HPE Aruba Networking
Data Center Switching Sales Play and Opportunities

Tony Low, Data Center Sales
John P. Gray, Sr. Global Product Marketing Manager

Before we begin…

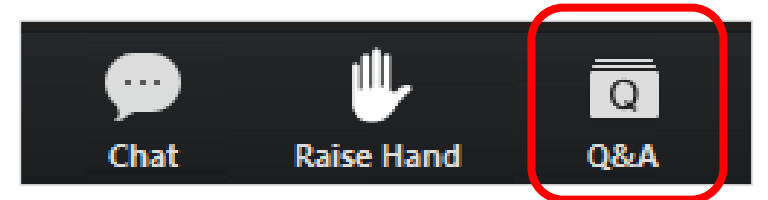- Listen by computer audio or dial-in

- All lines are muted during the webinar

- Ask *questions by selecting "Q&A"* and to report any webinar difficulties

- Webinar is being recorded & will be emailed to all attendees

Partner Sales Webinar Series
Win More Deals with HPE Aruba Networking's Next-Gen Data Center Switching Portfolio

Session 1: Data Center Switching Sales Play and Opportunities
Tuesday, March 12th at 11 AM PT / 2 PM

Session 2: Beat the Competition with Aruba's New Data Center Switching Solutions
Tuesday, April 9th at 11 AM PT / 2 PM ET

Session 3: Win More Data Center Switching Deals with Unique Differentiation and Best Practices from the Field
Tuesday, May 7th at 11 AM PT / 2 PM ET

(Click here) to register for the webinar series

Today's Agenda

1 Data Center Trends and Challenges

2 HPE Aruba Networking Data Center Solution Overview

3 HPE Aruba Networking Sales Plays

4 How to engage and handle objections

5 Key Takeaways and Additional Resources

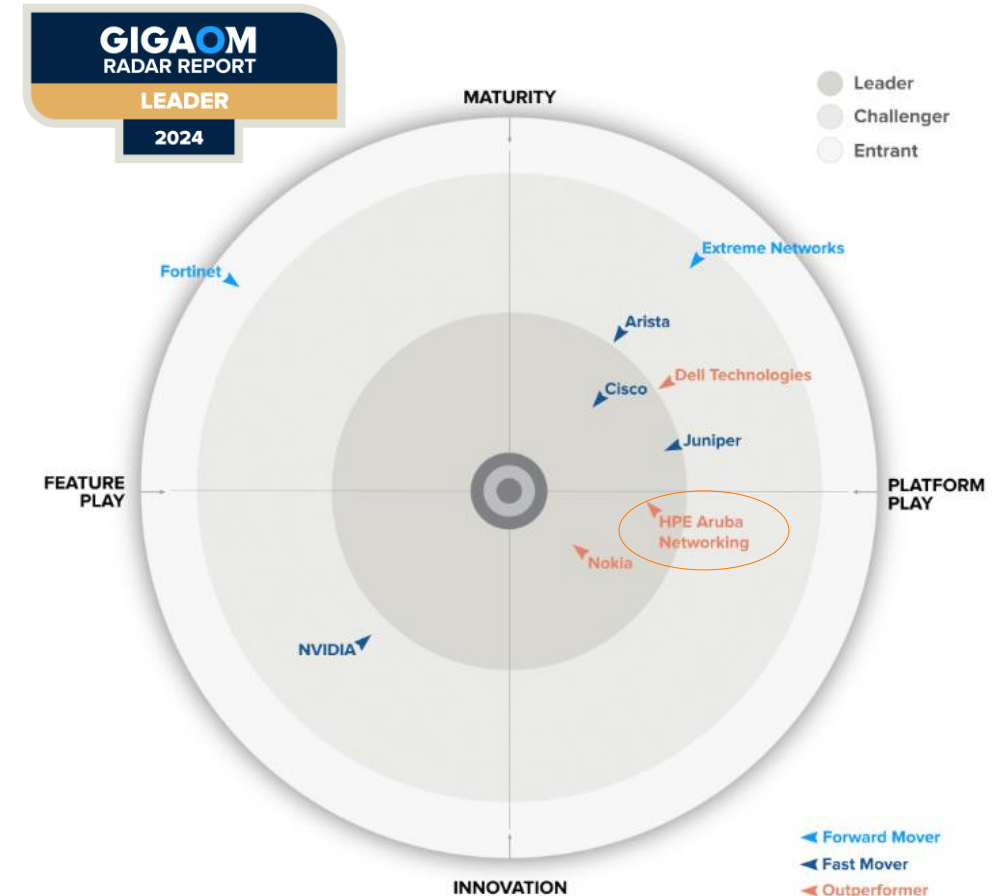# HPE Aruba Networking - Data Center Industry Recognition

