

HPE Networking News

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Agenda

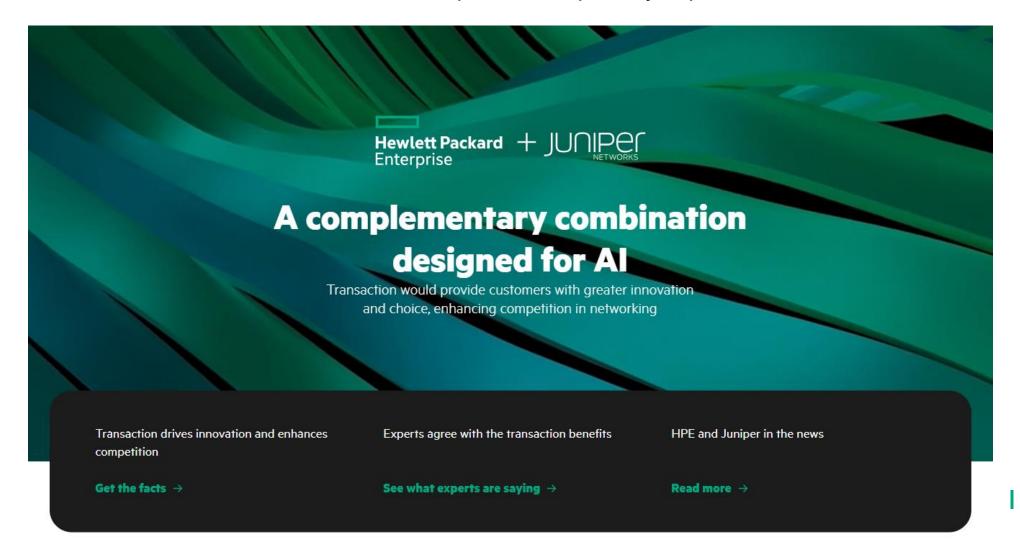
HPE und Juniper Networks – Update	
The larger HPE story	
Portfolio Updates	
HPE Aruba New Central Update	
HPE Networking Instant On Update	

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HPE und Juniper Networks – ein Update

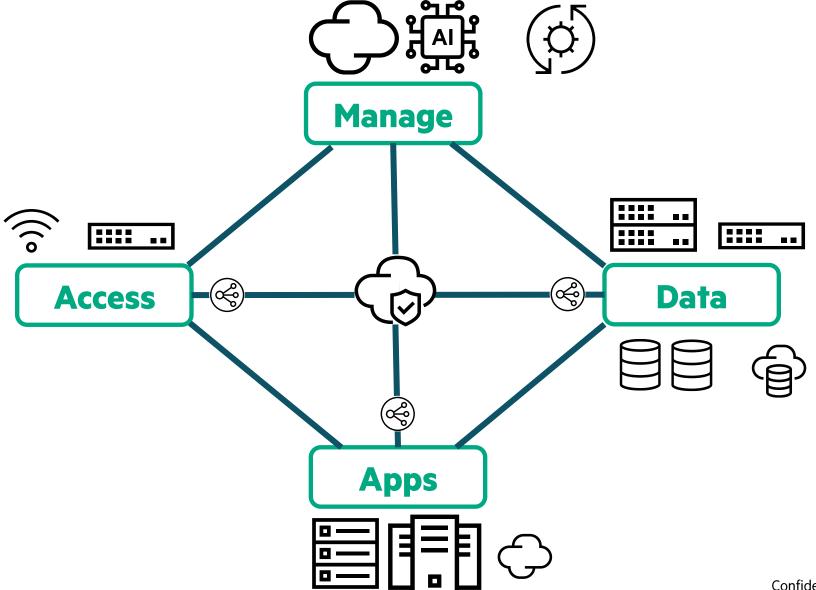
Landing Page mit aktuellen Informationen: <u>Hewlett Packard Enterprise + Juniper Networks</u>
https://www.hpeandjunipernetworks.com/



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What's our story? The bigger picture of the entire IT architecture

