

Cisco SP Wi-Fi Solution Support, Optimize, Assurance, and Operate Services

Cisco® Service Provider (SP) Wi-Fi is a single, unified architecture for all types of Wi-Fi services and business models. Cisco SP Wi-Fi increases revenue opportunities and reduces total cost of ownership.



Cisco SP Wi-Fi Services Overview

Carrier-grade Wi-Fi has become a central element in strategies for ubiquitous capacity and coverage across networks for both fixed and mobile operators. Cisco Service Provider (SP) Wi-Fi is an end-to-end 802.11n architecture, utilizing Cisco products and services designed to help you offer carrier-grade Wi-Fi services to complement existing wired and wireless broadband networks. Cisco Services increase efficiency and reduces the costs and risks associated with new technology adoption and scaling of your wireless network capabilities.

Cisco SP Wi-Fi Solution Support Service

The Cisco SP Wi-Fi Solution Support Service streamlines the operation of the Wi-Fi architecture. Our specialists quickly isolate and remediate unplanned service disruptions affecting any component within the complete SP Wi-Fi architecture. Tracking and understanding the root cause of disruptive incidents provides valuable information when preparing for design changes and scaling associated with your mobile subscriber growth (see Table 1).

Table 1. Cisco SP Wi-Fi Solution Support Service Activities, Deliverables, and Benefits

Activities and Deliverables	Benefits: Helps You To...
Implementation Plan Review: Review the production Wi-Fi environment's proposed changes, implementation procedures, and contingency and rollback plans.	Reduce the risk of service disruptions when changes are being planned for the production Wi-Fi environment.
Incident Escalation Support: Facilitate service restoration for the production Wi-Fi environment's managed components.	Gain insight into service requests.
Quarterly Business Review: Review recent deliverables and activities while planning for the upcoming quarter.	Better understand the background of recent changes to the production Wi-Fi environment, and help set the direction for operational and technology maturity improvements.
Root Cause Analysis: Analyze details of service incidents in the production Wi-Fi environment.	More effectively address sources of service disruption by gaining visibility into root causes.
Solution Project Management: Manage programs and projects for incremental changes to the production environment.	Enhance the integration of Cisco support into your day-to-day workflow, increasing the value of this support.
Solution Supplier Management: Provides assistance with third-party products (approved by Cisco) operating in the production Wi-Fi environment.	Ensure the architecture operates as it was designed.

Cisco SP Wi-Fi Optimization Service

The Cisco SP Wi-Fi Optimization Service delivers Cisco expertise through analysis and recommendations designed to transform your SP Wi-Fi architecture into a high-performing, efficient environment.

We help you create a strategy for managing all the critical components of the SP Wi-Fi architecture using a suite of Cisco hosted network management applications, including Cisco Prime™ Network Control System (NCS), Cisco Access Registrar, and Cisco Network Registrar. This enables you to examine essential key performance indicators (KPIs) of the Cisco Intelligent Service Gateways (ISGs) and Cisco Wireless LAN Controllers (WLCs), which is critical in establishing a scalable model for deploying, activating, and provisioning thousands of Cisco wireless access points.

Optimize the availability and performance of your wireless architecture with our Cisco certified experts as they validate your planned design changes, work with you to develop a strategy for managing software releases and changes, and get the most from your Cisco wireless access points using CleanAir™ technology.

The Cisco SP Wi-Fi Optimization Service includes:

- Network support activities that help you fine-tune the design and performance of your Wi-Fi network
- Network health activities that help you improve the management of your network
- Continuous learning activities that help your IT staff become more self-sufficient

Table 2 summarizes the activities, deliverables and benefits of the network support activities provided by this service.

