

You Want Them to Want You.

Exploring user-centric wireless LAN.



Is your Wi-Fi network running at peak performance? How do you know?

Traditional wireless LANs focus on network and AP uptime. But “up” doesn’t necessarily mean “good,” and a lack of complaints doesn’t necessarily mean a lack of problems.

You can now give your customers—and your organization—a better wireless LAN user experience. By leveraging the mountains of user data currently being ignored, your wireless LAN can provide much more than just a signal.

Perhaps it’s time to ask some tough questions about your wireless LAN:

- Does it leverage artificial intelligence to listen to and learn from its users?
- Does it proactively provide big data and machine-learning insights to aid rapid spin-ups, and to identify potential problems before they become real problems?
- Can it see the full user experience (UX) by giving you visibility across the network, devices and even applications, in near-real-time?
- Will it drive a richer UX with new, innovative user experiences that make them love what’s going on with YOUR particular network?
- Could it make your life easier?

How would it impact you if it could?

In this brief, we explore a new way to strongly and affirmatively answer those questions by delivering a solution that fundamentally disrupts how we think about wireless LAN.

Let’s disrupt something.

Introducing Software-Defined Wireless LAN (SD WLAN), the first user-centric, rather than network-centric, approach to wireless LANs. Leveraging patented, breakthrough technology from Mist Systems, Verizon’s Managed SD WLAN is intelligent, cloud-based, bluetooth-enabled enterprise Wi-Fi with sophisticated virtual location-based services. With native artificial intelligence and machine-learning best practices delivered through a purpose-built cloud, SD WLAN is a fully integrated and managed solution. And the entire focus is to help you and your customers get the most from your wireless LAN and ensure your customers experience an exceptional engagement with your network.

What is Software-Defined Wireless LAN?

User-centric enterprise WLAN.

With our technology partner, Mist Systems, we’ve studied how big data companies correlate massive amounts of information using the cloud and machine-learning, and harnessed those principles to develop the world’s first user-centric wireless network.

Unprecedented user insight.

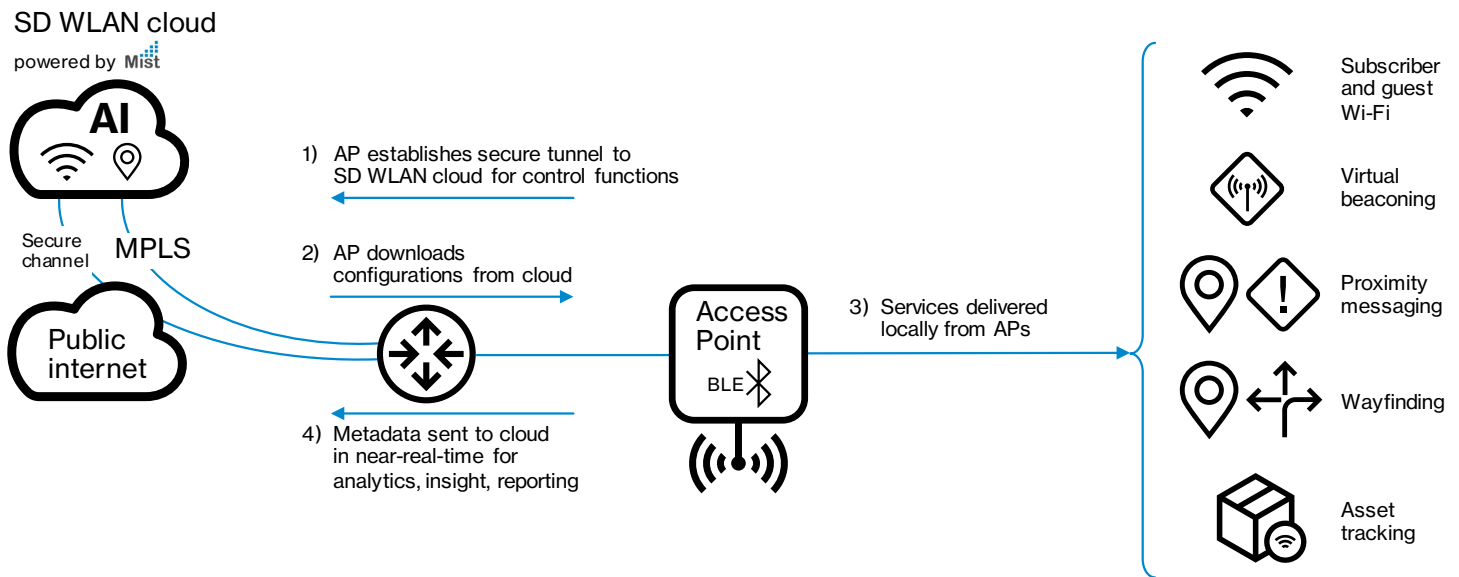
Unlike traditional wireless LAN solutions, we reveal vastly more information than whether an access point is working. If a user is experiencing a problem, we show you the root cause—in just one click. We help you drill down to see if issues are occurring during specific periods of time or are a result of recent changes. We help you visualize user states over time and inspect problematic events.

UX-based service levels.

Verizon’s SD WLAN provides the tools to let you set, monitor and enforce service levels based on what’s right for your users, rather than arbitrary vendor metrics. You can track thresholds in near-real-time based on what users are experiencing in the moment, to help ensure service levels are being met and are trending in the right direction.

Virtual location-based services.

In a big step up for what is already an innovative capability, we enable next-generation location-based services with virtual beacons that let you drive proximity messaging, wayfinding, and asset tracking, and other location capabilities. Virtual beacons don't require maintenance or logistics, and their geo-fencing capabilities are readily modified.



