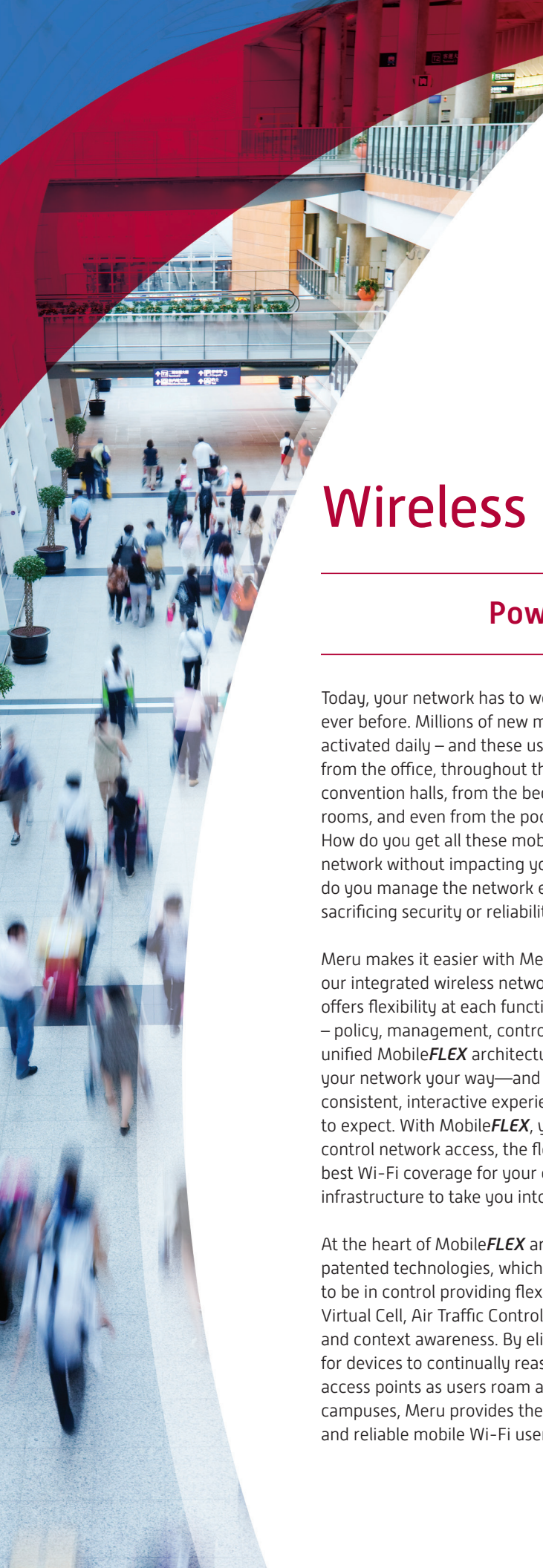


MERU NETWORKS Wireless LAN Product Portfolio

Powering the all-wireless mobile enterprise

Today, your network has to work harder than ever before. Millions of new mobile devices are activated daily – and these users expect access from the office, throughout the campus, in convention halls, from the bed side in hospital rooms, and even from the pool side at hotels. How do you get all these mobile devices on the network without impacting your IT staff? How do you manage the network effectively, without sacrificing security or reliability?

Meru makes it easier with Meru® Mobile***FLEX***, our integrated wireless network architecture that offers flexibility at each functional network layer – policy, management, control and access. Meru's unified Mobile***FLEX*** architecture lets you manage your network your way—and gives users the consistent, interactive experience they've come to expect. With Mobile***FLEX***, you have the tools to control network access, the flexibility to deploy the best Wi-Fi coverage for your environment, and the infrastructure to take you into the future.

At the heart of Mobile***FLEX*** are Meru's unique patented technologies, which allow the network to be in control providing flexibility through Virtual Cell, Air Traffic Control, channel layering and context awareness. By eliminating the need for devices to continually reassociate to new access points as users roam across floors or across campuses, Meru provides the most seamless and reliable mobile Wi-Fi user experience in the industry. Cost-effective and easy to deploy, a Meru wireless network intelligently self-optimizes to minimize the workload on your IT administrators even in networks with thousands of smartphones, tablets, laptops, and other mobile devices.

