MERU NETWORKS

High Capacity Data, Voice and Video Over Wireless

THE MERU NETWORKS ADVANTAGE

Meru Networks is the global leader in wireless infrastructure solutions that enable the All-Wireless Enterprise. Its industry-leading innovations deliver pervasive, wireless service fidelity for business-critical applications to major Fortune 500 enterprises, universities, healthcare organizations and local, state and federal government agencies. Meru's award-winning Air Traffic Control technology brings the benefits of the cellular world to the wireless LAN environment, and its WLAN System is the only solution on the market that delivers predictable bandwidth and over-the-air Quality of Service with the reliability, scalability, and security necessary to deliver converged voice and data services over a single WLAN infrastructure.

Meru Networks Background

- Founded in 2002
- Headquarters: Sunnyvale, CA
- Numerous customer deployments in Enterprise, Healthcare, Education, Retail, Manufacturing and Hospitality worldwide.

Value Proposition Statement

Meru® Networks offers the only Wi-Fi certified WLAN system that delivers a single wireless infrastructure for toll-quality voice and high-capacity data and video, all with superior total cost of ownership. Combining centralized security and management with system-wide air traffic coordination and control, the Meru WLAN System overcomes the critical challenges involved in implementing and managing a scalable WLAN infrastructure at enterprise headquarters, campuses, multi-tenant facilities and branch offices.

Meru Benefits

- Fast and simple deployment with no RF expertise required
- Unprecedented density and highest throughput for data, voice and video applications
- Scalable for the very largest enterprise, yet affordable enough for the smallest school or office
- Lowest cost of ownership with up to 30% fewer APs, cabling and installation costs, with no need for repeated and costly site surveys
- Toll-quality voice calls even when mixed with high density data with zero-handoff roaming
- Highest capacity, easiest to deploy 802.11n
- Simplest migration to 802.11n, with investment protection
- No proprietary clients or drivers to manage

Meru WLAN System

AP300 Access Point	RS4000 Radio Switch	AP200 Access Point	OAP180 Access Point	AP150 Access Point	Workgroup Bridge
• Single and Dual radio a/b/g/n Access Point enables simultaneous support of 802.11n, 802.11a and 802.11b/g clients • Ideal for high density and large scale deployments needing 802.11 n support	• Quad radio a/b/g Access Point • Built to support large scale and density for both data and voice clients • Mesh capable	• Single and Dual radio Access Points with 802.11a/b/g • Ideal for large scale data or voice deployments • Mesh capable	• Dual radios enable simultaneous support of 802.11a and 802.11b/g clients • Compact, rugged enclosure designed for use outdoors or in harsh indoor environments with exposure to extreme heat, cold and/or rain • Enables cost-effective, scalable deployment of secure outdoor wireless LANs using Mesh technology • Mesh capable	• Dual radio 802.11a/b/g low cost Access Point • Ideally suited for deployments with low density data and voice requirements • Mesh capable	• Dual radio support with dedicated 802.11a/b/g radios • Bridges an Ethernet LAN network to WLAN network • Enterprise-grade, multi-level security options allow multiple applications and user groups

MC5000 Controller	MC3000 Controller	MC1000 Controller	MC500 Controller	System Director™ OS	E(z)RF™ Application Suite

• Large Scale Enterprise
• Support for up to 1000 APs
	• Midsize Enterprise
	• Support for up to 150 APs
		• Branch Office
		• Support for up to 30 APs
			• Remote Office/Small Office
			• Support for up to 5 APs
				• Meru System Director Operating System is the embedded software foundation included with Meru controllers and all APs, and supports service specific for:
				  • Policy Enforcement Module (PEM)
				  • Voice Services Module (VSM)
					• The Meru Networks E(z)RF application includes a suite of intelligent applications for comprehensive management, visualization and coverage planning, and location, and includes the following applications:
					  • E(z)RF Network Manager
					  • E(z)RF Coverage Planner
					  • E(z)RF Location Manager