Table 2. Cisco SP Wi-Fi Optimization Service: Network Support Activities, Deliverables, and Benefits

Activities and Deliverables	Benefits: Helps You To...
Design Collaboration: Provide design support for incremental changes to your Wi-Fi design and architecture.	Improve network stability and make the Wi-Fi network more consistent and predictable, tuning it in accordance with your design goals.
Detailed Design Report: Review your Wi-Fi design priorities and goals, and requirements for modifying your existing architecture or design.	Validate that proposed changes meet design goals and objectives.
Inventory Management Support: Share observations regarding device configuration attributes, software versions, and hardware inventory.	Increase visibility of the Wi-Fi network's inventory and configurations.
Performance Analysis: Provide in-depth troubleshooting for a specific portion of the Wi-Fi network, examining the wireless network's signal coverage, overall interference level, utilization, RF signal tracking accuracy, and efficiency.	Quickly identify, classify, and troubleshoot sources of RF interference that may affect the performance of Wi-Fi networks.
Security Alert: Analyze Cisco Security Advisories for issues with potential to affect your Wi-Fi network and offer remediation advice specific to your environment.	Improve network resiliency and security with timely security advisories.
Software Infrastructure Analysis Report: Analyze your software release diversity and conformance to your software release standards and notify you of release milestones.	Reduce network complexity by receiving the information you need to identify the fewest possible Cisco IOS® Software releases for your network equipment while fulfilling various topology roles for your infrastructure.
Software Management Strategy Review: Analyze your current practices related to establishing and managing software release standards, software migration triggers, and the lifecycle of software in your network.	Understand how to improve your software management practices in alignment with your objectives.
Software Recommendation Report: Collaboratively identify the right software version to meet your hardware platform and functionality requirements.	Improve network performance, reliability, and functionality by receiving the information you need to deploy the right software releases for your network.
Wireless LAN Network Assessment: Analyze the Wi-Fi environment's architecture, operational status, redundancy, and security.	Improve the reliability and resiliency of your wireless network by identifying architectural gaps and deviations from best practices.

Table 3 summarizes the network health activities and benefits provided by the Cisco SP Wi-Fi Optimization Service. These activities and deliverables improve the management of the end-to-end architecture with Cisco Wi-Fi specialists as they analyze the health of the network using software configuration best practices and syslog messages.

Table 3. Cisco SP Wi-Fi Optimization Service Network Health Activities, Deliverables, and Benefits

Activities and Deliverables	Benefits: Helps You To...
Configuration Best Practices Report: Analyze device configurations for technology and software features, protocols, and network management.	Improve visibility into how well your network conforms to your software release standards. Identify potential security and interface configuration risks. Improve protocol configurations and consistency and device manageability.
Syslog Analysis Report: Analyze collected syslog messages for event correlation, device health, and baseline metrics.	Improve network stability by analyzing system trends to identify repeating, unresolved issues.

Table 4 summarizes the continuous learning activities provided by the Cisco SP Wi-Fi Optimization Service. These activities and deliverables lower operational costs and reduce risks as your staff becomes more self-sufficient through knowledge transfer and learning opportunities.

Table 4. Cisco SP Wi-Fi Optimization Service Continuous Learning Activities, Deliverables, and Benefits

Activities and Deliverables	Benefits: Helps You To...
Formal Training: Hands-on, multiday training session, led by Cisco at your location, focusing on selected topics related to the deployment and integration of Cisco Wi-Fi products and technologies.	Increase operational efficiency and maximize the return on Cisco network investment with continuous learning.
Knowledge Transfer and Mentoring: Online, distance-learning opportunities across multiple sites, for situations that do not require more formal learning.	Increase the self-sufficiency of your support team by sharing knowledge, best practices, and intellectual property, and providing opportunities for continuous learning.
Technical Knowledge Library: Unlimited access to knowledge content on Cisco.com for Cisco products and technologies. Includes proprietary Cisco documentation, e-learning, and self-study resources.	Remain current on the latest Cisco Wi-Fi developments with product and technology updates.

Cisco SP Wi-Fi Assurance Service

Extend the measurement and analytical capabilities of your Cisco SP Wi-Fi architecture with the Cisco SP Wi-Fi Assurance Service. Cisco's Network Operations Center real-time monitoring platform provides device-level diagnostics, real-time tools with network-level visibility, and predictive analytics to detect service problems before they impact performance and service delivery.