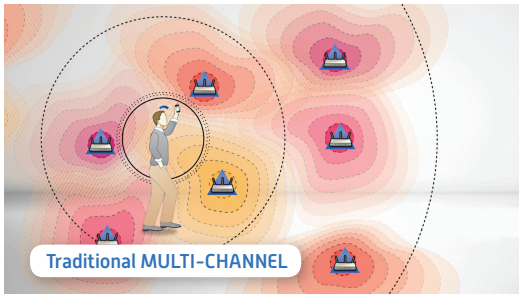
- ***Unique Access:*** Meru offers the ability to eliminate channel planning by placing the network in control, while also utilizing channel layering to prioritize application traffic.
- ***Flexible Control:*** Meru offers control plane options to best meet your requirements, from on-premise controllers to private cloud hosted instances.
- ***Fully Managed:*** Easily manage your network using our network management system E{z}RF® and optimize performance using Service Assurance Manager and Spectrum Analyzer. Protect and secure your network with enterprise-class encryption, policy enforcement, and intrusion protection, and audit your security with Meru's PCI compliance module.
- ***Best-in Class Policy:*** Simplify onboarding of devices and guest access with Identity Manager, which offers easy to configure role- and policy-based provisioning. Identity Manager supports both wireless and wired equipment, as well as both Meru and non-Meru infrastructure.

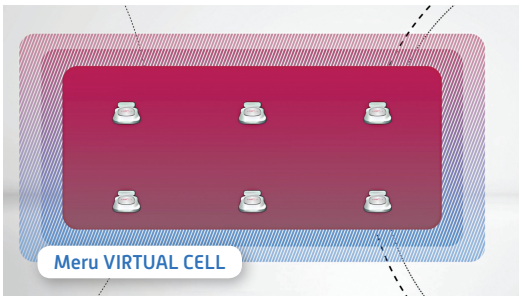
TECHNOLOGY

Putting the network in control

VIRTUAL CELL

Unlike traditional Wi-Fi networks, where client devices chaotically connect to dozens of different access points, Meru creates a single, seamless Virtual Cell, so that client devices see one virtualized access point instead of many—allowing for less disruptive roaming and transparent load balancing. This means that latency-sensitive applications, like voice and video, are able to operate with the industry's lowest latency. This virtualized WLAN architecture also effectively eliminates channel planning and manages co-channel interference.





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VIRTUAL CELL KEY BENEFITS

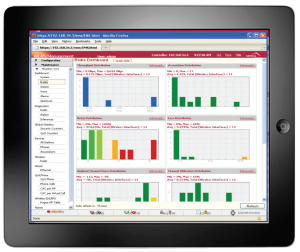
- Provides the industry's best Wi-Fi roaming experience for voice and video applications
- Eliminate time-consuming channel planning
- Mitigates and reduces co-channel interference – thus improving network performance
- Intelligently control connections instead of the device thus facilitating load balancing and optimal performance

AIR TRAFFIC CONTROL®

Sometimes, devices can be too chatty and overuse precious network bandwidth. Air Traffic Control governs all traffic on your wireless LAN, managing transmissions that client devices send and receive—not just the ones they receive, as found in most Wi-Fi solutions. Awareness of transmissions from both the client device and access point prevents system overload, helps ensure reliability, and maximizes over-the-air system performance.

AIRTIME FAIRNESS®

Airtime Fairness is the process by which a Meru system governs Wi-Fi network access so that each client gets the same amount of time, delivering consistent performance for your users. With conventional wireless networks, the speed of the network is determined by the slowest traffic. Meru allocates time equally among clients, allowing each client device to get optimal performance based on the speed of its connection.



System Director, the operating system that runs in every Meru controller and access point—puts the network in control to optimize the performance of your wireless network.

KEY ADVANTAGES

Reliable
Switch-like wireless performance

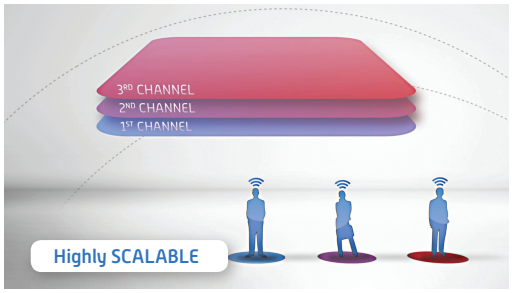
Scalable
Independent channel layering

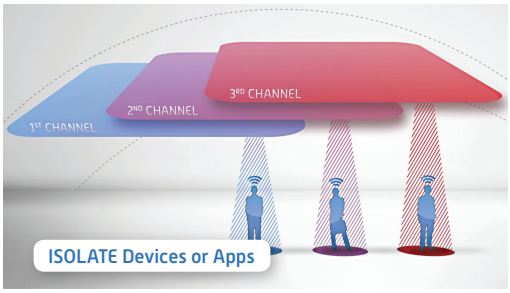
Predictable
Proactive management, security, and diagnostics