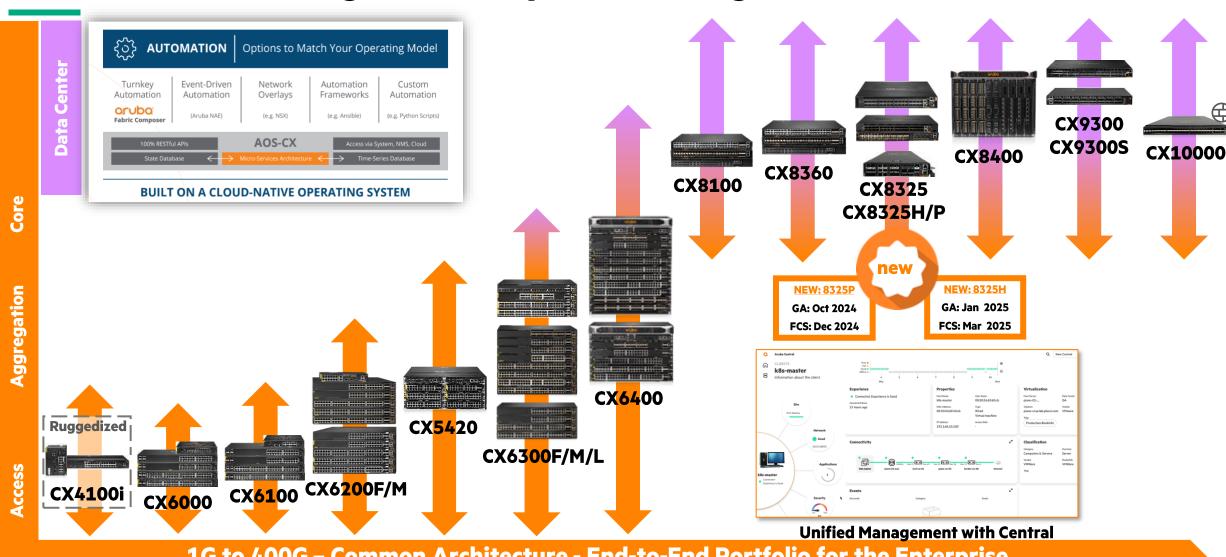


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Switching

HPE Aruba Networking CX Switch portfolio – Edge to DC

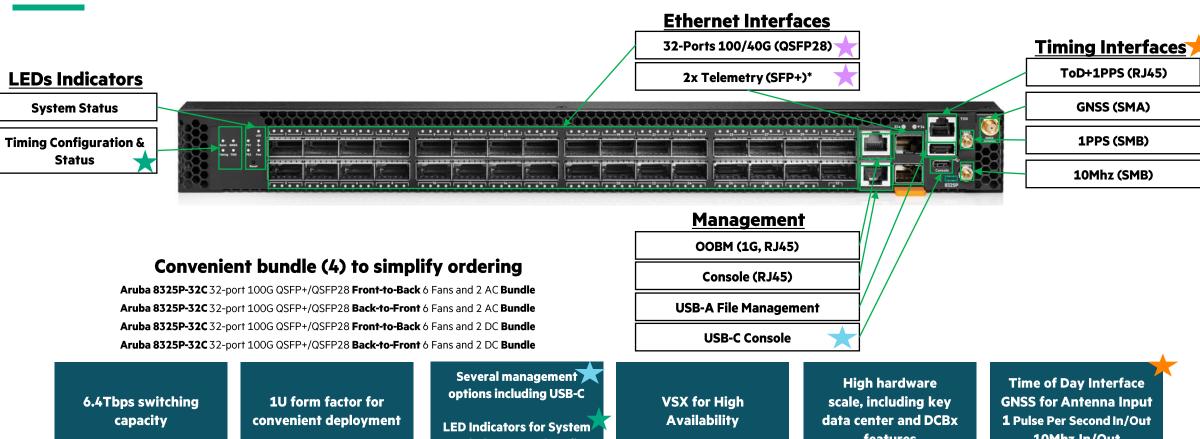


1G to 400G – Common Architecture - End-to-End Portfolio for the Enterprise

HPE Aruba Networking CX 8325P Switch Series



Aruba 8325P-32C



Advanced Layer 3 including OSPF, BGP, **VXLAN and many AOS-CX features**

NEBS Compliant, N+1 hot swappable Power **Supplies (AC or DC) &** Fan Trays (F2B or B2F) & Timing Status/Config

High Speed Interfaces: 32-100/40G QSFP28 Up to 125-25G SFP28 Up to 127- 10G SFP+

REST for distributed or centralized orchestration

features

Database-driven Aruba OS-CX architecture for HA and fault tolerance

10Mhz In/Out

HW and SW support for Telco PTP Class C (G.8275.1 and G.8275.2-(T-BC, T-GM*)) and **SyncE (G.8262.1)**

Telemetry Ports are the same as any other ports and are connected to the ASIC, they can be used as standard ports or used to send Telemetry data, etc across it. Similarly, Telemetry egress is not restricted to these Telemetry Ports, it can be on ANY of the supported ports.



HPE Aruba Networking CX 8325H Switch Series



HPE Aruba Networking CX 8325H Product Details

High performance, High density - First HPE ANW half-width Data Center Switch

18 (25G) and 4 (100G)
1.74 Tb/s Switching Capacity (FDx)
1.28Tb/s Bidirectional ASIC Performance
(1.28 Tb/s in + 1.28 Tb/s out)



16 (100G)
3.24 Tb/s Switching Capacity (FDx)
2Tb/s Bidirectional ASIC Performance
(2 Tb/s in + 2 Tb/s out)



Cost-effective, half-width Ethernet network switches for storage, HCl and data center applications

Half-width, single RU form factor, 1/10/25/40/100G connectivity. Allows full HW redundancy in 1RU.

Enables low-latency and "lossless" networking QoS and connectivity characteristics that storage requires.

Ideal for Ethernet Storage Fabric, SDS and Hyperconverged infrastructure

Ideal for smaller, edge or colocation data centers that require "right-sized" port density or have limited rack space.

Advanced Layer 2/3 including EVPN-VXLAN*, BGP, OSPF, Multicast

Support for Cut-Through OR Store and Forward switching (with no need to reboot)

Two additional 1/10G SFP+ ports which can be used for additional functionality like telemetry

Can be used in small campus and branch locations where space is at a premium

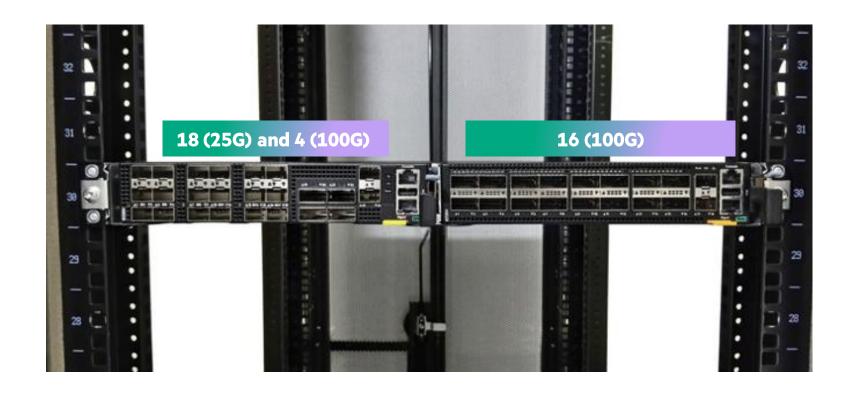
Fixed redundant power (1+1) and cooling with four fixed fans (N+1)

Designed to use lower power consumption, producing less heat and allowing reduced OPEX cost.

