Cisco Wireless LAN Adaptive Wireless Intrusion Prevention Systems Planning and Design Service

Help designing and deploying the wireless threat prevention capabilities of the Cisco Adaptive Wireless Intrusion Prevention Systems (IPS)

Challenge

Businesses are increasing the use of mobile devices and wireless networks to drive productivity and provide timely access to applications and services. This increased access requires a wireless threat detection, mitigation, and prevention system designed to protect the network against an ever growing number of threats and attacks.

Without proper wireless threat prevention, customer networks are vulnerable to:

- Rogue wireless access points
- A wide variety of Wi-Fi-enabled clients that can create backdoor access to the company’s network
- Hacker access points that try to lure users into connecting to them for purposes of network profiling or stealing proprietary information
- Denial of service that disrupts or disables your wireless network
- Over-the-air network reconnaissance, eavesdropping, and traffic cracking

The radio frequency (RF) spectrum within the company perimeter is a business asset that must be managed and secured for the benefit of the business. Hackers, once motivated only by fame and notoriety, are now more likely to be part of criminal enterprises that are constantly developing new methods of attack to acquire financial and confidential information. Maintaining constant awareness of your RF environment is critical to minimizing legal liability, protecting brand reputation, and assuring regulatory compliance.

Solution

Cisco and our Wireless LAN Specialized Partners offer services to help you successfully deploy enterprise-class wireless security. These services include the installation and configuration of crucial components such as the Mobility Services Engine (MSE), helping you to take full advantage of the scalability, management, and investment protection features that are built into Adaptive Wireless IPS and Mobility Solution products. In addition to planning, design, and implementation, we also offer services based on proven methodologies for operating and optimizing the performance of a Cisco® Adaptive Wireless IPS solution, along with its associated technologies and strategies.
Cisco Wireless LAN Adaptive Wireless IPS Planning and Design Service

For a Cisco Adaptive Wireless IPS solution to detect wireless network anomalies and identify unauthorized access and RF attacks, it must be properly designed for your environment. Because wireless LANs deployed for secure data access might not provide adequate coverage or performance for the highest levels of detection, it is necessary to establish appropriate RF coverage and to calibrate and implement the system correctly so as to achieve the desired levels of sensitivity.

Through the Cisco Wireless LAN Adaptive Wireless IPS Planning and Design Service, Cisco and our Wireless LAN Specialized Partners can work with you to assess your physical environment to determine your requirements and integrate the solution into your existing wireless LAN and wired security architecture.

We then develop a design to meet your business and technical needs and establish the steps for deploying it. Our teams of engineers are wireless LAN security subject matter experts who offer expertise and guidance in designing and deploying wireless security solutions. They have an intimate understanding of Cisco wireless LAN products and technologies, including the Cisco Mobility Services Engine.

The Cisco Wireless LAN Adaptive Wireless IPS Planning and Design Service includes five activities that Cisco has identified as essential for successful deployment of a comprehensive wireless security solution:

- Wireless LAN architecture design for wireless IPS
- Wireless LAN network assessment
- Wireless LAN RF assessment
- Adaptive wireless IPS configuration and implementation
- Wireless LAN post deployment validation

Wireless LAN Architecture Design for Wireless IPS

This service uses a comprehensive set of methodologies that help you manage your technical and applications requirements while providing various architectural options. The first steps in deploying a secure wireless LAN Adaptive Wireless IPS Mobility solution are translating business application requirements into solution requirements and aligning those solution requirements with Cisco leading deployment practices. Experts provide you with a design document with recommendations for architecture and deployment.

Wireless LAN Network Assessment

The Cisco Wireless LAN Network Assessment and Cisco Wireless LAN Performance Analysis services provide a comprehensive approach to assessing the architecture, performance, and security of your wireless network. These services are delivered by experts who draw on extensive experience in wireless network architecture design and RF engineering to help you prepare for business-critical mobility that relies on a high-performance wireless network. Supported by best-in-class tools, methodologies, and superior access to Cisco product engineers, these experts analyze how your network compares with Cisco leading practices and provide actionable recommendations to help improve wireless LAN network throughput, reliability, and security.

Wireless LAN RF Assessment

This service gauges the ability of your environment to allow secure wireless LAN access in the desired coverage area. It helps you assess your current state and future needs so you can make informed decisions about how to protect your wireless network architecture. Assessments, which include a site survey, enable Cisco to make recommendations for placement of data and monitoring access points, establishing their frequencies, antenna selections, and power and cabling specifications. Resulting recommendations help you achieve the greatest levels of detection and mitigate risk by providing a foundation for addressing coverage challenges and interference during later design development.
Adaptive Wireless IPS Configuration and Implementation
This service provides onsite support for configuring your Cisco Wireless Control System (WCS), wireless controllers, and Mobility Services Engine to help ensure the proper deployment and installation of software releases and updates. Implementation of the Adaptive Wireless IPS software includes configuring and enabling the monitor mode access points as well as developing a profile for adaptive intrusion prevention and optimizing policy rules to improve performance based on environmental characteristics.

Wireless LAN Post Deployment Validation
This service verifies that the system is operating in accordance with the design by surveying the RF environment for detection capabilities, coverage, interference, and general performance after the Adaptive Wireless IPS monitor mode access points are installed and the software is configured. In providing onsite and remote wireless LAN post deployment validation, our team of wireless LAN specialists assesses coverage, measures interference, and evaluates overall wireless LAN network capacity to help ensure optimal performance.

Benefits
The Cisco wireless LAN Adaptive Wireless IPS Planning and Design Service helps you to achieve the highest levels of protection of your wired and wireless network against wireless threats. In addition, this service helps you to:

- Reduce risk and anticipate deployment obstacles by establishing deployment project parameters, identifying primary sponsors, and developing a best practice wireless LAN project plan
- Help ensure smooth integration into your production environment as wireless LAN specialists work with your organization’s staff to install, configure, test, and tune your security solution
- Protect against unauthorized wireless access to confidential corporate information by addressing compliance and regulatory requirements with Cisco best practices and recommended configurations
- Create a secure open platform for the development of mobility applications that increase productivity, responsiveness, and collaboration

Why Cisco Services
Today, the network is a strategic platform in a world that demands better integration between people, information, and ideas. The network works better when services, together with products, create solutions aligned with business needs and opportunities.

The unique Cisco Lifecycle approach to services defines the requisite activities at each phase of the network lifecycle to help ensure service excellence. With a collaborative delivery methodology that joins the forces of Cisco, our skilled network of partners, and our customers, we achieve the best results.
Cisco and Partner Expertise: Better Together

Cisco engineers and Cisco Certified Partners are among the industry’s elite in providing integrated, collaborative, adaptive solutions. Jointly with our partners, we form the largest collection of industry certified experts in the world supporting the most complex networks to meet and exceed the needs of our customers. Cisco teams can collaborate with partners to foster consistency and alignment with Cisco methodologies, tools, and leading practices.

For More Information

For more information about Cisco Wireless LAN Services, visit www.cisco.com/go/wirelesslanservices or contact your local account representative.