

Cisco ASA 5500 Series Firewall Edition for the Enterprise

Threats to today's networks continue to grow, with attacks coming from both outside and within corporate networks. These threats can have devastating effects, ranging from business disruption due to a network outage, financial risk resulting from information loss, or liability issues stemming from information tampering. Meanwhile, businesses are striving to improve their profitability and competitiveness through continued business process optimization and automation, leading to increased connectivity with their business partners and customers. These applications offer many benefits, but can also introduce a variety of risks, if not secured properly. Using the world-class security and networking services provided by the Cisco® ASA 5500 Series Firewall Edition, businesses can securely deploy mission-critical applications and networks in a highly reliable manner, while benefiting from the significant investment protection and lower operational costs offered by this unique, modular solution.

CHALLENGE

The information assets and applications traveling on today's networks are the lifeblood of the modern enterprise. As businesses continue to optimize their processes and streamline their operations for improved profitability and competitiveness, their networks become increasingly more complex and interconnected. Now, as businesses depend on these networks as mission-critical infrastructure, the security and reliability challenges businesses face continue to grow.

Examples of threats to today's business networks include:

- Unauthorized network or information access—As businesses increase internal network connectivity and collaboration with new customers and business partners, they need to effectively maintain control of their vital assets to preserve their competitive edge and limit corporate liability. New applications can increase business automation and collaboration, but can also open dangerous security holes, if not secured properly.
- Decreased employee productivity and wasted bandwidth—Businesses need to effectively control the use of applications, such as peer-to-peer file sharing and instant messaging, which plague many unsuspecting businesses, to improve employee productivity and reduce the costs associated with Internet connectivity.
- Unplanned network downtime—Businesses need highly reliable networks that help ensure continuous operations for maximum productivity, including support for planned and unplanned maintenance upgrades. These networks must be able to defend against threats such as Internet-based denial of service attacks or internal sabotage from disgruntled employees or contractors.



SOLUTION

The Cisco ASA 5500 Series Firewall Edition enables businesses to securely deploy mission-critical applications and networks in a highly reliable manner, while providing significant investment protection and lower operational costs through its unique, modular design. Businesses can protect their networks from unauthorized access using the Cisco ASA 5500 Series Firewall Edition's robust policy enforcement services. These services combine with market-leading VPN services to enable businesses to securely extend their networks

across low-cost Internet connections to business partners, remote sites, and mobile workers. This flexible solution can adapt as an organization's needs evolve along with the ever-changing security threat landscape, giving businesses the ability to easily integrate market-leading intrusion prevention, antivirus, antispam, antispymware, URL filtering, and other advanced content security services for additional layers of protection. Combined with Cisco management and monitoring application solutions, the Cisco ASA 5500 Series Firewall Edition provides world-class security with lower operational costs.

Capabilities of the Cisco ASA 5500 Series Firewall Edition include:

- Most trusted and deployed firewall technology—Building upon the market-proven capabilities of the Cisco PIX® Family of security appliances, the Cisco ASA 5500 Series provides a wide range of services to secure modern network environments. Flexible policy capabilities prevent unauthorized access to network resources or vital corporate information. Advanced application control capabilities help businesses effectively control the use of peer-to-peer file sharing, instant messaging, and other non-corporate applications—thus improving employee productivity and reducing wasted Internet bandwidth.
- Threat-protected VPN—Building upon the market-proven VPN capabilities of the Cisco VPN 3000 Series Concentrator, the Cisco ASA 5500 Series Firewall Edition provides secure site-to-site and remote-user access to corporate networks and services. This solution offers businesses maximum flexibility for secure connectivity by combining support for Secure Sockets Layer (SSL) and IP Security (IPSec) VPN capabilities into a single, best-in-class solution. Using the services offered by the Cisco ASA 5500 Series Firewall Edition, businesses can enforce identity-based security and networking policies to all network traffic, thus enabling businesses to tailor-fit access privileges for every group of employees, contractors, and business partners.
- Adaptive design provides superior investment protection and extensibility to address future threats—The Cisco ASA 5500 Series Firewall Edition can adapt as businesses needs change through its unique, modular design. Businesses can easily expand the number of security services offered by adding a high-performance, purpose-built Cisco ASA 5500 Series security services module, such as the Advanced Inspection and Prevention Security Services Module (AIP-SSM) for advanced intrusion prevention services, or the Content Security and Control Security Services Module (CSC-SSM) for advanced antivirus, antispam, and other anti-X services.
- Intelligent network integration and enterprise-class resiliency—Building on more than 20 years of Cisco networking leadership and innovation, the Cisco ASA 5500 Series Firewall Edition delivers a wide range of intelligent networking services for seamless integration into today's diverse network environments. Businesses can maximize network uptime and throughput by taking advantage of the many resiliency and scalability services this solution has to offer, such Active/Active high availability, “zero-downtime software upgrades,” and integrated VPN clustering and load balancing.
- Easy deployment and management—The Cisco management and monitoring suite enables large-scale deployment and operation of the Cisco ASA 5500 Series Firewall Edition. Cisco provides a complete solution, covering management and monitoring. Also included with the solution is Cisco Adaptive Security Device Manager (ASDM), which provides a powerful, yet easy-to-use browser-based management and monitoring interface for individual security appliances.