32 GB RAM, 120 GB SSD, 32 MB packet buffer, AMD x86 8 Core CPU

HPE Aruba Networking CX 8325H Switch Series

Allows full HW redundancy in 1RU – Both SKUs placed side-by-side



HPE Aruba Networking CX 10000

Distributed Services Switch Eine neue Switching-Kategorie

HPE Aruba Networking CX 10000

AMDI PENSANDO



Stateful Firewall Services













Firewall

DDoS

Telemetry

Encrypt

NAT

SLB

Volle Netzwerkfunktionalität plus 800G-Firewall-Leistung

Eine Stateful Firewall hinter jedem Switch-Port mit integriertem Telemetrie-Streaming

Eliminiert/reduziert den Bedarf an Security Appliances und Host-Software und bietet 10-fache Leistung bei 1/3 TCO

Use Cases:

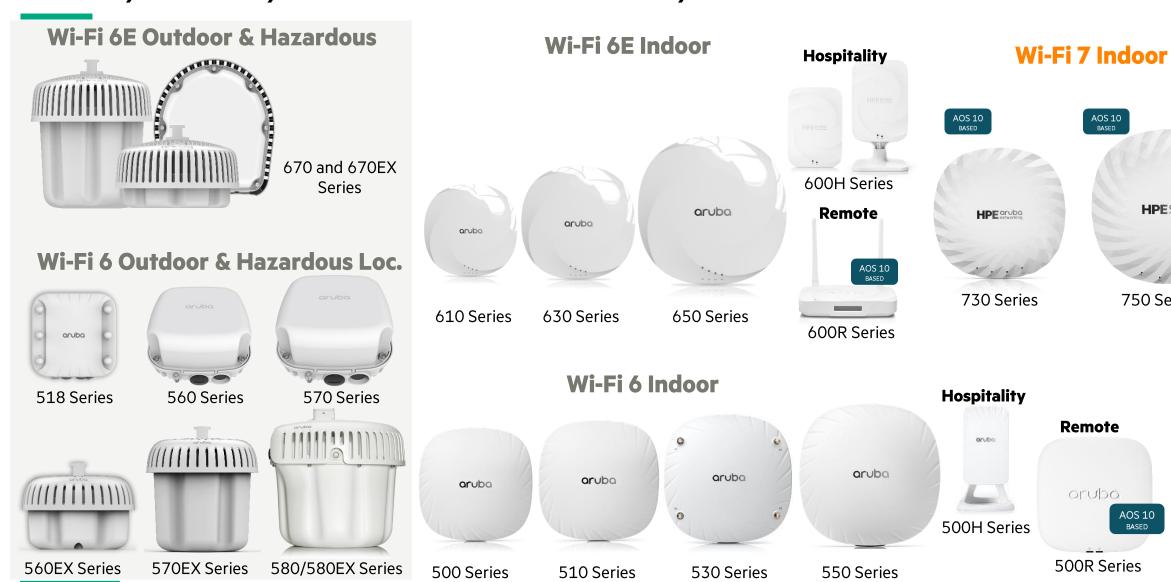
- VM-Ware NSX Alternative
- Datacenter Applikations-Visibilität
- Mikrosegmentierung im DC
- IPSEC Datacenter Interconnect
- Collapsed Core für den Mittelstand



Wireless



Wi-Fi 6, Wi-Fi 6E, and Wi-Fi 7 APs for indoor, outdoor & remote use



orubo

AOS 10

AOS 10 BASED

HPEaruba

750 Series

7XX Series Access Points



Mid-Range: 730 Series (AP-735/734)

Tri-band 2x2 Flex Radio

- Options for dual 5 Ghz (5/5/6) or Dual 6 Ghz (5/6/6)
- Peak combined 14.4 Gbps (Dual-6 GHz mode)
- Typical combined 4.7 Gbps (20/80/160, tri-band mode)

Dual 5 Gbps Ethernet Ports (PoE failover)

• Class 5 802.3bt or 802.3at w/IPM support



Flagship: 750 Series (AP-755/754)

Tri-band 4x4 Flex Radio

- Options for dual 5 Ghz (5/5/6) or Dual 6 Ghz (5/6/6)
- Peak combined 28.8 Gbps (Dual-6 GHz mode)
- Typical combined 9.4 Gbps (20/80/160, tri-band mode)

Dual 10 Gbps Ethernet Ports (PoE sharing)

 Class 6 802.3bt or Class 5 802.3bt/802.3at w/IPM support





AP als Wireless Access Platform

Reduzieren Overlay-Infrastruktur, um verschieden Konnektivitätsanforderungen zu unterstützen

802.11ax (Wi-Fi 6) Radio



WAY

FINDING

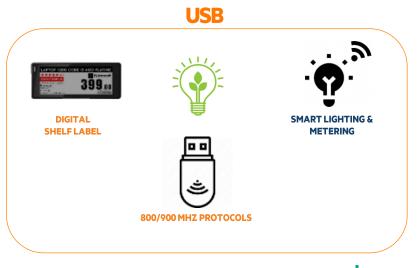




- Reduce complexity by replacing overlay IoT infrastructure
- Transport IoT data over Aruba WLAN
- Deliver IT and OT visibility in one central location

802.15.4 / Zigbee





HPE Aruba Networking 100 Series Cellular Bridge



Cloud-managed cellular wireless bridge for internet connectivity





HPE Aruba Networking BR-150

- High-performance 5G cellular speeds for primary, secondary or backup WAN connectivity
- Supports 5G, LTE (4G), and private cellular including CBRS bands.
- Certified by major public cellular providers...
- Cloud-based management and control with new HPE Aruba Networking Central.
- High-speed wired connectivity with 2.5 Gbps Ethernet ports.
- Compact model powered by PoE or DC power.
- Additional environmental protection with optional IP55 Transformation kit (sold separately).



