Arista Cognitive Unified Edge (CUE)

Build a future campus with Edge-as-a-Service platform

Challenges and opportunities

Legacy approaches

- Permanent cube assignments
- Fixed conference rooms
- Applications privately hosted
- Laptops, Smartphones as mobility devices
- Perimeter firewalls
- High density of employees

Modern network requirements

- Reserved flexible workspaces
- Collaboration rooms
- Cloud hosted applications
- Influx of IoT devices
- Real time video meet-ups
- Immersive media technologies
- Highly distributed firewall services
- Smaller agile offices

Extending Cognitive Campus with Cognitive Unified Edge (CUE)

Campus network edge is at an inflection point, transforming from device and office centric to boundless, highly secure and deployed as-a-service.

Network Edge-as-a-Service

- Secure users and IoT: Integrated WIPS and Edge Threat Management,
- Connectivity: wired and wireless trends featuring latest WiFi standards, 5G/CBRS coexistence and convergence, and Bluetooth/BLE
- Zero touch provisioning: Install Device, power on and go
- Edge NetOps Automation: wired and wireless provisioning, network assurance, TAC style troubleshooting with automated root cause analysis
- Client Experience, Performance and connectivity Quality of Experience, endpoint inventory, unified dashboards, monitoring, and reporting
- Vertical specific applications: IoT/IIoT/IoMT visibility and locationing

CloudVision
CUE

CUE components and features

**Arista 710 Series Compact switch**

- Rich Security (MACsec)
- Full L2/L3 features and VXLAN-EVPN
- High Availability
- Flexible PoE Budgets and
- Dynamic Power Management
- Real Time Telemetry and Flow Tracker

Wi-Fi6/6E access points

- Indoor and outdoor models
- Internal/External antenna
- Multi-band access radios and multifunctional non-access radio
- Integrated WIPS
- Multi-gigabit Ethernet uplinks

Edge Threat Management

- Multiple layers of advanced protection
- Secure branch connectivity
- Extensive network control and visibility
- Deep analysis and insights
- Real-time alerts
- Flexible deployment (hardware, software, virtual, cloud)
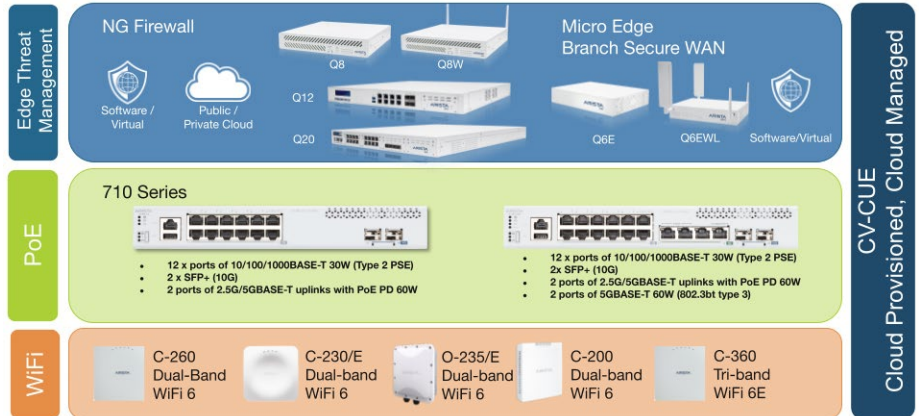
The power of CUE

- Rooted in CloudVision: Built on one EOS, network innovation and highest quality
- Cognitive Intelligence: AI-driven data context and data analytics
- Global Cloud Repository: Arista and third party devices and partners
- Real-Time Streaming: Complete data sets, anonymized across tenants
- Single source of truth: Leverages Network Data Lake (NetDL) telemetry innovation and real-time state visibility
- Security radar: Edge security sensors
- Edge Threat Management : Next generation firewall and secure branch WAN

Summary

Virtual workspaces, application outsourcing to the cloud, e-enabled collaboration, highly personalized smartphone applications, and location intelligence are use cases redefining edge services. Productivity workers expect transparency, where they are always securely connected, whether remote, mobile, in the office or in a hot spot.

Silo'd networking technologies based upon evolutionary advances create unwanted connectivity, performance, and outage conditions that impact the bottom line. Arista's Cognitive Unified Edge solution coupling of wired. wireless, edge threat management, and integrated artificial intelligence address these challenges.