# SECURITY & COMPLIANCE



## **SECURITY & COMPLIANCE**

The Meru solution features a wide range of security measures to protect your confidential data and aid in compliance. Extensive security features are built in to Meru products, with additional security functions available as add-on options.



## SECURITY AND COMPLIANCE OVERVIEW

Enterprise security is among the top priorities for IT departments today. To give you control over your security posture, a broad range of security features is built in to the Meru architecture. Meru provides secure connectivity with full support for WPA2 Enterprise and IEEE 802.1X. Your data is protected with enterprise-class authentication, authorization control, and encryption. A per-user firewall provides granular control over policy settings, with applications recognized through flow signatures as well as deep packet inspection. Meru supports industry standards TACACS+ and RADIUS for WLAN access control, enhancing security and scalability. The System Director operating system detects and mitigates rogue access points, and access points continuously scan for intruders. The AP110 Virtual Office Access Point includes integrated TLS-VPN encryption to ensure secure wireless and wired access for home office and small branch office environments.

For further assurance, Meru provides the option to add additional security and compliance functions:

- Meru Identity Manager is an identity-based software platform for provisioning and managing secure access for guests and for employee- and corporate-owned devices
- Meru Wireless Intrusion Prevention System (WIPS) Module is fully customizable and comes with a base set of signatures corresponding to common wireless attacks
- PCI Compliance Manager Module audits and verifies a network's security posture to ensure PCI compliance

## **Benefits**

- Puts you in control of your security posture
- Protects your network and confidential data
- Delivers secure access for guests, employees, and their mobile devices
- Prevents attacks on the WLAN
- Aids in achieving compliance

## Meru Security and Compliance Features

A broad range of built-in and optional measures secures your Meru wireless LAN, protects your confidential data, and aids in compliance.

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

# SECURITY & COMPLIANCE TECHNICAL SPECIFICATIONS

#### STANDARD SECURITY FEATURES

#### Authentication

Combination of 802.1X and open authentication 802.1X with EAP-Transport Layer Security (EAP-TLS), Tunneled TLS (EAP-TTLS), Protected EAP (PEAP), MS-CHAPv2, Smartcard/Certificate, Lightweight EAP (LEAP), EAP-FAST, and EAP-MD5, with mutual authentication and dynamic per-user, per-session unicast and broadcast keys Secure HTTPS with customizable captive portal utilizing RADIUS

#### **Encryption Support**

WPA2 Enterprise Certified 802.11n: Full support of 802.11i with dynamic AES keys

802.11/a/b/g: Static and dynamic 40-bit and 128-bit WEP keys, TKIP with MIC

#### Security Policy

Access control entries supported based on user identity, location, group membership, application, or SSID

Multiple ESSID/BSSID, each with its own security policy Granular management of multiple security policies

#### **Dual Radios**

Centralized, continuous rogue access point detection and suppression/permit for 802.11a/b/g/n

#### Firewall

Deep packet inspection for application-aware policies Per-user firewall

#### MERU COMPLIANCE

#### **Auditing and Analysis**

Automatic discovery and inventory of wireless assets and configurations Historical and on-demand reporting based on Payment Card Industry (PCI) Data Security Standard (DSS) v1.2

Comprehensive analysis of failures in PCI compliance

#### **Policy Verification**

Strong encryption of data transmitted over the air Firewall set to default deny posture Passwords changed from vendor defaults Discover and remediate security vulnerabilities Restrict access to cardholder data by business need to know Restrict physical access to cardholder data

## Tracking and Monitoring

All actions taken by users with root or administrative privileges Access to all audit trails Invalid login attempts Use of identification and authentication mechanisms Initialization of audit logs Creation and deletion of system level objects

## WIRELESS INTRUSION PREVENTION

## Configuration

Action taken upon detection of each threat fully customizable Support for custom signatures to deal with new threats as well as any threats unique to a given enterprise Intuitive web GUI or powerful CLI

# **Reporting**Dashboard shows trends based on threat severity, time, and location

Alerts when security issues are detected
Automatically generated reports of security posture and attempted malicious activity or potential threats on demand or according to regular schedule

#### **Included Signatures**

Adhoc Network
Antistumbler
Association Flood
Authentication Flood
Channel Hogger
De-authentication Flood
Disassociation Flood
EAP Handshake Failure
EAPOL Logoff Flood
EAPOL Start Flood
Fake AP

Fragmentation and Re-Assembly

Large Duration ID MAC Spoof Null Probe Response Overutilized AP PRGA Roque AP

Too Big SSID

Unregulated Channel

Ability to disable unused radios via software to lower power consumption

## ADDITIONAL HARDWARE AND SOFTWARE REQUIREMENTS FOR OPTIONAL MODULES

#### Identity Manager

Hardware Appliance: SA200 or SA2000 Services Appliance Virtual Appliance minimum specifications: 1 GB memory, 20 GB disk space, 2.0 GHz CPU, VMware ESX/ESXi 3.5

### **PCI Compliance Module**

SA2000 Services Appliance (also requires E(z)RF™ Network Manager software license)

#### Wireless Intrusion Prevention System (WIPS) Module

SA2000 Services Appliance (also requires E(z)RF™ Network Manager software license)

**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.



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