Secure Connectivity - SASE

Secure Access Service Edge: sicherer & performanter Zugriff auf Ressourcen

SASE

HPE Aruba Networking

EdgeConnect SD-WAN

beste Performance, dynamisches Routing & notwendige On-Site Security



HPE Aruba Networking

EdgeConnect SSE

Sicherer Zugriff für User & gleichzeitiger Schutz von Ressourcen - ortsunabhängig

- Advanced, Secure SD-WAN
- Dynamic Routing
- WAN Optimization
- Next Generation Firewall
- IDS/IPS
- DDoS Protection
- Advanced Segmentation

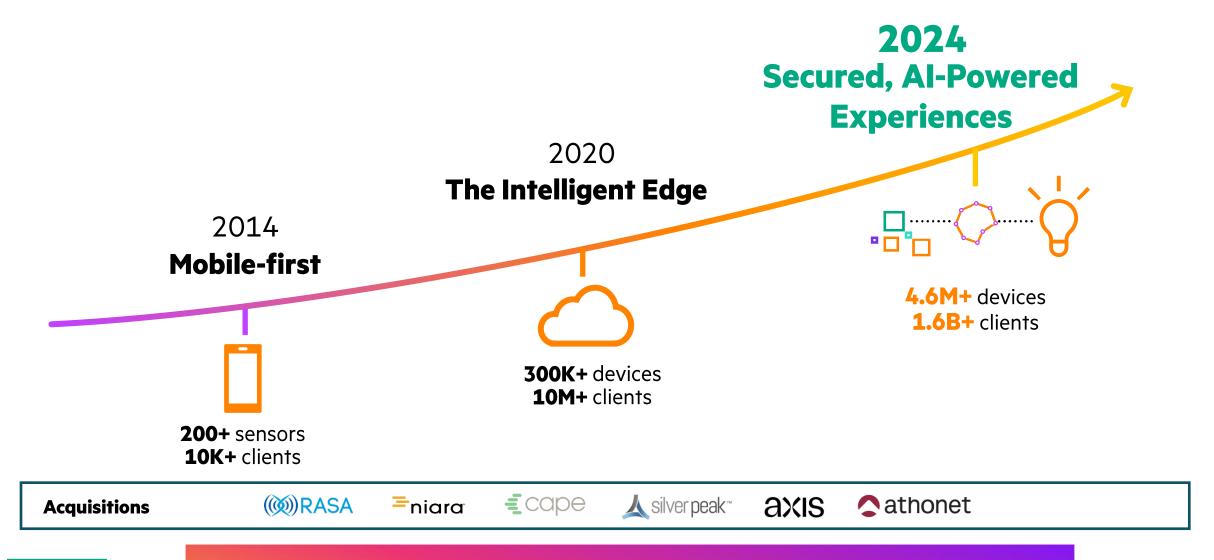
- Zero Trust Network Access
- Cloud Access Security Broker
- Secure Web Gateway
- Remote Browser Isolation
- Data Loss Prevention



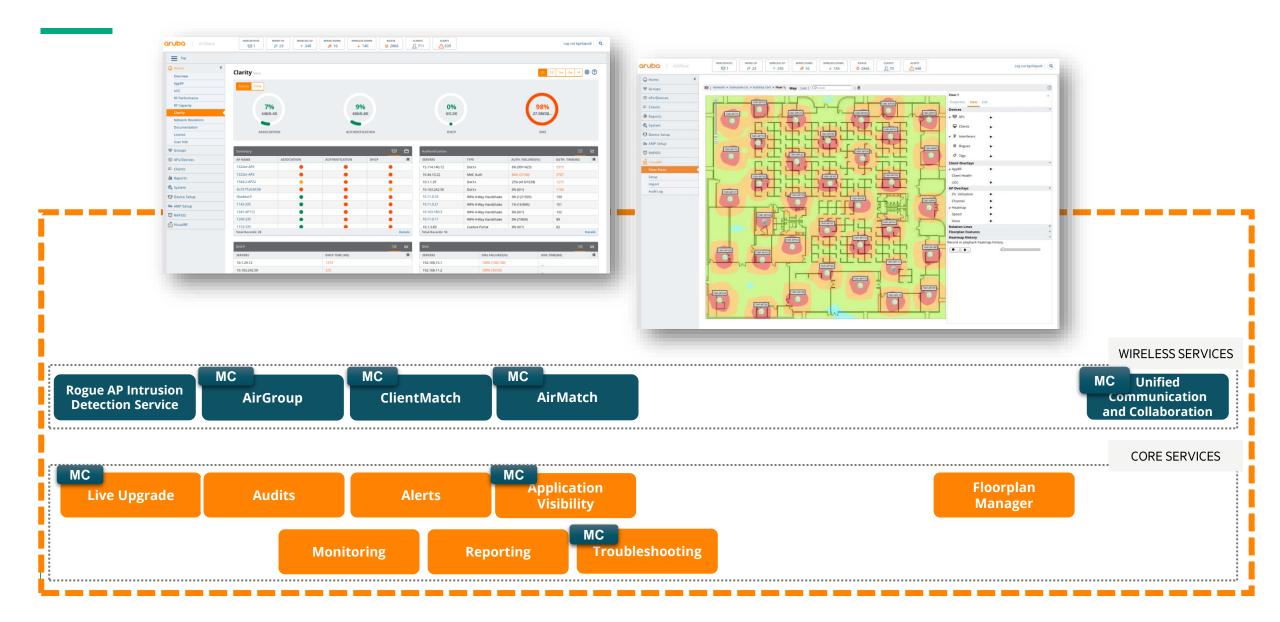
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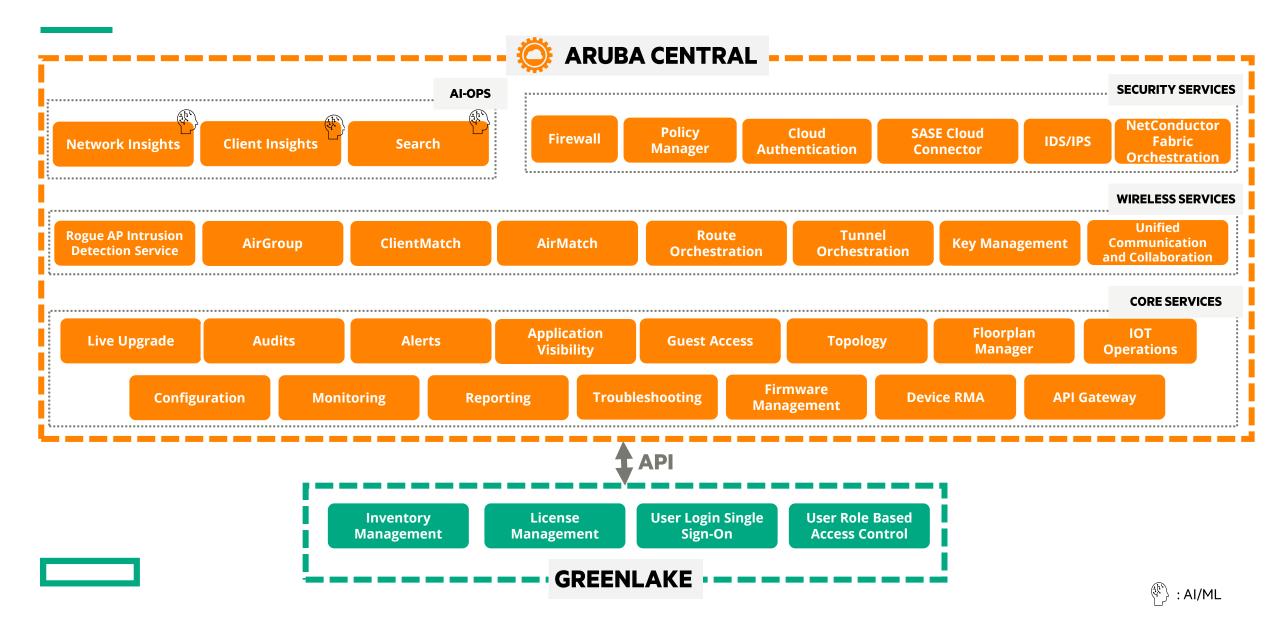
Evolution of Central