BUSINESS BENEFITS

The Cisco ASA 5500 Series Firewall Edition provides the security and connectivity services that helps your business with:

- Controlled access to corporate resources—Prevents unauthorized access to applications or information assets by providing businesses with fine-grain identity- or network-based access control. Integrates with popular user authentication services such as Microsoft Active Directory, Lightweight Directory Access Protocol (LDAP), Kerberos, and RSA SecurID.



- Secure deployment of new applications—Enables businesses to safely deploy new applications by providing advanced application-layer security services for a wide range of popular applications, including Web-based applications, e-mail, voice over IP (VoIP), video, and multimedia applications. Hides corporate network addresses from the Internet for an additional layer of protection from attack.
- Secure remote access to corporate network—Provides both SSL- and IPSec-based methods of threat-protected VPN connectivity to remote sites, business partners, and mobile workers.
- Business resiliency—Prevents disruption of mission-critical applications and services due to security breaches by implementing world-class firewall, VPN, and networking technologies.

ARCHITECTURE

The Cisco ASA 5500 Series Firewall Edition is the focal point of a complete solution for secure network access. Tight integration with Cisco management and monitoring systems enables organizations to deploy and maintain a security solution that protects mission-critical applications and information assets (Figure 1).

Primary Components

Cisco ASA 5500 Series Firewall Edition

Provides a wide range of security and networking services at locations across the enterprise.

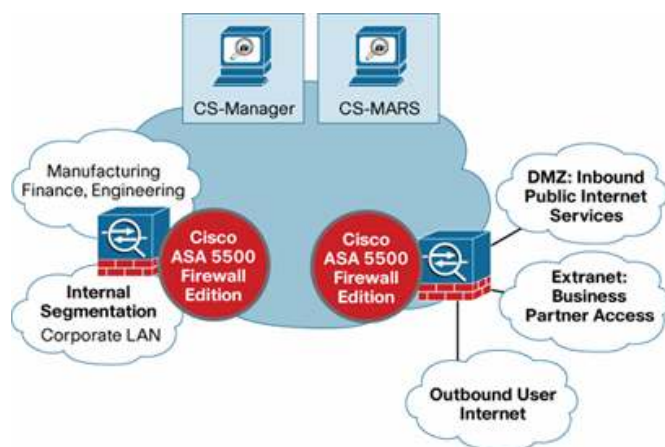
Management

Cisco Security Manager provides an enterprise-grade management infrastructure for large-scale deployments of Cisco security technologies.

Monitoring

Cisco Security Monitoring, Analysis, and Response System (Cisco Security MARS) provides real-time monitoring and incident response capabilities, enabling businesses to get the most value from the security and networking services of the Cisco ASA 5500 Series Firewall Edition.

Figure 1. Solution Architecture



COMPLEMENTARY SOLUTIONS

The Cisco® ASA 5500 Series Adaptive Security Appliance is a modular platform that provides the next generation of security and VPN services for small and medium-sized business and enterprise applications. The comprehensive portfolio of services within the Cisco ASA 5500 Series enables customization for location-specific needs through its four tailored package product editions: the Firewall, VPN, IPS, and Anti-X Editions.

These packages enable superior protection by providing the right services for the right location. At the same time, they enable standardization on the Cisco ASA 5500 Series platform to reduce costs in management, training, and sparing. Finally, each Edition simplifies design and deployment by providing pre-packaged location-specific security solutions.

Figure 2. Complementary Solutions



CISCO SERVICES

Cisco and its partners offer world-class service and support tailored for your business. Cisco has adopted a lifecycle approach to services that addresses the necessary set of requirements for deploying and operating Cisco ASA 5500 Series security appliances that improves your network's business value and return on investment. For more information on Cisco security services, visit <http://www.cisco.com/go/services/security>.

RECOMMENDED SOLUTIONS

To place an order, visit the [Cisco Ordering Home Page](#) or refer to Table 1.

