



Cisco is accelerating the shift to the mobile workplace with the Borderless Network Architecture to deliver the Borderless Mobility experience enabling the Partner community to be the drivers of this transition. Partners are able to plan migration, provide cross-selling/up-selling opportunities as well as include additional service options all with Cisco's Borderless Mobility experience.

Clear the Air

In today's enterprises, the wireless network is more than just a convenience; it's mission-critical. Wireless is a shared spectrum and all types of applications and devices are competing for bandwidth in enterprise environments. More than ever, your customers need to have visibility into their wireless spectrum to manage radio frequency (RF) interference and prevent unexpected downtime.

The adoption of ratified 802.11n wireless connectivity has provided a powerful tool for increasing the mobility and productivity of your customers and has unlocked a new generation of wireless-enabled applications. However, as wireless applications become more pervasive, the demand for greater network reliability with additional bandwidth is increasing.

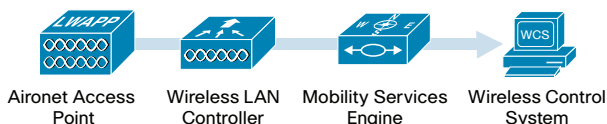
In order to further optimize your customers' 802.11n networks, Cisco has developed CleanAir technology. CleanAir is a system wide capability of the Cisco Unified Wireless Network that uses chipset intelligence to create a self-healing and self-optimizing wireless network. Building on the capacity benefits of 802.11n, CleanAir technology delivers the reliability required to support mission-critical applications in your customers' wireless networks. CleanAir supports optimized performance by mitigating radio frequency interference. CleanAir has the unique ability to detect RF interference that other systems cannot see, identify the source, locate it on a

map, and then make automatic adjustments to optimize wireless coverage. Now IT managers can enforce policies and quickly take action to improve network performance based on intelligent information.

Product Components of Cisco CleanAir Technology

CleanAir technology is enabled by the advanced chipset design of the Cisco Aironet 3500 Series Access Points, Cisco wireless controllers, the Cisco Wireless Control System (WCS), and the Cisco 3300 Mobility Services Engine (Figure 1).

Figure 1. Components of CleanAir Technology and the Cisco Unified Wireless Network



Five Business Benefits That CleanAir Brings to Your Customers' Wireless Networks

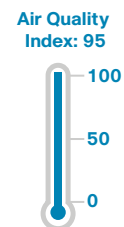
Benefit One: Self-Healing and Self-Optimizing Wireless

With CleanAir technology, if an interference source is strong enough to impact Wi-Fi performance, the system will change channels within 30 seconds to avoid the interference and resume client activity on another channel outside of the affected area.

Benefit Two: Troubleshooting for Faster Interference Resolution and Less Downtime

CleanAir technology provides full visibility into the performance and security of the wireless network, with an easy-to-read Air Quality Index. The index identifies problem areas and locates them in the context of access point, floor, building, and campus (Figure 2).

Figure 2. An AirQuality Index Providing a Snapshot of Network Performance and the Impact of Interference



Benefit Three: Quick and Accurate Interference Detection Reducing False Positives

Even in very busy RF environments where hundreds of devices are operating simultaneously, CleanAir can classify over 20 different types of interference within 5 to 30 seconds.

Benefit Four: Remote Access for More Efficient Problem Resolution and Reduced Travel

For remote troubleshooting, CleanAir Connect mode provides an expert view of low-level spectrum plots from an individual access point's coverage area.

Benefit Five: Effective Policy Enforcement

With CleanAir technology network administrators now have the ability to track network performance, locate and see the impact of non-Wi-Fi devices and enforce policies that prevent known interference sources from taking down their networks or jeopardizing network security.



Identifying the Opportunity

The Customer Challenge

Users expect wireless performance to match that of their existing wired networks. The limited wireless spectrum is experiencing unprecedented growth in wireless devices impairing performance due to interference. IT lacks the expertise and the resources to effectively manage interference, often resulting in lost productivity and application disruption.

Only CleanAir can detect, classify, locate, and mitigate Wi-Fi and non Wi-Fi sources of interference. No other solution has visibility into everything wireless that impacts your network performance.

Trigger Questions:

- Can your network optimize performance of applications anytime, anywhere?
- Is the prevalence of mobile devices on the network causing bandwidth degradation?
- Are your high availability applications negatively impacted by RF interference?
- Is bandwidth optimization becoming mission critical to your business?
- Is the wireless network maximizing the benefits of 802.11n?

Use Cases for Vertical Markets

Education: Reduce trouble tickets for student and faculty wireless devices by quickly locating sources of RF interference that are impacting Wi-Fi connections.

Retail: Improve store associate productivity and maintain PCI compliance by cost-effectively and centrally managing the impact of wireless interference from nearby stores, customers, or other devices

Healthcare: Quickly detect Wi-Fi and non-Wi-Fi interference that is affecting medical devices, operations, voice or Wi-Fi tags to help prevent medical errors, improve patient care, and reduce costs.

Manufacturing: Maintain production deadlines by finding and mitigating unexpected and unwelcome RF interference that is impacting assembly lines, handheld devices, or Wi-Fi enabled operations equipment.

Cisco Wireless LAN Services

Increase your profitability, expand your deals, and increase your sales opportunity size by seamlessly integrating mobile services and take full advantage of the systemwide capabilities of the Cisco Unified Wireless Network with services from Cisco. Better utilize the self-healing, self-optimizing features built into the silicon-level intelligence of CleanAir technology and the increased performance of the 802.11n standard while simplifying the transition to these new technologies. To learn more about Cisco Wireless LAN Service offers, please visit <http://www.cisco.com/go/wirelesslanservices>.

Summary: The CleanAir Technology Difference

Many companies claim they have an integrated interference detection system, yet their products can't decipher between Wi-Fi and non-Wi-Fi interference. Spectrum intelligence products from other manufacturers may falsely interpret any network noise as interference and randomly switch channels, which jeopardizes network stability and may reduce overall network performance. With CleanAir technology, Cisco channel partners can accelerate the transition to 802.11n while providing customers the confidence to know they can deploy mission critical applications over the wireless network without impacting operational costs or requiring additional IT expertise.

How Do Partners Win?

Maximize your profitability and deliver greater value to your customers by using Cisco's award-winning partner programs, competitive offerings, services, and support:

- Build a repeatable sales practice and uncover new opportunities with Cisco Network Assessments.
- Utilize Cisco incentives like the Cisco Value Incentive Program (VIP) to increase your profitability.
- Evaluate new products and services with the Cisco Test Drive program (U.S. and Canada only).
- Take advantage of the new Limited Lifetime Hardware Warranty available for Cisco Aironet® 1140, 1250, 1260, and 3500 Series access point products. For full warranty terms please refer to the following link: http://www.cisco.com/en/US/products/prod_warranties_listing.html