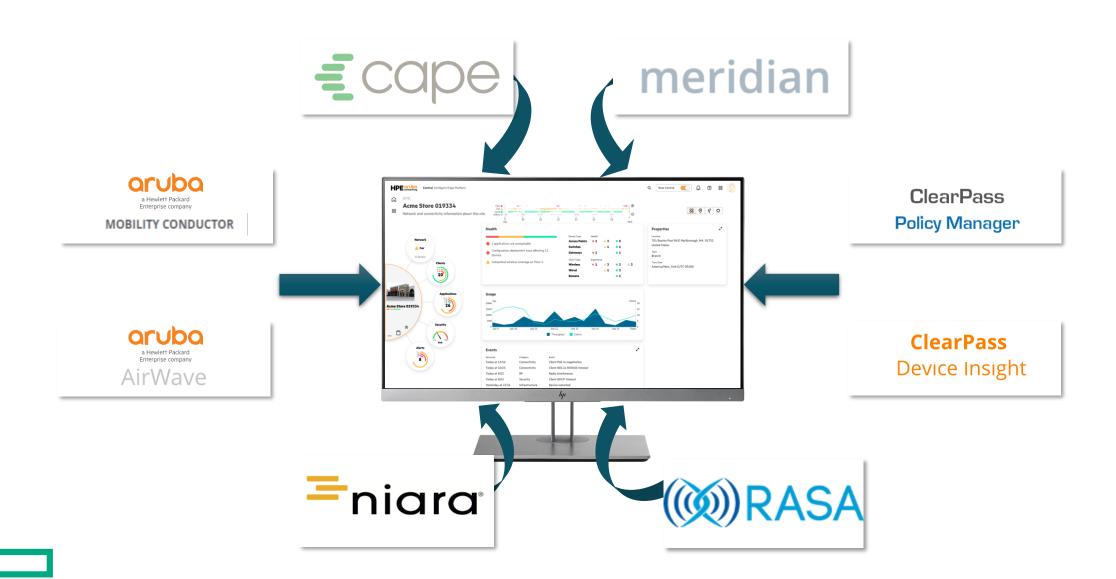
AirWave & Mobility Conductor Primary Features



HPE GreenLake & Aruba Central applications, delivered and managed in SaaS



New Central: The Best From the Past and the Future

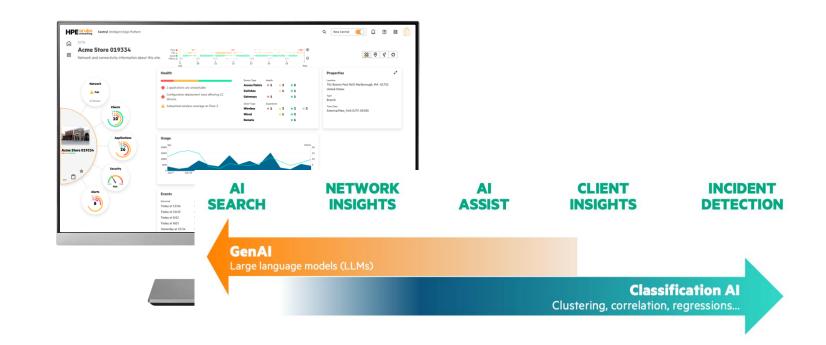


New Central: Learns from the Industry's Largest Data Lake









Introducing the next generation of Central



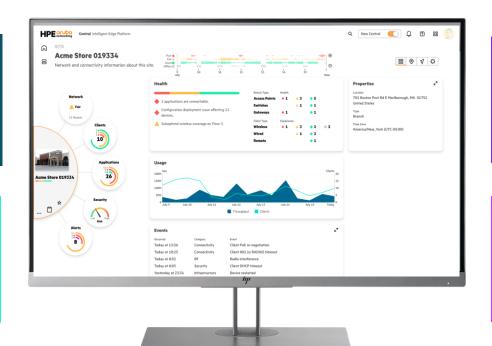


Maximize IT efficiency

Contextual representation of data based on **user-intent**, minimizing manual correlation