AIRTIME FAIRNESS KEY BENEFITS

- Blend legacy traffic and mobile traffic—without bottlenecks
- Make the network equally accessible for all devices —whether your users have computers, tablets, or smartphones
- Let bandwidth-hungry applications perform at peak capability—including data, voice, and video
- Give your users consistent performance—every time they access the network
- Deploy mixed 802.11 a/b/g/n/ac networks in high-density environments

CHANNEL LAYERING





With channel layering, Meru provides the flexibility to deploy multiple channel layers that operate independently in the same area. Similarly to stacked Ethernet switches, you can layer additional channels ("switches") in the same physical space to increase capacity. With the advent of Mobile***FLEX***, channel layering can be extended to associate specific channels with specific user types, such as employees versus guests, or with application types such as video versus voice, a concept we call context-aware layers.

KEY ADVANTAGES

Making the most of finite wireless resources to ensure the best user experience

APPLICATION-AWARE WIRELESS

System Director, the operating system that runs in every Meru controller and access point, analyzes traffic passing through the system, identifies different application flows, and then configures network resources and policies to optimize delivery for each application, providing a more reliable quality of service to every user.

FLEXIBLE NETWORK DEPLOYMENT

Meru controllers and access points can be integrated seamlessly into existing networks and installed virtually anywhere, with communication between controller and access points provided at layer 2 or layer 3, consistent with the design of the wired network. For branch office networks, data traffic can be securely tunneled back to a central controller or bridged directly from the remote location, whichever best suits the needs of the enterprise.

VIDEO AND VOICE SERVICES

Leverage Meru's video and voice service features to prioritize high-quality video and near latency-free voice over wireless, through DPI classification technology, which can detect and prioritize video and voice packets through the network using our channel layering capabilities. Support SIP over TCP and over UDP, as required by unified communications platforms, like Microsoft Lync, and automatically recognize and provision appropriate over-the-air QoS policies for SIP applications.

IDENTITY MANAGER

Simplify BYOD onboarding and guest management

IT organizations are struggling to keep up with a flood of new mobile devices requiring network access. Employees and visitors alike bring their devices to your environment, taking wireless connectivity for granted. Identity Manager simplifies secure guest access and BYOD for any client on any vendor's network. Optimized for ease-of-use, it dramatically reduces IT workload and delivers a trouble-free end-user experience. Identity Manager is a fully integrated software platform with two modules, which are accessed from a common user interface.

Guest Connect manages network access for visitors.
Smart Connect manages network access for employee- and company-owned devices.



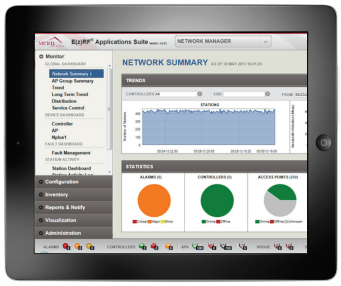
Identity Manager supports the iOS, Android, Microsoft Windows, Apple Mac OS X and Linux operating systems, among others. It is designed to work seamlessly with access points, controllers, and wired switches from any vendor. Role- and policy-based provisioning gives you control over who and what devices get access – as well as the level of access provided. For instance, you can delegate guest management to internal sponsors or allow guests to securely self-provision. Integration with popular payment gateways lets you accept credit cards for paid access. You can also empower employees with intuitive self-service capability. Enterprise-strength encryption and authentication protect the network and sensitive data, while comprehensive guest activity monitoring supports appropriate use. Identity Manager can be deployed on a VMware-ready virtual appliance or on a Meru Services Appliance. For hospitality customers, Identity Manager integrates with a broad range of property management systems, streamlining billing and administration for hotel guest Internet access.