How does it work?

Purpose-built cloud solution.

Mist Systems designed its own control plane that exposes over 100 user states in near-real-time for unprecedented visibility. Each transition generates valuable meta-data that represents the entire user experience. This powerful cloud architecture collects and processes information with unparalleled performance and scale.

Sees wired, wireless, device and application domains.

We let you spot trends across device types, operating systems and applications. You can identify troublesome access points or WLANs to pinpoint which areas need immediate attention and which are interesting but not critical. You can determine whether an Android experience differs from iOS and what applications might bog down.

Dynamic packet capture.

If a service-impacting event occurs, we trigger a dynamic packet capture (PCap) and store it in the cloud for easy analysis—no more wasting time and money chasing temporal problems with expensive truck rolls and sniffers.

Enterprise-grade access points.

Each Wi-Fi AP includes a dedicated radio that detects interference, vulnerabilities and attacks on all channels, as well as delivering Virtual Bluetooth® LE (vBLE) service. And all of its capabilities are 100% programmable through open APIs. (WPA, WPA2, AES, and 802.11i are fully supported).

Virtual Bluetooth low-energy beacons.

Select APs provide an embedded Bluetooth Low Energy (BLE) system which delivers virtual beacon functionality

as well as visibility of Bluetooth LE devices. This next generation service supersedes the need for separate physical beacons which lack SD WLAN's rich, flexible programmability and require replaceable batteries.

What's in it for you?

Get operational faster.

Software Defined Wireless LAN can give new meaning to "rapid deployment" through highly automated and simpler implementation. We can help you remotely configure and activate a new site in minutes, rather than days or weeks.

Fix issues before they're issues.

You can see, pinpoint, and fix issues before customers are aware that there's anything to fix by creating alerts to notify you when baseline metrics aren't being met or are negatively trending. We replace reactive troubleshooting with proactive wireless operations.

Help reduce costs.

Since most of the solution is in the cloud, SD Wireless LAN can help reduce costs through less and smarter hardware. And through extensive self-discovering and self-healing capabilities, we can help pinpoint and fix potential and real vulnerabilities faster and easier—so you expend less cost and effort, and your customers experience less downtime.

Leverage advanced innovations.

By introducing virtual location-based services, you can impact how your users think—and perhaps more importantly, feel—about your network, and your business. How far could your creativity and our expertise take you in delivering a fresh, useable, productivity-enhancing experience that they love?

Focus on the big picture.

Through Software Defined Wireless LAN's solution automation, and Verizon's managed services, we can help you focus on your big picture—on your and your stakeholders' strategic initiatives. Whether it's co-sourcing with you or fully-managing for you, let us help by doing the heavy lifting. We manage the network so you can focus on business.

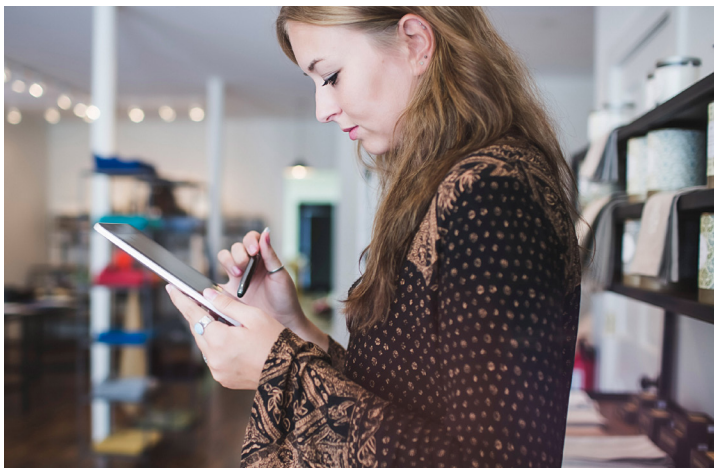
Specialized use cases.

While Verizon's Software Defined Wireless LAN is designed for broad usage across enterprises and small and medium-sized businesses (SMBs) in general, it also delivers some extraordinarily clear benefits to vertical industries. Particularly for retail, healthcare, hospitality, transportation, and the public sector, our virtual location-based services create customer engagement possibilities limited only by your imagination.

Here are just a few to consider:

Retail.

- Shopper benefits
 - Proximity messaging
 - In-store navigation
 - Shopping assistance
- Retailer benefits
 - Increase foot traffic
 - Understand shopping patterns
 - Asset tracking
 - Mobile PoS



Healthcare.

- Patient benefits
 - Guest Wi-Fi access
 - Facility navigation (wayfinding)
 - Automatic check-in
- Provider benefits
 - Guest Wi-Fi access
 - Facility navigation (wayfinding)
 - Automatic check-in



Hospitality.

- Guest benefits
 - Concierge guest experience
 - Automated check-in
 - Easy navigation
 - Notification of the day's offerings
- Host benefits
 - Increased foot traffic
 - Optimized staffing resources
 - Event analytics



Why Verizon?

SD WLAN should be viewed as a strategic part of your digital journey. It's a disruptive, game-changing step to help you transform how your customers experience your network. It's also a strategic part of our managed services ecosystem and of our Software Defined Network vision. Verizon delivers your data, connects it, secures it, moves it faster and smarter, deploys it, and enables you to see it, helping your teams work better while driving your strategic mission. As significantly, SD WLAN is a strategic component of our long-term Software Defined Network (SDN) vision—a strategy that helps you drive your digital journey by making your customers' network experiences more agile, productive, and vital.

