Mist
AI is in the AIR™

WLAN Solution Comparison

Explore the WLAN comparison table to see a side-by-side comparison of Mist, Cisco-Meraki, Aruba, and Cisco. This shows key features to consider when upgrading your network architecture, operations, and indoor location analytics.

ARCHITECTURE

	Mist	Cisco Meraki	Aruba (a Hewlett Packard Enterprise company)	Cisco
CORE DESIGN	• Modern cloud • Microservices • Real-time event processing • Service containerization	• 1st generation cloud • Hosted datacenter • Virtual controller architecture WATCH VIDEO	• Monolithic software • Controller architecture • Multiple OS (10+) • Multiple non-integrated products	• Monolithic software • Controller architecture • Multiple OS (10+) • Multiple non-integrated products
ARTIFICIAL INTELLIGENCE	AI foundation for IT built on: • Rich data/metrics • Data science • Machine learning • Natural language processing	No AI.	AI capabilities are isolated to security product (Introspect from acquisition of Niara).	No AI.
SCALABILITY	Elastic scale with microservices.	Virtual controllers hosted in co-located data centers.	Buy more controllers $$$.	Buy more controllers. $$$
PROGRAMMABILITY	100% accessible through APIs.	Limited set of APIs. WATCH VIDEO	Limited set of APIs. Only Aruba 8xxx Wired Switch has full API access.	Limited set of APIs.
RESILIENCY	Service containerization Microservices.	Redundant virtual Controllers.	Add more hardware $$$ (Controllers, Mobility Masters).	Add more hardware $$$ (Controllers).
AGILITY	Agile microservices architecture enables rapid updates.	1st generation cloud without microservices lacks agility and results in slow updates.	Monolithic software results in poor ability to update for new devices/apps/fixes and high risk to update.	Monolithic software results in poor ability to update for new devices/apps/fixes and high risk to update.

OPERATIONS

	Mist	Cisco Meraki	Aruba (a Hewlett Packard Enterprise company)	Cisco
SERVICE LEVEL MONITORING	●●●●● Realtime and inline service levels including: Throughput, Time to Connect, Roaming, Coverage, Capacity. User/Site/AP level monitoring. 100+ states monitored.	● Basic non-realtime event log monitoring (future). WATCH VIDEO	●● Basic non-realtime event log monitoring. Requires NetInsight appliances and subscription. $	● Basic non-realtime event log monitoring. Requires DNA appliances. $$$
VIRTUAL ASSISTANT TO ACCELERATE HELP DESK	●●●●● Natural language queries with integrated helpdesk based on Marvis AI.	○ Not available. WATCH VIDEO	○ Not available.	○ Not available.
DYNAMIC PACKET CAPTURE	●●●●● Proactively captures packets when an error event occurs in real-time. Eliminates need to reproduce issues.	○ Manual WATCH VIDEO	● Primarily manual. Limited auto capture on authentication failure events. Requires overlay network of Cape Networks wireless sensor hardware.	○ Manual
BASELINING AND ANOMALY DETECTION	●●●●● Proactive device/OS baselining and anomaly detection by AI system.	● Basic anomaly detection. WATCH VIDEO	●● Limited anomaly detection for a few states (DHCP, DNS, Assoc, Auth).	●● Limited anomaly detection. Requires DNA appliances. $$$
ROOT CAUSE IDENTIFICATION	●●●●● Automated event correlation using machine learning across wireless/wired/device domains.	● Only event logs. WATCH VIDEO	● Only available for the Aruba 8200/8400 Core Wired Switch.	● Limited RCA. Requires DNA appliances. $$$
INLINE MICROSEGMENTATION	●●●●● WxLAN classifies IoT/headless devices and segments by policy.	●● Stateful firewall in AP with device/app.	●●● Stateful firewall in Controller. IoT classification requires ClearPass $$$.	● Requires ISE.
PERSONAL WLAN (PRIVATE USER GROUPS)	●●●●● Self-serve Personal WLAN for segmentation. Unique PSK.	● Shared PSK or requires one SSID per group. WATCH VIDEO	●● Requires ClearPass $$$ for user/role segmentation. Shared PSK.	● Requires ISE $$$ for user/role segmentation. Shared PSK.
REAL-TIME RF VIEW	●●●●● Real-time RF Glasses shows actual Wi-Fi and BLE coverage from both AP and Client.	● Wi-Fi only; predicted, not actual RF coverage; not real-time.	●● Wi-Fi only; predicted, not actual RF coverage; not real-time. Requires AirWave appliance.	●● Wi-Fi only; predicted, not actual RF coverage; not real-time. Requires Prime appliance.
FAST AP BOOT	●●●●● AP's boot under 20 seconds.	● ~1 minute	○ Several minutes.	○ Several minutes.

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LOCATION ENGAGEMENT AND INSIGHT				
BLE ANTENNA IN APS	Patented 16-element BLE antenna array enables dynamic beam-forming.	Single integrated omni-directional BLE antenna. Additional 3rd party battery-powered BLE beacons required for coverage. WATCH VIDEO	Single integrated omni-directional BLE antenna. Additional Aruba battery-powered BLE beacons required for coverage.	Single integrated omni-directional BLE antenna. Additional 3rd party battery-powered BLE beacons required for coverage. Only available with Cisco 4800 AP.
VIRTUAL BEACONS	Unlimited virtual beacons per AP.	No virtual beacons. WATCH VIDEO	No virtual beacons.	No virtual beacons.
SITE CALIBRATION (UNSUPERVISED MACHINE LEARNING)	Unsupervised machine learning calibrates the site and devices without administrator input.	Requires 3rd party integration, not native. Does not adapt/learn radio performance for new devices. WATCH VIDEO	Requires accurate BLE coverage planning and manual beacon placement with mobile app during installation. Does not adapt/learn radio performance for new devices.	Requires 3rd party BLE integration. Does not adapt/learn radio performance for new devices.
LOCATION ALGORITHM	Unsupervised machine learning in the cloud triangulates and adapts to varying BLE clients and changing RF.	Triangulation dependent on accurate map placement. Errors introduced by variance in BLE clients.	Triangulation dependent on accurate map placement. Errors introduced by variance in BLE clients.	Requires 3rd party BLE integration. Triangulation dependent on accurate map placement. Errors introduced by variance in BLE clients.
LOCATION ANALYTICS	BLE & Wi-Fi.	Wi-Fi only.	Wi-Fi only Requires additional appliance (ALE).	Wi-Fi only Requires additional appliance (CMX).
ASSET TRACKING	Tracking of 3rd party BLE asset tags.	No asset tracking.	Tracking of Aruba BLE asset tags. Requires Aruba 3xx model APs with integrated BLE beacon or overlay deployment of Aruba AS-100 Wireless Sensors.	Wi-Fi RFID tags only. Requires additional appliance (CMX Operational Visibility).
BLE OVERLAY FOR EXISTING WI-FI DEPLOYMENTS	vBLE APs available.	No BLE overlay solution.	Requires many wall-plug Aruba AS-100 Wireless Sensors.	No BLE overlay solution.

Last Update: May 16, 2018

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