Operational simplicity

Software-defined, intent-based and **device agnostic** configuration workflows



Reduced MTTR

Powerful troubleshooting tools, and Al-driven pragmatic assistance for **faster root cause analysis**

Enhanced programmability

API-first model for interoperability and automation

New Central

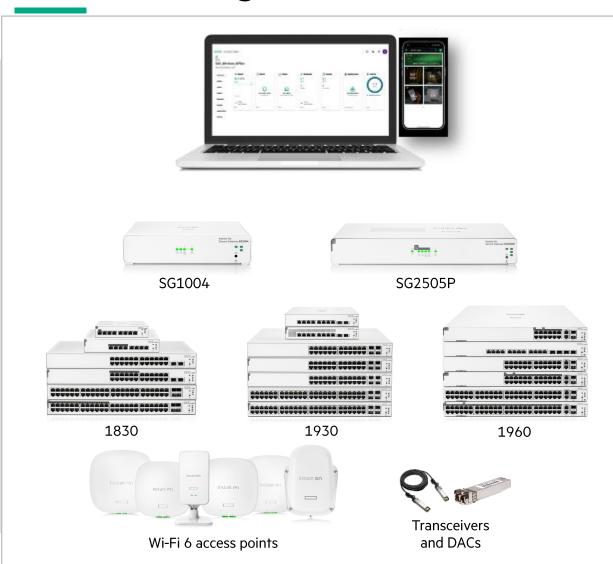
DEMO TIME



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HPE Networking Instant On end-to-end networking solution





Single pane of glass

Common user experience for Instant On switches and Access Points



Common workflows

Automatic configuration of VLANs across APs and switches



Managed firmware updates

Automatic distribution/ installation of maintenance software for bug fixes / security enhancements



Topology view

Intuitive map of all Instant On devices deployed in a network



Remote management

Remote monitoring and management of your network

Unmanaged switches

No configuration or management required for the smallest networks



1430

HPE Networking Instant On Secure Gateways



HPE Networking Instant On Secure Gateways

Key features

Firewall

 Protect against security breaches and limit the origin & destination of the traffic reaching & leaving your network.

IDS/IPS

 Inspect flows and prevent malicious traffic beyond the address or domain flows originate from.

Encryption

- Securely VPN connects workplaces over un-trusted domains.
- Regulatory compliance and sensitive data transmission.

Uninterrupted internet and cloud business access

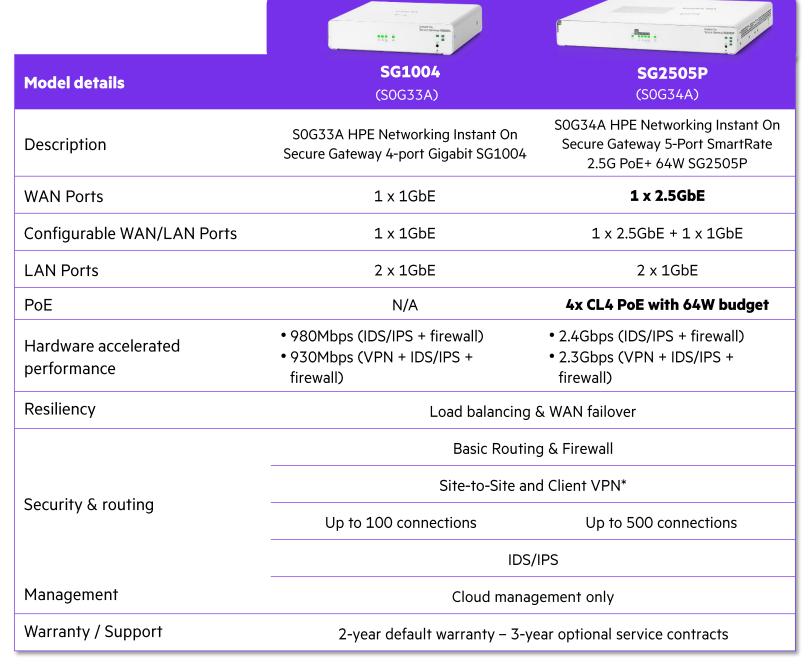
WAN Resiliency

Automated multi-ISP WAN resiliency failover

Instant On end-to-end cloud management

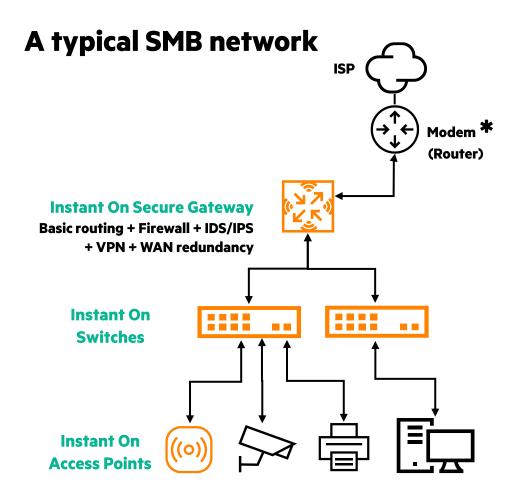
Instant On Secure Gateways

- Crypto future-proofness from TPM 2.0
- Up to 2.5Gbps hardware accelerated connectivity throughput per SMB site
 no downgraded network performance
- Business resiliency from multiple WAN links and ISPs
- Instant On cloud management portal famous Ease-of-Use expanded to endto-end zero-trust network security



^{*} Some features highlighted will be introduced through future software updates.

