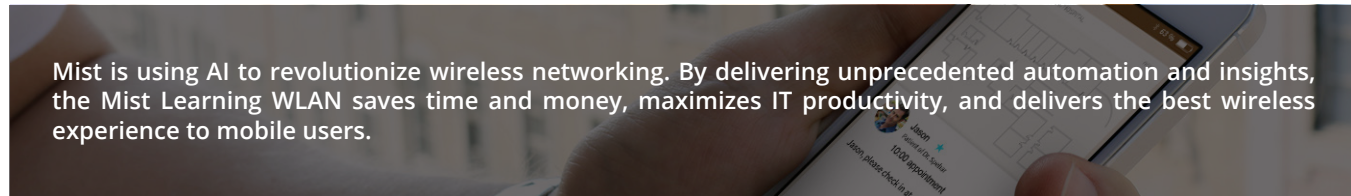




# THE FIRST AND ONLY AI-DRIVEN WIRELESS LAN



Mist is using AI to revolutionize wireless networking. By delivering unprecedented automation and insights, the Mist Learning WLAN saves time and money, maximizes IT productivity, and delivers the best wireless experience to mobile users.

## OVERVIEW

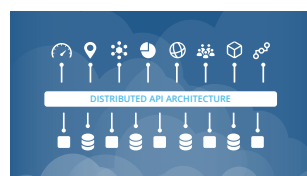
Mist has brought true innovation to the wireless space with the world's first AI-driven Wireless LAN (WLAN).

The Mist Learning WLAN makes Wi-Fi predictable, reliable and measurable with unprecedented visibility into the user experience. Time consuming 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® LE 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



### Microservices bring unparalleled agility, scale, resiliency

Mist makes it easy to add or remove new features by leveraging a microservices cloud architecture. New enhancements

and bug fixes are delivered almost weekly without network disruption. Services scale up or down elastically when they're needed, eliminating the cost and complexity of monolithic hardware. Plus, the Mist platform is inherently resilient as the failure of one service does not impact others.

### AI engine lowers OpEx, delivers unprecedented insight

The Mist cloud uses AI and data science to analyze large amounts of rich metadata collected from Mist Access Points and provide actionable insight. For example:

- Supervised machine learning correlates events for rapid root cause identification.
- Time-series anomaly detection identifies negative trends and determines the magnitude of their impact.
- AI-driven Radio Resource Management (RRM) optimizes the RF settings in real-time based on changing conditions.
- Natural Language Processing (NLP) is used for making complex queries simple and fast
- Unsupervised machine learning is used with Mist's vBLE technology to accurately locate users and devices.

## Wireless-as-a-Service

The Mist cloud enables wireless and location services to be consumed in a scalable and cost effective manner. Customers select the specific subscription services (detailed on page 2) that are best for their environment, and can easily add/remove cloud services as business requirements change. No additional hardware is required.

## Fully programmable cloud

The Mist platform is 100% programmable, using open APIs, for full automation and seamless integration with complementary products including our AI for IT partners across LAN, WAN, security, engagement and asset location.

## ACCESS POINTS



### Best Wi-Fi and Bluetooth LE performance

In addition to delivering the best 802.11ac Wave 2 Wi-Fi range and performance, Mist APs incorporate a patented dynamic vBLE 16 element antenna array to deliver the industry's most accurate and scalable location services.

### Data collection, analysis and enforcement

Mist APs collect data and enforce policies in conjunction with the Mist cloud, which is critical when doing analytics, machine learning, location services, and event correlation. For enhanced visibility, several models incorporate a third radio for constant monitoring and intelligent packet capture to speed up troubleshooting.

### Single, enterprise-grade platform for Wi-Fi, Bluetooth LE, and IoT

For network convergence, Mist APs incorporate a port for direct, and programmable, integration to the analog and digital interfaces of Internet of Things (IoT) devices.

