

Arista and Highway 9: Complete Enterprise Wireless

Arista Wi-Fi and Highway 9 Private 5G/LTE — one unified wireless architecture spanning Wi-Fi and cellular, delivering seamless coverage, consistent security, and enterprise-grade control across your entire estate.

Delivering Seamless Mobility

Modern enterprises run on wireless. Users, guests, devices, robots, and AI workloads all demand consistent, high-performance connectivity — indoors and out, across every corner of the campus.

The Arista and Highway 9 joint solution unifies two complementary technologies into one wireless experience:

- **Arista Cognitive Wi-Fi** for high-density, high-throughput coverage where Wi-Fi is the right fit.
- **Highway 9 Private 5G/LTE** for deterministic, low-latency mobility where cellular excels.

Together they give staff, guests, and systems a fluid, always-connected experience regardless of location. This joint solution helps enterprises in manufacturing, logistics, healthcare, energy, and higher education modernize their wireless infrastructure — improving productivity, efficiency, and operational control.

By combining the inherent strengths of Wi-Fi and Private 5G, organizations eliminate fragmented connectivity and gain a single, secure foundation for every use case.

Arista as the Default Wi-Fi Layer

When your deployment requires Wi-Fi, Arista Cognitive Wi-Fi is the default, preferred solution within every Highway 9 architecture.

Rather than integrating with whatever Wi-Fi happens to be on site, Highway 9 recommends Arista as the standard Wi-Fi layer to guarantee a tested, tightly integrated, single-vendor-grade experience across both wireless domains.

Why Arista is the default choice:

- **Purpose-built integration.** Arista Wi-Fi and Highway 9 Mobile Cloud are engineered to work as one system — shared identity, shared segmentation, shared management.
- **Consistent operations.** A single operating model spans campus, WAN, and data center through Arista EOS, extended to mobile through the Highway 9 Mobile Edge.
- **Unified security.** Zero Trust policy, identity, and segmentation apply the same way to Wi-Fi and cellular clients — no gaps, no translation layers.
- **Simplified procurement and support.** One recommended architecture reduces integration risk, shortens deployment cycles, and streamlines ongoing operations.
- **Field-proven performance.** Arista's award-winning platforms deliver the availability, automation, and analytics that enterprise and industrial environments demand.



The unified wireless story is simple:

Arista Wi-Fi + Highway 9 Private 5G/LTE = complete enterprise wireless.

Where Wi-Fi is required, deploy Arista. Where cellular-grade reliability, coverage, or mobility is required, deploy Highway 9. Manage both as one.

Joint Solution: Features and Benefits

1. Cognitive Campus and Mobile Cloud: A Seamless Integration

Arista's best-in-class network infrastructure provides the high-performance foundation for the Highway 9 Mobile Cloud. This synergy extends cognitive campus capabilities directly into mobile environments.

Enhanced Power and Connectivity

- Arista's advanced PoE capabilities deliver abundant power for Highway 9 Access Points, ensuring optimal performance and coverage.
- Integration at the access layer maximizes efficiency and simplifies deployment.

Precision Timing for Mobility

- Arista's network distributes Precision Time Protocol (PTP) throughout the campus — a critical requirement for mobile networks.
- Reliable PTP delivers synchronized, dependable mobile services across the enterprise.

Resilient and Flexible Mobile Edge

- The Highway 9 Mobile Edge, hosting the 5G Packet Core, seamlessly extends Arista's service spine switch set.
- Multi-Chassis Link Aggregation (MLAG) provides high availability and resilience.
- VLAN and VXLAN tunneling integrate with existing network segments, extending security zones and applications into the cellular wireless space.

Secure Virtual Mobile Zones

- Mobile devices are grouped into secured enterprise zones — a protected operating environment for mobile routers, phones, and tablets.
- Security policies stay consistent across both Wi-Fi and cellular networks.

The result is a unified, intelligent network that extends from core to edge, blending Arista Wi-Fi and Highway 9 cellular for consistent coverage, security, and performance.

2. Extending Zero Trust to Every Device

The integration of Arista's Cognitive Campus and the Highway 9 Mobile Cloud extends Zero Trust principles seamlessly to mobile environments — comprehensive security across all network types and all devices.

Consistent Segmentation and Policy Enforcement

- The Highway 9 Mobile Cloud integrates with Arista's Cognitive Campus segments and zones, including Arista CV AGNI (next-gen identity and policy), Macro-Segmentation Service (MSS), and Arista NDR.
- The Zero Trust principle of “never trust, always verify” applies consistently to every device — whether connected via Arista Wi-Fi or Highway 9 cellular.
- Mobile devices are subject to the same strict segmentation and least-privilege access policies as traditional network endpoints.

Unified Authentication and Access Control

- Arista AGNI integrates with the Highway 9 Mobile Edge to provide consistent Network Access Control (NAC) for all devices.
- The Zero Trust requirement to “verify explicitly” extends fully to the mobile environment.
- eSIM authentication from Highway 9 delivers hardware-based identity verification for both cellular and Wi-Fi clients.

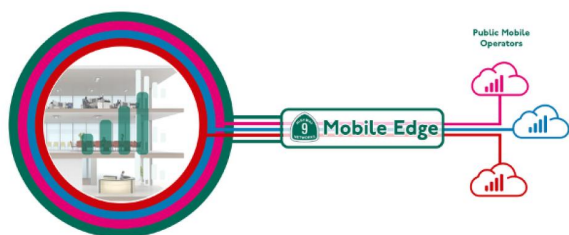
Simplified Zero Trust Management

- Arista CloudVision users gain Single Sign-On (SSO) access to the Highway 9 Mobile Services dashboard.
- One management interface spans campus and mobile networks.
- Administrators implement and enforce Zero Trust policy consistently across all network types through a single pane of glass.