QR - Get the Reprint

"One of HPE Aruba's differentiating features is its Distributed Services Switch, which provides stateful firewall services at every top-of-rack configuration ..."

Data Center 50:
The Coolest Data Center Companies of 2023

HPE Aruba Networking CX 10000

HPE ARUBA
EDGE TO CLOUD LEADERSHIP

$28.4 Billion Revenue
$870 Million Net Income
GreenLake Growth +97% YoY
Channel GL Growth +112% YoY
SI GL Growth +151% YoY

HYBRID CLOUD WORKLOADS

#1 WORLDWIDE TOTAL **SERVER** REVENUE[1]

#1 WORLDWIDE TOTAL **HPC** REVENUE [2]

#1 PROACTIVE STORAGE SUPPORT INFOSIGHT[3]

#2 WORLDWIDE TOTAL **STORAGE** REVENUE[4]

#2 WORLDWIDE TOTAL ON-PREMISE **PRIVATE CLOUD INFRASTRUCTURE** REVENUE[5]

#1 OF THE **TOP 500 SUPERCOMPUTERS**[6]

INTELLIGENT EDGE

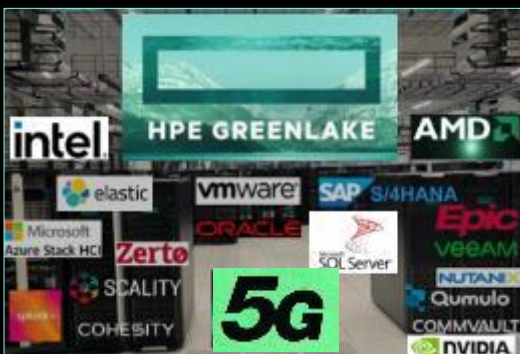**#1** GARTNER - HIGHEST SCORE FOR 5 OUT OF 6 USE CASES FOR **WIRED & WIRELESS LAN** ACCESS Out of 17 vendors[7]

#1 WORLDWIDE NEXT GENERATION **WLAN** (802.11AX) REVENUE[8]

#2 WORLDWIDE **WIRELESS LAN AND CAMPUS SWITCHES** (Excluding China)[9]