The HPE Networking Instant On Secure Networking Solution



Instant On Benefits



All in one network security, from workplace perimeter to network access control and cloud access security



Single vendor single seat management for end-to-end secure network



Intent networking from End-to-end security policies from Instant On cloud platform



The full devices capabilities at **no additional** cost as always



Two gateway models for SMB customers scale, performance, and pricing requirements

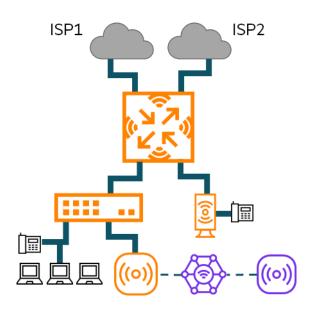


Competitive TCO with robust feature set and rich roadmap

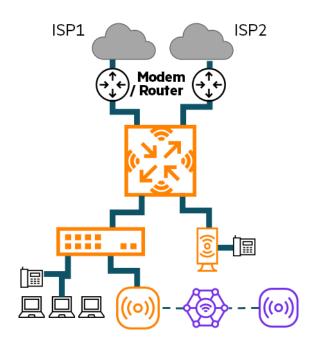
^{*} Optional - Modem will be needed for conversion of cable/fiber to ethernet and could be skipped for deployments that have ISP connectivity with Ethernet

Deployment Scenario

One gateway per site



Each SMB network infrastructure needs security



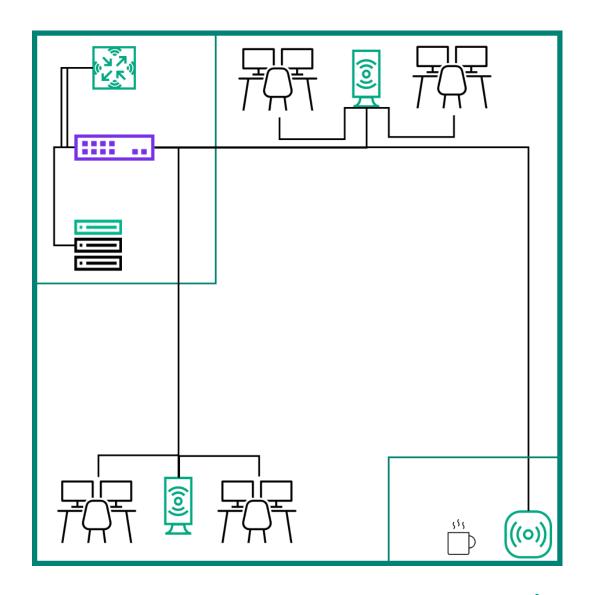
- Direct Ethernet connectivity
- WAN resiliency, automated failover, load balancing
- All security managed with Instant On cloud portal 'Ease of use'

- Non-Ethernet connectivity or the Ethernet ISP device can not be replaced
- Instant On secure gateway may be deployable to raise SMBs' networking security
- Partner shall have expertise to design security across multiple systems

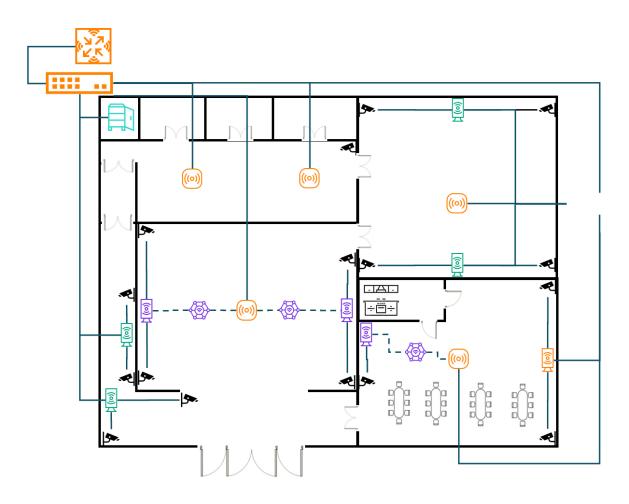


Small or sub-1G bandwidth environments - SG1004

- For small businesses with less than 1Gbps of ISP throughput [ex: accounting firms, insurance agencies]
- Employees are seldom mobile, and guests are limited
- These service companies handle critical customer information and require the same level of security as large businesses
- Network protection without ISP throughput impact thanks for hardware acceleration
 - Business protected from ransomware and phishing scams
- Power it all with the Instant On 1830 switch series
- Support laptops, phones, and personal wireless devices with Instant On AP22D and Instant On AP21

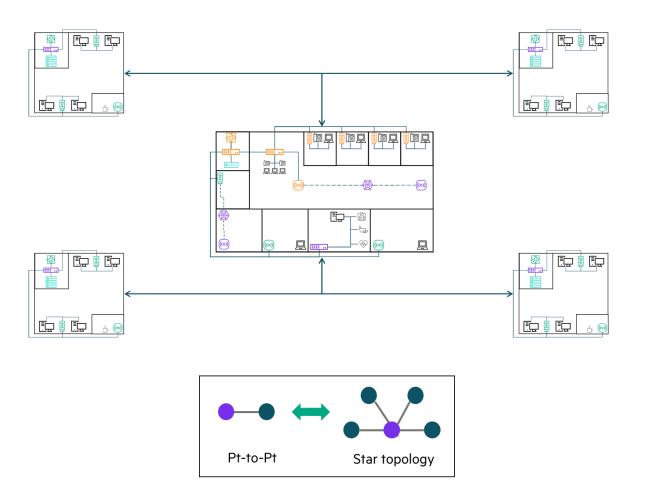


Moderate or high bandwidth deployments - SG2505P



- SMBs with dozens of employees and guests
- Keep the business-critical information safe from bad actors
- Protect guest and customer information without ISP throughput impact thanks for hardware acceleration up to 2.3Gbps
- Great for businesses with diverse user groups: event venues, large restaurants, or shared workspaces
- Instant On Secure Gateway SG2505P makes web use worry free and protected from malware or ransomware
- A complete solution with Instant On Switch Series 1960 and Instant On Access Point AP22D and AP25
 - Built-in security: 802.1X RADIUS, Captive portal, and ACLs