	AP61	AP41	AP21	BT11
<b>Deployment</b>	Outdoor	Indoor	Indoor	Indoor
<b>Wi-Fi</b>	802.11ac Wave 2 4x4 : 4SS	802.11ac Wave 2 4x4 : 4SS	802.11ac Wave 2 2x2: 2SS	-
<b>Wi-Fi-Tri-Radio</b>	✓	✓	-	-
<b>IoT Interface</b>	-	✓	-	-
<b>Antenna Options</b>	Internal/ External	Internal/ External	Internal	Internal
<b>Virtual Bluetooth LE</b>	✓	✓	✓	✓

## WI-FI CLOUD SERVICES



### WI-FI WITH ASSURANCE

Mist makes Wi-Fi predictable, reliable, and measurable. Automate operations, save time and money, and get unprecedented visibility into the Wi-Fi user experience. Secure your network with 802.1X, IPsec, RogueAP detection and more.

#### Customizable Wi-Fi Service Levels

Set, monitor, and enforce Service Level Expectations (SLE) for key Wi-Fi performance metrics.

#### Root Cause Identification in One Click

Proactively identify and fix the root causes of problems using Mist's Proactive Analytics and Correlation Engine (PACE).

#### Guest Wi-Fi

The industry's most scalable guest access solution with options including: multiple language support, customizable branding, social login, and external portal/AAA/RADIUS integration.

#### AI-Driven Radio Resource Management

Learn and better optimize radio settings to assure performance, while also instantaneously adapting to intermittent outside interference.

#### Real-time User State Information

Dynamically capture packets the moment an event occurs; Rewind to see any user's state at any point in time.

#### Simple Resource Assignment and QoS

With WxLAN, assign and prioritize network resources to Wi-Fi users with the click of a mouse or via pre-assigned policies.



### MARVIS VIRTUAL ASSISTANT

Meet Marvis – the first AI-driven virtual network assistant. Now you can ask questions and get intuitive answers on par with a wireless expert.

#### Simple Natural Language Interface

Marvis uses Natural Language Processing (NLP) and Information Theory to analyze massive amounts of data and draw subtle inferences. Simply ask Marvis a question and it will help you extract insights from the system or troubleshoot an issue for you.

#### Anomaly Detection

Marvis adds anomaly detection to the Mist SLE dashboard so that administrators can rapidly and proactively identify service impacting events that assure rapid determination and resolution of the root cause of issues.

#### Correlate Data to Understand Scope

Marvis correlates information across a large knowledge base to determine the scope and magnitude of a problem.

#### Integrated Help Desk

Marvis uses machine learning to perform unique troubleshooting and helpdesk functions like anomaly detection, event correlation, and confidence ratings.

#### Accurate Root Cause Analysis

Bayesian Inference, a part of our data science toolbox, is used to identify causes with the highest probability of association to the problem occurring on the network.

## BLUETOOTH LE CLOUD SERVICES



### USER ENGAGEMENT

Mist flipped the indoor location model on its head. With patented virtual Bluetooth LE (vBLE), indoor location is finally easy to deploy and scale, with unprecedented accuracy and agility.

#### Real-time Wayfinding

Help employees, guests, and customers get to where they need to be with turn-by-turn directions. Enable wayfinding with accuracy of up to 1 meter (3.3 feet) with sub-second latency.

#### Real-time Proximity Notification and Alerts

Greet patients, clients or customers as they arrive onsite. Create push notifications anywhere with unlimited virtual beacons. Deliver contextually relevant messages anywhere for a personalized mobile experience.

#### SDK for Mobile App Integration

Mist offers a mobile SDK that enables you to integrate your mobile application wayfinding and notifications with Mist's virtual Bluetooth LE infrastructure.



### ASSET VISIBILITY

With Mist's patented virtual Bluetooth LE technology, the same infrastructure for engaging with mobile users can be used for asset visibility.

#### Get Full Visibility Into People and Things Using Standards-based Bluetooth LE Services

Easily locate key resources, like nurses, security guards, and sales associates. Track IV pumps, forklifts, and high value assets with Bluetooth LE tags.

#### Asset Identity

Assign names to asset tags or BLE-enabled mobile/IoT devices to locate these assets on your venue map or integrate location with business applications.

#### Detailed Analytics

Monitor visits and dwell times, with detailed drill down into zone traffic patterns and congestion points.

#### Asset Location and Analytics Powered by APIs

A complete and open set of APIs enable you to integrate your asset tags as well as asset location and analytics applications with the Mist virtual Bluetooth LE infrastructure.

Highlighted features listed on this page are a subset for each service; refer to services datasheet(s) for complete set of functions.