• Air Traffic Control™ delivers intelligent contention management for the highest possible wireless client density • Unique QoS traffic prioritization delivers toll quality voice over wireless LAN • Multi-layer security and standard WPA2 and 802.11i enable industry leading security policies that follow users as they roam					

Meru Hotsheet

MERU WLAN SYSTEM

The Meru WLAN System is a set of products and technology that centralizes management and security functions to deliver the most reliable and scalable enterprise wireless experience. The Meru WLAN System is unique because of its technologies—Meru Air Traffic Control™ and Virtual Cell™.

Meru ATC technology—a set of patented coordination and timing instructions—allows the system to tightly control the airspace. With ATC, Meru controllers and APs work together to determine the needs of the entire network rather than any single user or AP at a given time. This allows the Meru WLAN System to effectively manage key network activities, from giving priority to latency-sensitive packets, to moving clients to APs with lesser loads for maximum performance.

Meru Virtual Cell enables APs to operate on a single channel, creating a single contiguous zone of coverage versus individual islands of coverage as in legacy Wi-Fi systems. It allows the Meru WLAN System to manage activities such as client handoffs, load-balancing and failover. It eliminates complex RF site surveys, maximizes flexibility (i.e., moves/adds/changes do not require channel planning), and enables seamless mobility across APs.

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Frequently Asked Questions

What problems does Meru technology solve?

Meru overcomes the technical barriers to adopting wireless for true enterprise mobility. Meru provides the ability to scale the network, streamline deployment and management, improve reliability, and enable seamless mobility throughout the network.

Why is Meru better for voice?

The Meru WLAN System automatically detects different traffic types and applies appropriate over-the-air QoS policies to latency-sensitive voice packets for guaranteed high-priority delivery. In addition, the Meru Virtual Cell architecture creates a single zone of coverage in which handoffs become "invisible" and seamless to the user.

How many simultaneous calls can Meru support with a MOS of 4+ in the presence of data?

With support for 28 Session Initiation Protocol (SIP) calls per AP, and with 8 simultaneous data streams, the Meru WLAN System delivers unprecedented scale and performance when it comes to voice calls based on independant test results.

What if I do not want wireless voice today?

While Meru is uniquely suited to delivering voice over wireless, the technological advantage of the system is not exclusive to voice. The Meru WLAN System manages contention among wireless clients to maximize scalability, performance and reliability for all applications, especially those in high-density environments. Similarly, the Meru Virtual Cell architecture is just as important for data traffic, as it makes load balancing, handoffs and failover functionalities "invisible" to the user. In this way, one should consider Meru as a future-proof system rather than a future system.

How does Meru simplify deployment?

Unlike any other system, the Meru WLAN System can be deployed with minimal RF site surveys and without complex channel planning. Since the Meru Virtual Cell architecture allows all APs to operate on a single channel, users can simply deploy APs to cover any given area without worrying about channel interference across AP cells.

What is the key difference between Meru and its competitors?

Competing enterprise WLAN systems centralize management and security functions and the APs act as individual islands of connectivity whose individual behaviors often negatively impact its neighboring cells and the system as a whole, requiring constant RF tuning. Unlike these solutions, the Meru WLAN System is able to control the air to deliver QoS, scalability and reliability. With Meru Air Traffic Control, APs are coordinated to enable single-channel operations for seamless mobility and ease of deployment, delivering highest capacity data, voice and video.

NMS and Wireless Management Systems · RADIUS Server · Meru Controller · IP/PBX or Call Management Server · PSTN · VPN/Firewall · Internet · Wired SIP Phones · Wireless Intrusion Detection and Prevention Server · Wireless Intrusion Detection and Prevention Server · Meru AP · Wireless IPS Sensor · Meru AP · Wireless IPS Sensor · Meru AP · Wireless IPS Sensor · Wireless Devices