The real-time monitoring platform continually monitors a variety of key performance indicators (KPIs):

- Syslog messages and Simple Networking Management Protocol (SNMP) traps to identify top-event and "top-talker" data
- Device-level metrics such as processor, memory, interface, throughput, busiest access points, number of connected clients, thresholds, and Cisco CleanAir™ reports
- Network-level examinations of routing protocols
- Service-level analysis for virtualization and application profiling

The real-time monitoring platform's rich analytics utilize fault, capacity, availability, and performance information to help ensure reliable operations (see Table 5). These operational objectives can be tied to service-level agreements such as network availability, restoration time, and response time, depending upon your business objectives.

Table 5. Cisco SP Wi-Fi Assurance Service Activities, Deliverables, and Benefits

Activities and Deliverables	Benefits: Helps You To...
Network Fault Management: Provide real-time correlation, impact analysis, and management of network events.	Enhance your ability to detect service disruptions and increase your speed of service restoration.
Network Capacity Management: Monitor capacity-related KPIs.	Analyze resource limitations using forecasted traffic patterns and growth to identify if network capacity may be approaching levels likely to disrupt service.
Network Availability Management: Compare established availability targets to production information.	Identify trends to minimize problem recurrence.
Network Performance Management: Monitor and measure KPIs at a device, network, data center, and service level.	Identify conditions that could impact service or degrade performance, so that you can take necessary action to avoid these issues.
Periodic Reports: Identify the impact of corrective actions by examining fault resolution, noting the corrective actions taken, and trending health.	Maintain visibility into network health and resolution activities.

Cisco SP Wi-Fi Operate Service

Maximize your SP Wi-Fi investment, reduce the time it takes to resolve unplanned service disruptions, and achieve overall operational efficiency with the personalized Cisco SP Wi-Fi Operate Service. The Cisco Operate team will monitor the managed devices in your SP Wi-Fi environment. They will help to ensure that your new Cisco wireless access points and Cisco Wireless LAN Controllers are properly activated and provisioned. The Cisco team will follow service-disrupting incidents through to resolution, and identify operational trends to continually improve performance (see Table 6).

Extending the value further, the Cisco SP Wi-Fi Operate Service manages the mobile subscriber policy enforcement system, streamlining procedures for onboarding, authenticating, and troubleshooting your mobile subscriber's user experience. Cisco wireless access points with CleanAir technology enable the Cisco team to account for all aspects of radio frequency (RF) coverage, capacity, throughput, and interference, resulting in higher mobile subscriber customer satisfaction and retention.

Table 6. Cisco SP Wi-Fi Operate Service Activities, Deliverables, and Benefits

Activities and Deliverables	Benefits: Helps You To...
Activation and Provisioning: Activates Access Points, Cisco Wireless LAN Controllers (WLC), Cisco Intelligent Service Gateways (ISG), Cisco Access Registrar, Cisco Network Registrar, and other essential Wi-Fi network elements onto the production environment, provisioning them for use, and validating each device is operational and ready to deliver service.	Methodically and efficiently deploy devices to increase the number of subscribers and/or improve services.
Incident Management: Monitors the production Wi-Fi environment's managed components around the clock. Logs incident information and observations, correlates data, restores service, and notifies you as necessary, keeping you informed.	Increase the Wi-Fi infrastructure's availability and performance.
Proactive Change Management: Reviews, proposes, and coordinates with your change management team to apply corrective actions to the production Wi-Fi environment's managed devices to avoid service disruptions.	Reduces risk by proactively addressing potential issues with software versions and configurations, hardware attributes, RF tuning, and/or procedures.
Problem Management: Analyzes service incident details to identify pervasive trends, then collaborates with your change management team to discuss and address them.	Improve network stability by analyzing system trends to identify repeating, unresolved issues.

Why Cisco SP Wi-Fi Services?

Cisco is a worldwide technology leader with extensive experience working with major service providers around the world. Cisco's comprehensive portfolio of services and proven methodologies is well tested and easily deployable with little integration effort, providing better visibility into the network while simplifying operations.

Cisco provides access to experienced and well-trained Cisco experts, certified on service provider networks, technologies, and network management needed to support, assist, and resolve network issues. Backed by service-level agreements, Cisco works together with you to lower risk.

Availability

The Cisco SP Wi-Fi Solution Support, Optimize, Assurance, and Operate Services are available globally. Service delivery details may vary by region.

For More Information

For more information about the Cisco SP Wi-Fi Services contact your local Cisco account manager.



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