

MIST EDGE

Extending the power of Mist’s microservices cloud to the campus brings agility and scale while enabling new applications at the network edge.

MIST LEARNING WLAN

Mist has brought true innovation to the wireless space with the world’s first AI-driven Wireless LAN (WLAN).

The Mist Learning WLAN makes Wi-Fi predictable, reliable and measurable with unprecedented visibility into the user experience through customizable Service Level Expectation (SLE) metrics. Resource taxing manual IT tasks are replaced with AI-driven proactive automation and self-healing, lowering Wi-Fi operational costs and saving substantial time and money.

Mist also brings enterprise-grade Wi-Fi, Bluetooth® Low Energy (BLE) and IoT together so businesses can increase the value of their wireless networks through personalized location services, such as wayfinding, proximity notifications, and asset location. With Mist’s patented virtual BLE (vBLE) technology, no battery beacons or manual calibration are required.

All operations are managed via Mist’s open and programmable microservices cloud architecture. This delivers maximum scalability and performance while also bringing DevOps agility to wireless networking and location services.

THE MIST CLOUD

The Mist Cloud leverages a microservices architecture in order to bring unparalleled agility, scale and resiliency to your network. It leverages an AI engine to lower operational costs and deliver unprecedented insight by using data science to analyze large amounts of rich metadata collected from Mist Access Points, Mist Edge, as well as Juniper and 3rd party switches.

MIST ACCESS POINTS

The Mist enterprise-grade access point family consists of the:

- AP43 Series that supports 802.11ax (Wi-Fi 6), Bluetooth LE and IoT
- AP21, AP41 and AP61 Series that support 802.11ac Wave 2, Bluetooth LE and IoT
- the BT11 that supports Bluetooth LE [CR/LF]

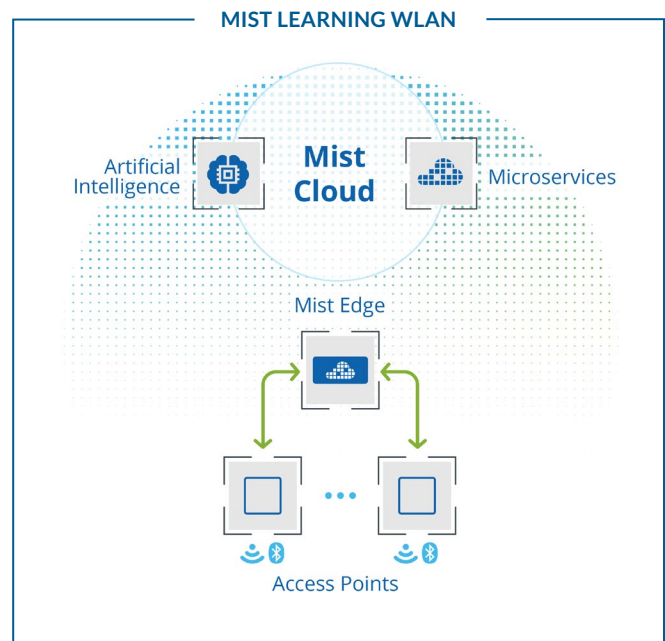
These access points are all built on a real-time microservices platform and are managed by the Mist Cloud.

MIST EDGE

Some microservices require specific functions be handled on-premises, whether due to bandwidth, latency or architecture requirements. Mist Edge extends select microservices to the customer premises while using the Mist cloud and its distributed software architecture for scalable and resilient operations, management, troubleshooting, and analytics. Now customers have the flexibility to deploy a hybrid architecture that extends processing and artificial intelligence to the network edge.

Key benefits of the Mist Edge architecture include:

- Agility to develop and deploy new microservices rapidly
- Scalable platform to meet demands of small to large campuses
- Simple to deploy and manage with zero-touch configuration and cloud management



Mist Edge is deployed as a standalone appliance with multiple variants for different sized deployments. A software only (VM) solution will be available in the near future for added design flexibility.

MIST EDGE MODELS

Model	Max AP	Max Client	Max Throughput
ME-X1	500	5,000	2 Gbps
ME-X5	5,000	50,000	20 Gbps
ME-X5-M	5,000	50,000	40 Gbps
ME-X10	10,000	100,000	40 Gbps

TUNNELING MICROSERVICE

One of the microservices available on the Mist Edge platform is a tunneling service. This service enables customers to make a seamless transition from their existing centralized data plane with legacy controller architectures to the modern Mist microservices cloud without affecting network design.

The Access Points leverage standards-based L2TPv3 technology to tunnel traffic to/from Mist Edge for selected WLANs. This provides the network design flexibility to leverage a combination of distributed and centralized data planes, where needed to meet the customer requirements. A deployment with Mist Edge can support both locally bridged as well as tunneled WLANs.

This enables you to preserve the VLAN configuration at your edge switches while transitioning to a Mist microservices cloud architecture by tunneling your traffic through a centralized cluster of Mist Edge devices in your data center while still maintaining the ability to separate SSIDs and users onto different VLANs. It also enables seamless mobility for mobile devices that have latency sensitive applications that must perform as they roam across the campus. A Mist Edge cluster will operate intelligently to deliver scalable and reliable performance by optimizing broadcast and multicast traffic delivery.

Configuration of the tunnels is also simplified through the power of the Mist cloud and its zero-touch provisioning.

Several of the common use cases for the tunneling microservice include:

- Seamless roaming for large campus networks through on-premises tunnel termination of traffic to/from access points
- Split tunneling for guest access and corporate traffic
- Dynamic traffic segmentation for IoT devices
- Extending virtual LANs (VLANs) to distributed branches and telecommuters to replace remote virtual private network (VPN) technology

HIGH AVAILABILITY AND CLUSTERING

Mist Edge supports an elastically scalable cluster (with options for backup clusters) composed of an unlimited number of nodes within a cluster. The Mist Edge cluster design for the tunneling microservice is guided by the aggregate capacity considerations for number of access points, clients and throughput expectations.

SPECIFICATIONS	
Interface	<p>ME-X1: Dual Port 1GbE (Data) & Dual Port 1GbE</p> <p>ME-X5: Dual Port 10GbE SFP+ (Data) & Dual Port 1GbE</p> <p>ME-X5-M: Quad Port 10GbE SFP+ (Data) & Dual Port 10GbE SFP+</p> <p>ME-X10: Quad Port 10GbE SFP+ (Data) & Dual Port 10GbE SFP+</p>
Power Supply	<p>ME-X1: Single, Cabled Power Supply, 250W</p> <p>ME-X5: Dual, Hot-plug, Redundant Power Supply (1+1), 750W</p> <p>ME-X5-M: Dual, Hot-plug, Redundant Power Supply (1+1), 750W</p> <p>ME-X10: Dual, Hot-plug, Redundant Power Supply (1+1), 750W</p>
Dimensions	<p>ME-X1: 17.1" (W) x 17.1" (D) x 1.75" (H)</p> <p>ME-X5: 18.98" (W) x 31.8" (D) x 1.69" (H)</p> <p>ME-X5-M: 18.98" (W) x 31.8" (D) x 1.69" (H)</p> <p>ME-X10: 18.98" (W) x 31.8" (D) x 1.69" (H)</p>

To assess whether the Mist Edge is a fit for your AI-Driven Enterprise, please contact your local Mist partner or representative who can help you architect your next generation network.