Multiple sites connecting to HQ



- Midsized businesses often have multiple locations
- Hospitals with regional clinics
- Secure access to centrally stored Electronic Medical Records (EMR)
- Deploying Instant On secure gateways ensures encrypted data transfer over the untrusted WAN
- Single click connectivity between sites from secure VPN(s) and protection against threats with built-in firewalls
- Pair with Instant On Switch Series and Access
 Points for unified and worry-free management

HPE Networking Instant On Access Points



The small business Wi-Fi CERTIFIED 6™ portfolio

Indoor Access Points

Desk-mounted Access Points

Outdoor Access Points



Instant On
Access Point AP21
2x2:2 802.11ax





Instant On
Access Point AP22
2x2:2 802.11ax





Instant On
Access Point AP32
2x2:2 802.11ax





Instant On
Access Point AP25
4x4:4 802.11ax





HPE Networking Instant On Access Point AP22D Desk/Wall 2x2:2 802.11ax



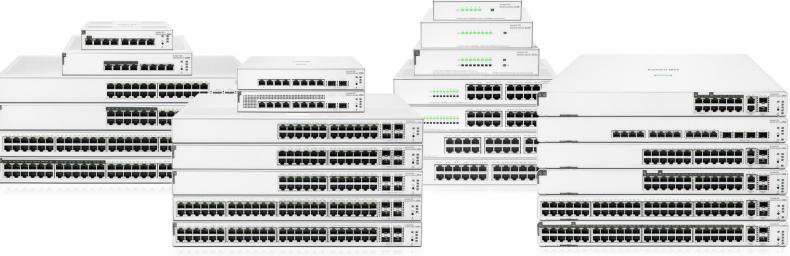


HPE Networking Instant On Access Point AP27 IP67 Outdoor 2x2:2 802.11ax

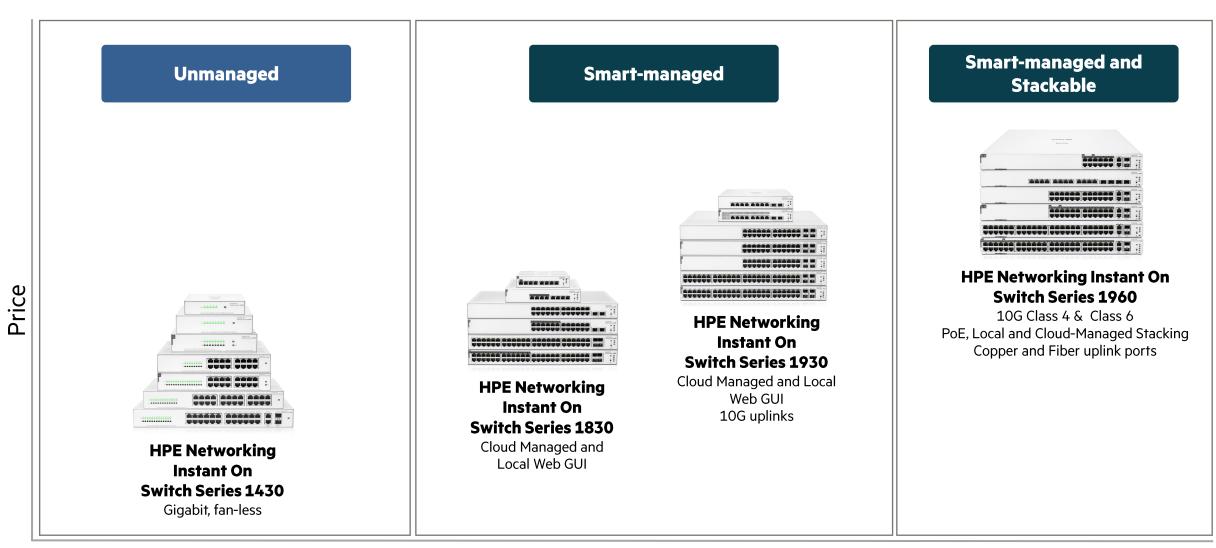




HPE Networking Instant On Switch Series



HPE Networking Instant On wired portfolio





Manage your site, from anywhere, any time

HPE Networking Instant On cloud management platform – simplicity

Cloud-managed stacking

Easily auto-discover and onboard an entire switch stack with streamlined workflows

Simplified Smart Mesh setup

Add additional access points and extend you network without additional Ethernet cabling

Guided device setup

Easily add access points and switches to your network with the integrated installation wizard

Hassle-free deployment

Make Instant On the primary Wi-Fi router for your network. Connect your access point to your modem, and you're all set









Important Facts for ION

- number of unlimited site (Recommended limit: 150 sites for best experience)
- maximum of 8 wireless networks (SSIDs) on a site
- maximum of 22 wired networks (VLANs) on a site
- limit to 25 management accounts per site
- maximum of 125 devices (mix of APs & Switches) per site
- Instant On does integrate with ClearPass:
 - no Role based concept
 - 802.1X Authentication and Dynamic VLAN Assignment works

Thank you