded SSL VPN client, enabling network-layer connectivity to virtually any application. The solution delivers truly clientless support for Citrix application access, allowing a transparent, low-overhead extension of the network resources to VPN users through a standard Web browser.
Comprehensive Deployment Scenario Coverage	SSL and IPsec are complementary technologies that address unique user access requirements; both are necessary in order for a company to meet the needs of a diverse user base. Cisco IOS Software supports both IPsec and SSL VPN, allowing businesses to choose the most appropriate technology for users accessing the network through different scenarios. This provides maximum flexibility and application access, all on one platform, alleviating the need to deploy and manage separate infrastructures.
Simple, Low, Per-user Pricing	The simple licensing structure of Cisco IOS SSL VPN (no added licenses for special features), combined with the consolidated technology platform, provides customers with unparalleled cost savings and competitive per-user pricing.

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Small Office

Main Office

Site-to-Site VPN
· Securely interconnect branch communications

Secure IPsec Tunnel

Internet

Cisco 2851

Integrated VPN, Security, Routing and voice Services
· Single box to operate and manage
· Modular, "future-proof" investment

Secure SSL VPN Tunnel

Lawyer at Courthouse

Remote-Access SSL VPN
· No software to install and maintain on PCs
· Secure access to Citrix and e-mail

· **Improved Staff Productivity**—Platform-dependent
· **Compliance with Regulations**—All remote communications fully encrypted and logged
· **Proactive Threat Defense**—Application firewall, inline intrusion prevention, and touchless endpoint security (Cisco Secure Desktop)

Application Example for Cisco IOS SSL VPN: Law Firm

Web-based Cisco SDM provides a simple interface to configure and monitor all remote-access users, providing ease of manageability across both IPsec and SSL VPN environments.

In this example, a law office uses integrated services router capabilities to enable its lawyers to access important files from any public computer, while allowing a small office to have an IPsec-based VPN.

The main office also has an integrated services router that terminates SSL VPN clients and site-to-site VPNs.

Group-based management features allow administrators to design security policies and authentication methods for each group, a feature that is essential when extending network resources to non-corporate-managed users and endpoints.

Terminal Server Support for Citrix

To minimize costs while maximizing remote connectivity options, many businesses are centralizing their application management and distribution to allow access to internal computing resources through terminal server architecture. For this reason, it is important that a robust remote-access solution support Citrix deployments with a simple, dependable, and easy-to-use protocol, while providing a local, system-based experience for application use. Typical SSL solutions require either a software client or the existence of an applet download (Java or ActiveX) to access internal terminal server resources, slowing application initiation and creating potential access problems due to software conflicts or browser settings. Cisco IOS SSL VPN provides truly clientless Citrix support without relying on additional Java-based port forwarding mechanisms, delivering rapid and highly stable system access, regardless of browser or security settings.

Performance Considerations	Licensing Portfolio
Cisco 871: 2 SSL VPN sessions	**Simple and cost-effective pricing:** All WebVPN functions are included in a single license (packs available in 10-, 25-, and 100-license increments).
Cisco 1800 Series: Up to 25 SSL VPN sessions	
Cisco 2800 Series: Up to 50 SSL VPN sessions	**Demo licenses:** A 2-user demo license is available on Cisco 870, 1800, 2800, and 3800 Series Integrated Services Routers and Cisco 7200 and 7301 Routers.
Cisco 3700 Series: Up to 75 SSL VPN sessions	
Cisco 3800 Series: Up to 100 SSL VPN sessions	Feature License for SSL VPN
Cisco 7200/7301: Up to 150 SSL VPN sessions	· FL-WEBVPN-10-K9: Up to 10 users (incremental)
AIM-VPN/SSL Module Recently Introduced	· FL-WEBVPN-25-K9: Up to 25 users (incremental)
(NOTE: please use complete Cisco product name, as it appears in the MDF)	· FL-WEBVPN-100-K9: Up to 100 users (incremental)
Cisco 1800 Series: Up to 50 SSL VPN sessions	Hardware Security Bundles available
Cisco 2800 Series: Up to 100 SSL VPN sessions	· HSEC/K9 bundles include 10 SSL VPN licenses for 1800 and 2800 Series.
Cisco 3700 Series: Up to 150 SSL VPN sessions	· HSEC/K9 bundles include 25 SSL VPN licenses for 3800 Series
Cisco 3800 Series: Up to 200 SSL VPN sessions	

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