WIRELESS NETWORK MANAGEMENT SUITE

The industry's only proactive diagnostics, operations, and management system

The Meru network management suite gives you control and single-console visibility over your Meru wireless LAN. This highly integrated, powerful wireless network management suite helps you proactively identify and prevent potential issues before they cause problems for your users. It gives you a unified view of applications, devices, and users, streamlining management with superior ease of use. By focusing on prediction rather than remediation, you gain the power to assure better performance and an excellent overall end-user experience. Each network management application can be deployed on a VMware-based virtual appliance or on a Meru Services Appliance.

E(z)RF® Network Manager is a comprehensive wireless management and troubleshooting system. It provides network visualization, configuration, wireless performance dashboards, and fault-management capabilities through a single interface.



E(z)RF Network Manager is an intelligent and comprehensive management system for Meru's 802.11 networks.

Service Assurance Manager* delivers end-to-end service assurance for the network and its applications. By creating virtual clients on existing access points, it tests and verifies network performance without the use of physical clients. You can quickly identify potential issues, predict problems before they occur, and take action before users experience any performance impact.

Spectrum Manager* detects and classifies sources of wireless interference to deliver optimal spectrum usage and high service levels. It lets you use the information captured from the RF environment to qualify all Wi-Fi channels and quickly remediate interference issues.



Spectrum Manager puts you in control of the wireless spectrum with tools for proactive spectrum analysis and management.

E(z)RF Network Manager shares a common administrator interface with Meru Service Assurance Manager and Spectrum Manager, making it easy to navigate between the three applications. It also integrates with SolarWinds Network Performance Monitor for unified wired and wireless management.

NETWORK MANAGEMENT SUITE KEY BENEFITS

- Identifies and prevents potential problems
- Aids in troubleshooting for rapid resolution
- Accelerates deployment of new applications
- Ensures excellent application performance
- Empowers you to provide a consistently excellent end-user experience
- Lowers costs by streamlining operations

WIRELESS SECURITY AND COMPLIANCE SUITE

Meru Networks delivers integrated security management for virtualized wireless LANs

By combining wireless intrusion prevention with comprehensive monitoring and verification, Meru's security and compliance applications enable you to keep your sensitive data private and secure.

PCI Compliance Manager* ensures your network is secure and your practices are consistent with PCI guidelines. It also gives administrators a global view from a single console and automatically logs all threats and actions.

Wireless Intrusion Prevention System* uncovers rogue access points, back doors, and attacks. It customizes the actions the system takes in response to threats and automatically generates reports.

Key Benefits:

- Continually audit your network security posture against best practices and policies
- Track separation and apply application-aware policies to each user
- Generate PCI compliance reports
- Protect data with authentication, authorization control, and encryption
- Leverage integration with E(z)RF Network Manager

Secure Connectivity	Authorization	Intrusion Prevention	User, Device, Application Security
• WPA2, WPA • 802.1X, PEAP, LEAP • VPN from remote offices	• RADIUS • MAC-based • Captive portal	• Rogue AP detection and mitigation • Wireless IPS/IDS	• Per-user and application-aware security policies • Policy-based control of devices • Guest lifecycle management • 802.1X provisioning for client devices • PCI compliance

* Requires E(z)RF Network Manager

WIRELESS CONTROLLERS

At the center of the virtualized Wireless LAN environment

These highly scalable controllers synchronize wireless access points to seamlessly optimize Wi-Fi traffic.

If your organization has adopted server virtualization, Meru WLAN controllers support your broader virtualization initiative, giving you freedom of choice. You can deploy the Meru 1550, 3200, and 4200 controllers as virtual appliances running on VMware and industry-standard hardware.

MC1550



- Small enterprises, branch offices
- 50 access points
- 2 x 10/100/1000BASE-T (RJ45)

MC4200



- Large enterprises, regional offices
- 500 access points
- 4 x 10/100/1000BASE-T (RJ45) or 2 x 10-GbE only SFP+ or 2 x 1-GbE/10-GbE SFP+

MC3200



- Mid-size enterprises
- 200 access points
- 4 x 10/100/1000BASE-T (RJ45)

MC6000



- Headquarters, large campuses
- 5,000 access points
- 6 x 10-GbE only SFP+ or 6 x 1-GbE/10-GbE SFP+ per blade
- Maximum 10 blades per chassis

REDUNDANCY MODULE

For resilience, our Redundancy module provides high availability at the system level through controller redundancy. With N+1 redundancy, one controller can act as a backup for other controllers, providing cost-effective continuity in case of a controller or back-end network failure.