Table 1. Ordering Information

Description	Performance	Part Number
Cisco ASA 5505 10 User Firewall Edition Bundle Includes: 10 users, 8-port Fast Ethernet switch with 2 Power over Ethernet ports, 10 IPSec VPN peers, 2 SSL VPN peers, Triple Data Encryption Standard/Advanced Encryption Standard (3DES/AES) license	• 150 Mbps Firewall • 100 Mbps IPSec VPN	ASA5505-BUN-K9
Cisco ASA 5505 10 User Firewall Edition Bundle Includes: 10 users, 8-port Fast Ethernet switch with 2 Power over Ethernet ports, 10 IPSec VPN peers, 2 SSL VPN peers, Data Encryption Standard (DES) license	• 150 Mbps Firewall • 100 Mbps IPSec VPN	ASA5505-K8
Cisco ASA 5505 50 User Firewall Edition Bundle Includes: 50 users, 8-port Fast Ethernet switch with 2 Power over Ethernet ports, 10 IPSec VPN peers, 2 SSL VPN peers, 3DES/AES license	• 150 Mbps Firewall • 100 Mbps IPSec VPN	ASA5505-50-BUN-K9
Cisco ASA 5505 Unlimited User Firewall Edition Bundle Includes: Unlimited users, 8-port Fast Ethernet switch with 2 Power over Ethernet ports, 10 IPSec VPN peers, 2 SSL VPN peers, 3DES/AES license	• 150 Mbps Firewall • 100 Mbps IPSec VPN	ASA5505-UL-BUN-K9

Cisco ASA 5505 Security Plus Firewall Edition Bundle Includes: Unlimited users, 8-port Fast Ethernet switch with 2 Power over Ethernet ports, 25 IPSec VPN peers, 2 SSL VPN peers, DMZ support, Stateless Active/Standby high availability, Dual ISP support, 3DES/AES license	• 150 Mbps Firewall • 100 Mbps IPSec VPN	ASA5505-SEC-BUN-K9
Cisco ASA 5510 Firewall Edition Bundle Includes: 3 Fast Ethernet interfaces, 250 IPSec VPN peers, 2 SSL VPN peers, 3DES/AES license	• 300 Mbps Firewall • 170 Mbps IPSec VPN	ASA5510-BUN-K9
Cisco ASA 5510 Firewall Edition Bundle Includes: 3 Fast Ethernet interfaces, 250 IPSec VPN peers, 2 SSL VPN peers, DES license	• 300 Mbps Firewall • 170 Mbps IPSec VPN	ASA5510-K8
Cisco ASA 5510 Security Plus Firewall Edition Bundle Includes: 5 Fast Ethernet interfaces, 250 IPSec VPN peers, 2 SSL VPN peers, Active/Active and Active/Standby high availability, 3DES/AES license	• 300 Mbps Firewall • 170 Mbps IPSec VPN	ASA5510-SEC-BUN-K9
Cisco ASA 5520 Firewall Edition Bundle Includes: 4 Gigabit Ethernet interfaces + 1 Fast Ethernet interface, 750 IPSec VPN peers, 2 SSL VPN peers, Active/Active and Active/Standby high availability, 3DES/AES license	• 450 Mbps Firewall • 225 Mbps IPSec VPN	ASA5520-BUN-K9
Cisco ASA 5520 Firewall Edition Bundle Includes: 4 Gigabit Ethernet interfaces + 1 Fast Ethernet interface, 750 IPSec VPN peers, 2 SSL VPN peers, Active/Active and Active/Standby high availability, DES license	• 450 Mbps Firewall • 225 Mbps IPSec VPN	ASA5520-K8
Cisco ASA 5540 Firewall Edition Bundle Includes: 4 Gigabit Ethernet interfaces + 1 Fast Ethernet interface, 5000 IPSec VPN peers, 2 SSL VPN peers, 3DES/AES license	• 650 Mbps Firewall • 325 Mbps IPSec VPN	ASA5540-BUN-K9
Cisco ASA 5540 Firewall Edition Bundle Includes: 4 Gigabit Ethernet interfaces + 1 Fast Ethernet interface, 5000 IPSec VPN peers, 2 SSL VPN peers, DES license	• 650 Mbps Firewall • 325 Mbps IPSec VPN	ASA5540-K8
Cisco ASA 5550 Firewall Edition Bundle Includes: 8 Gigabit Ethernet interfaces + 1 Fast Ethernet interface, 4 Gigabit SFP interfaces, 5000 IPSec VPN peers, 2 SSL VPN peers, 3DES/AES license	• 1.2 Gbps Firewall • 425 Mbps IPSec VPN	ASA5550-BUN-K9
Cisco ASA 5550 Firewall Edition Bundle Includes: 8 Gigabit Ethernet interfaces + 1 Fast Ethernet interface, 4 Gigabit SFP interfaces, 5000 IPSec VPN peers, 2 SSL VPN peers, DES license	• 1.2 Gbps Firewall • 425 Mbps IPSec VPN	ASA5550-K8

For more information, please visit the following links:

Cisco ASA 5500 Series: <http://www.cisco.com/go/asa>

Cisco Adaptive Security Device Manager: <http://www.cisco.com/go/asdm>

Cisco Product Certifications: <http://www.cisco.com/go/securitycert>

Cisco Technical Support Services: http://www.cisco.com/en/US/products/svcs/ps3034/serv_category_home.html

Cisco Advanced Services: <http://www.cisco.com/go/services>

Cisco Services for IPS: http://www.cisco.com/en/US/products/ps6076/serv_home.html

Note: The Cisco ASA 5500 Series CSC-SSM includes embedded software and support from Trend Micro. Point of sale and registration data will be provided to both Cisco and Trend Micro.



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