#1 IT TECHNOLOGY RENEWAL CENTER & REMARKETER OF IT ASSETS
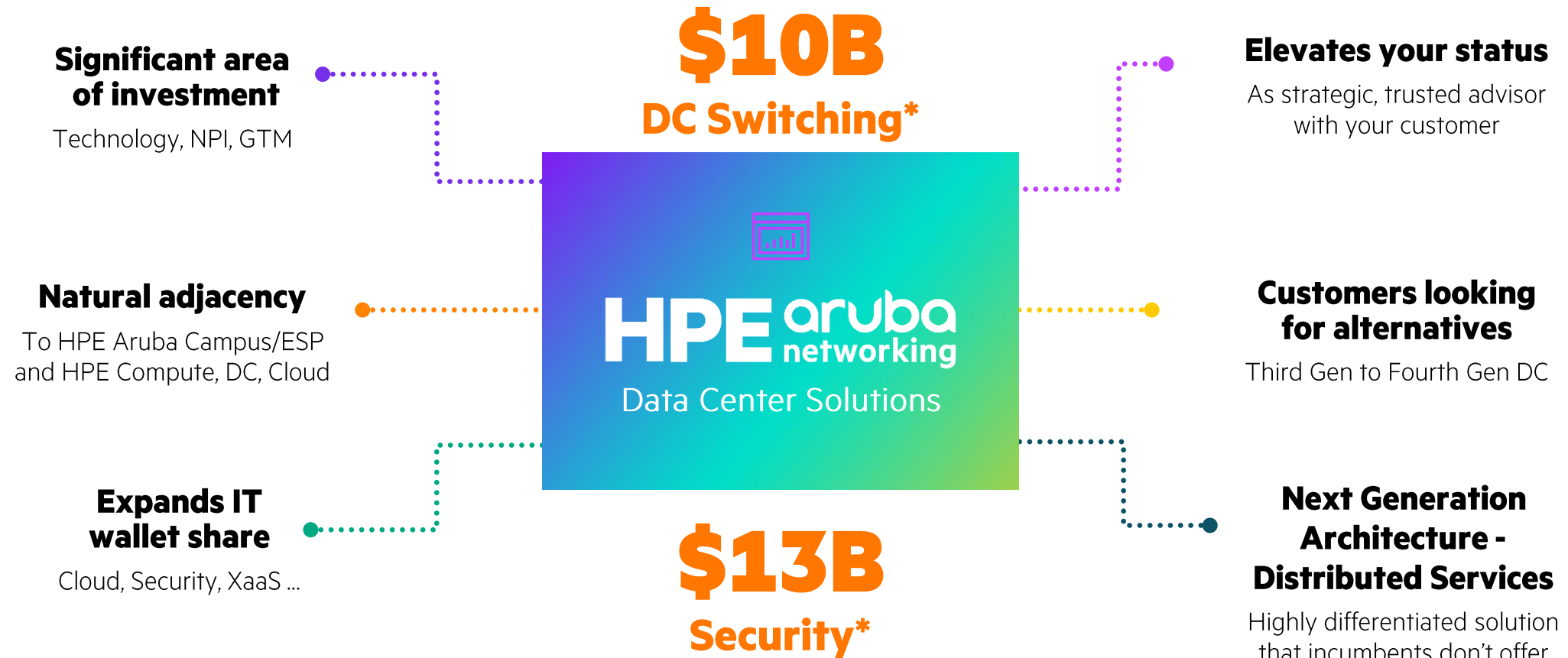
1ST IN INDUSTRY TO PROVIDE CIRCULAR ECONOMY TRACKING

#2 IT CAPTIVE **FINANCING** COMPANY

Leading Edge to Cloud Advisory and Management Services

Why Partner with
HPE Aruba Networking in the Data Center?

$10B
DC Switching*

$13B
Security*

HPE aruba networking
Data Center Solutions

Significant area of investment
Technology, NPI, GTM

Natural adjacency
To HPE Aruba Campus/ESP and HPE Compute, DC, Cloud

Expands IT wallet share
Cloud, Security, XaaS ...

Elevates your status
As strategic, trusted advisor with your customer

Customers looking for alternatives
Third Gen to Fourth Gen DC

Next Generation Architecture - Distributed Services
Highly differentiated solution that incumbents don't offer

*10/25/100/400 GbE , Leaf-Spine Switching, DC security adjacencies Enterprise Market - IDC

2024 Data Center / IT Trends and Challenges

Generative AI - board level IT investments in apps, GPU based servers, and supporting infrastructure (200/400GbE) AI "Clusters"

Ongoing IT/DC/App modernization driving "traditional" compute, storage, network refresh cycle (reduce risk, increased availability, BC/DR)

Security (Zero Trust) **–** improving visibility, telemetry, unifying policies and control

Simplifying operations, lowering cost – IT automation, unifying Netop/SecOps. Budget/ spending re-prioritize (needing compelling ROI).

Customers are also telling us

Simpler IT

If I could get help and expertise with the routine stuff, our people could do so much more.

Evolving Roles

Our personnel is asked to do more than traditional networking or IT.

Business agility

I need to move a lot faster – if IT could only be ahead of business initiatives for once.

Lower IT costs

I need to align our costs to business benefits, and I'm constrained by our budget.

Proper control

I'm worried about our ability to control performance, security, compliance, and our data.