By extending Zero Trust to mobile, the joint solution creates a unified, secure network ecosystem that verifies every user, device, and connection — without compromising simplicity or user experience.

3. Converged Wireless: Indoor Cellular Extension

Highway 9's Indoor Cellular Extension transforms your building into a seamless, secure extension of public mobile networks. It improves safety, simplifies connectivity, and supports the modern BYOD workplace — all while maintaining enterprise-grade security.



Seamless Cellular Connectivity

- Extends carrier networks across the enterprise, delivering coverage where public networks fall short.
- Automatic transition between public mobile networks and private cellular.
- Users stay connected as they enter or leave the building, roaming seamlessly across Wi-Fi and 5G. No manual switching or configuration required.

Enhanced Safety and Communication

- Improved E911 support with accurate in-building location awareness.
- Reliable delivery of critical information, including national emergency alerts and building-wide announcements — ensuring all occupants receive vital information across every network provider.

5. Native BYOD Support with Enterprise-Grade Security

- Personal devices connect automatically to their preferred network — no special configuration or added software.
- Enterprise security posture is maintained for all data and cellular traffic.

4. Converged Wireless: Indoor-Outdoor Roaming

Seamless indoor-outdoor roaming from Arista and Highway 9 creates a borderless enterprise — where connectivity, security, and user experience stay consistent regardless of location. Users move freely between indoor Arista Wi-Fi and outdoor Highway 9 Private 5G while maintaining uninterrupted connectivity, security, and access to critical resources.

Uninterrupted User Experience

- Users roam seamlessly between Wi-Fi and Private 5G without manual intervention or reconnection.
- Continuous access to voice, data, and enterprise applications as users move across the campus.
- Supports high-bandwidth, low-latency applications like video conferencing and augmented reality, even during network transitions.

Consistent Zero Trust Security

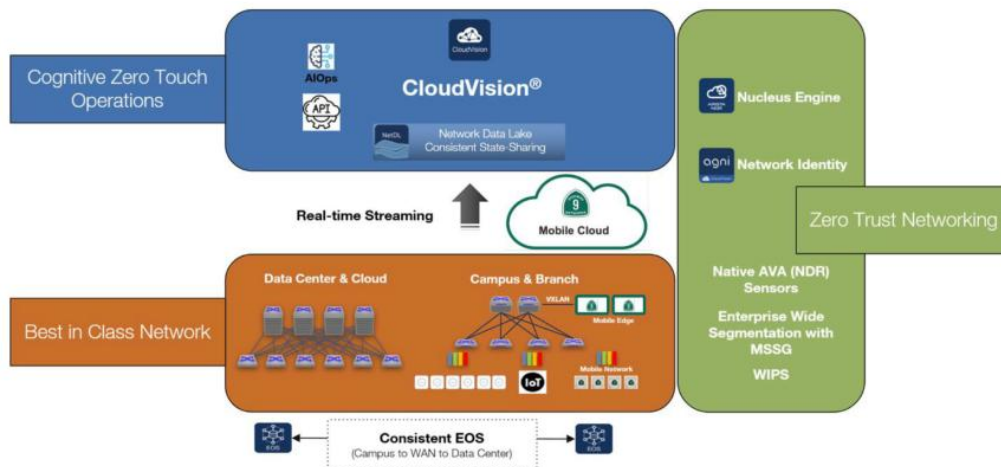
- The same security and access control apply as users transition between networks.
- Unified eSIM authentication across Wi-Fi and Private 5G delivers continuous identity verification.
- Consistent segmentation and policy enforcement, regardless of location or connection type.

Enhanced Operational Efficiency

- Enables location-based services and context-aware applications that adapt to the user's environment.
- Supports efficient asset tracking and management across indoor and outdoor spaces.
- Facilitates real-time collaboration and data access for mobile workers, improving productivity.

The Joint Architecture at a Glance

Layer	Delivered By	Function
Wi-Fi (default)	Arista Cognitive Wi-Fi	High-density, high-throughput coverage where Wi-Fi is required
Private Cellular	Highway 9 Private 5G/LTE	Deterministic, low-latency mobility and coverage
Identity & Policy	Arista CV AGNI + Highway 9 eSIM	Unified authentication and Zero Trust access control
Segmentation	Arista MSS + Highway 9 Virtual Mobile Zones	Consistent least-privilege segmentation across both domains
Management	Arista CloudVision + Highway 9 Mobile Services	Single pane of glass with SSO across campus and mobile
Foundation	Arista EOS	Consistent operating stack from campus to WAN to data center



About Arista Networks

Arista Networks is an industry leader in data-driven, client-to-cloud networking for large AI, data center, campus, and routing environments. Its award-winning platforms deliver availability, agility, automation, analytics, and security through an advanced network operating stack. For more information, visit www.arista.com. Arista, the Arista logo, and EOS are trademarks of Arista Networks.

About Highway 9 Networks

Highway 9 Networks brings the power of the cloud to enterprise mobility. By combining advances in private mobile technology — free spectrum availability, multi-eSIM support, and private 5G — with deep cloud and networking expertise, Highway 9 built a mobile cloud for the enterprise. The result is the Highway 9 Mobile Cloud: the first cloud-based approach to enterprise mobility and the only offering that meets an AI-driven enterprise's core operational, performance, and multi-carrier integration requirements.

Discover Complete Enterprise Wireless

See how Arista Wi-Fi and Highway 9 Private 5G/LTE deliver one secure, unified wireless architecture for your enterprise.

Get in touch

Contact us to learn how Highway 9's Mobile Cloud can transform your enterprise wireless.

Info@highway9.com www.highway9.com