KEY ADVANTAGES OF MERU CONTROLLERS

- Switch-like performance
- Ultra-high-density client support
- Multilayered security
- Simplified operation with centralized management
- Flexible deployment

SERVICES APPLIANCES

Meru Services Appliances provide the hardware platform for running the complete list of Meru software and management applications:

- Identity Manager
- E(z)RF Network Management
- Service Assurance Manager
- Spectrum Manager
- PCI Compliance Manager
- Wireless Intrusion Prevention System

SA200



- Designed for small enterprises
- Supports up to 10 controllers

SA2000



- Designed for medium to large enterprises
- Supports up to 250 controllers

WIRELESS ACCESS POINTS

Built for mobility

Meru wireless access points are designed to deliver the best wireless user experience in the industry. No channel planning. No power adjustment. Just install Meru Access Points, and they'll automatically receive configurations from the Meru Controller. Multiple operating modes give you the flexibility to design a wireless network suited to your specific needs.

AP110



- Virtual office access point
- Designed for home office
- Single-radio 802.11 b/g/n
- Client Ethernet port

AP332



- Dual-radio, three-stream 802.11 a/b/g/n
- Internal or external antennas
- High-performance wireless connectivity for high-density environments

AP1014i



- Designed for in-room access in hotels and dormitories
- Single-radio 802.11 b/g/n
- Four client Ethernet ports

AP433



- Three-radio, three-stream 802.11 a/b/g/n
- High-performance wireless connectivity
- Internal or external antennas
- Optional integrated spectrum analysis

AP1010 and AP1020





- Single- or dual-radio 802.11 a/b/g/n
- General purpose wireless connectivity
- Internal or external antennas

AP832



- Dual-radio, dual-mode, three stream 802.11 a/b/g/n/ac
- High density environments
- Internal or external antennas

AP320



- Dual-radio, dual-stream 802.11 a/b/g/n
- Internal or external antennas
- High-performance wireless connectivity

OAP433e



- Three-stream, three-radio 802.11 a/b/g/n
- Outdoor access point
- Rugged design for harsh environmental conditions

KEY ADVANTAGES OF MERU ACCESS POINTS

- Plug-and-play deployment with easy capacity expansion
- No complex channel planning required
- Multiple operating modes
- Seamless mobility
- Superior reliability and performance

SERVICES AND SUPPORT

Expertly delivered services and support increase the value of your technology investment

MAINTENANCE SERVICES

Meru offers a comprehensive range of MeruAssure support services to help you get the most out of your Meru investment. We can support your product after the sale with 24x7 technical support, advance hardware replacement, software bug fixes, and feature updates. For organizations that require always-on, always-working wireless delivery, MeruAssure Premium Services enable you to operate at peak performance with confidence. Three different premium service levels are offered, depending on your support needs: Enhanced, Business-critical, and Mission-critical.

MeruAssure

- Advance hardware replacement
- Prepaid hardware return shipping
- Technical support
- Software maintenance and feature releases
- Extended hardware warranty
- Web support portal and knowledge base

MeruAssure Premium Services

- Onsite system audits and network assessments
- Network assessment reports
- Onsite network performance tune-ups
- Service account management
- Direct tier-2 support engineer access (Business-critical and Mission-critical)
- A dedicated onsite support engineer (Mission-critical)

EDUCATION AND TRAINING

Meru offers education and training to both our customers and our partners. Instruction is available in recorded online courses, instructor-led online courses, and formal classroom sessions.

- Course content created and delivered by experts in Meru technology
- Easy online registration
- Choice of online or traditional classroom instruction

PROFESSIONAL SERVICES

From planning through ongoing operation, we can help you get a quick and satisfactory return on your investment. Available directly from Meru or from authorized partners, our solution-focused services are aimed at making your experience with Meru products as convenient and rewarding as possible.

- Our product experts can help you custom-design your network
- Take advantage of Meru configuration best practices
- Learn from the experience our service professionals have gained deploying business-critical wireless networks in all kinds of industries

Meru delivers an all-wireless network that fully supports the enterprise, delivering a consistent, interactive experience for all users. No matter what applications they are running. No matter how many other users are on the network.

or more information, visit www.merunetworks.com or email your questions to: meruinfo@merunetworks.com

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