HPE Aruba

**Delivering Next Generation
High Value Data Centers**

POLL

Simplification and accelerate service delivery and security

HPE Aruba Networking delivers modern networking solutions for "Centers of Data" connectivity

Cloud native switching architecture

Software-defined fabric automation / orchestration

Distributed services architecture

HPE Aruba Networking IT integration (compute, storage, HCI, SAP, HPE GreenLake …)

UP TO 35% LOWER TCO optimized form-factors and licensing

UP TO 10X FASTER provisioning vs traditional manual CLI models

UP TO 100X SCALE vs traditional centralized DC designs

Unified Infrastructure, edge-to-cloud

Data center—leaf-spine, 25/100/400G,
On premises, private cloud, colocation

Core

HPE Aruba Networking CX 10000

HPE Aruba Networking CX 9300

Aggregation

HPE Aruba Networking
CX 8400

HPE Aruba Networking CX 8360/8100

HPE Aruba Networking CX 8325

HPE Aruba Networking CX 6300M
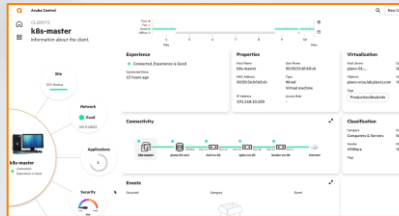
HPE Aruba Networking
CX 6400

Access

HPE Aruba Networking
CX 6X00

HPE Aruba Central and AOS CX

Common operating model - campus edge to DC, cloud managed

AOS-CX
Built on cloud-native principles

Modularity

Faster innovation with independent processes

Programmability

Simplified operations through automation

Resiliency

Stable and reliable microservices design

Elasticity
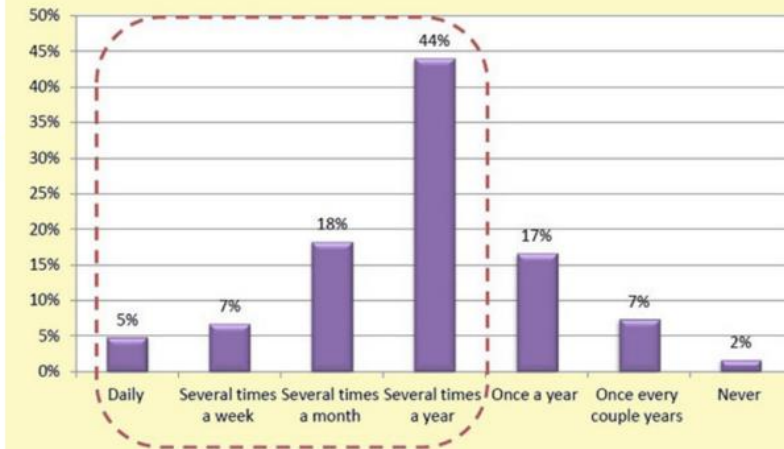
One operating model from edge access to data center

Gartner

Accessible from System, NMS or Cloud

Aruba Network Analytics Engine

Time-Series Database

100% REST APIs

State Database

Microservices Architecture

AOS-CX
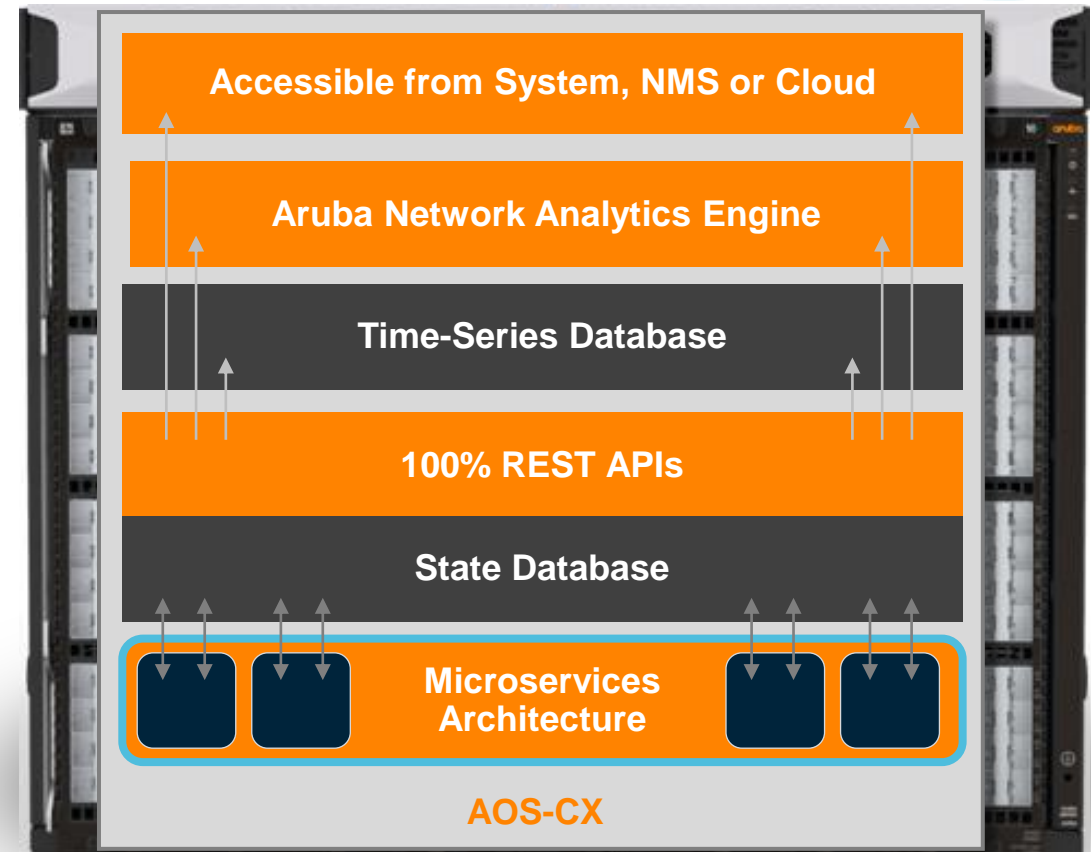
Top 10 Causes of Outages

1. Faults, errors or discards in network devices

2. Device configuration changes

3. Operational human errors and mismanagement of devices

4. Link failure caused due to fiber cable cuts

5. Power outages

6. Server hardware failure

7. Security attacks such as denial of service (DoS)

8. Failed software and firmware upgrade or patches

9. Incompatibility between firmware and hardware device

10. Unprecedented natural disasters and ad hoc mishaps on the network such as a minor accidents, or even as unrelated as a rodent chewing through a network line, etc.

Frequency of network changes that lead to an outage or performance issue

Category	Percentage
Daily	5%
Several times a week	7%
Several times a month	18%
Several times a year	44%
Once a year	17%
Once every couple years	7%
Never	2%

Analytics and Automation Powered Network Operations

Automated config management with Aruba NetEdit

Search

Edit

Validate

Deploy

Audit

Troubleshoot
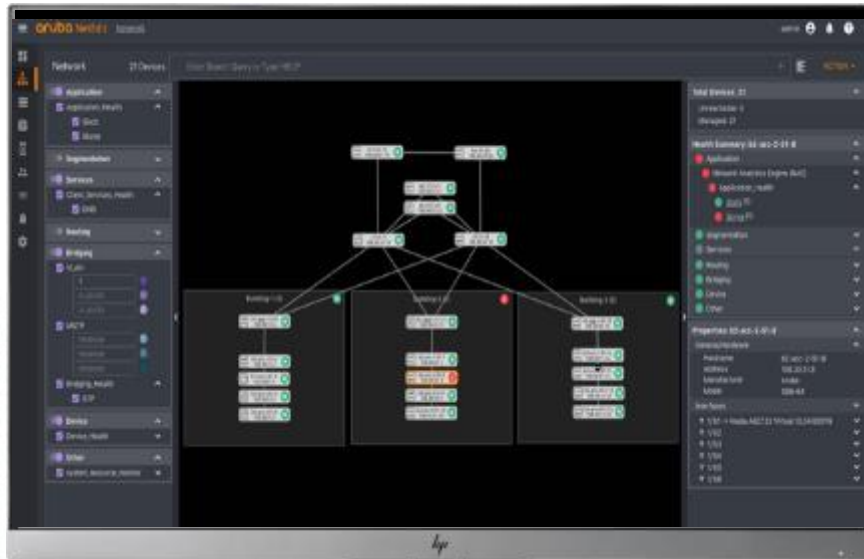
Aruba CX Mobile App

Management Simplicity

- Topology for fast view into network health, including devices with config issues
- GUI-driven solution configs to implement common configurations easily across multiple systems
- Auto-Change Verification to minimize change windows and reduce errors
- Continuous Validation to monitor for deviations from intended policy or design

Visibility and Analytics via NAE

- Embedded analytics with real-time health status and diagnostics for efficient root cause analysis
- Health reports on devices, apps, and network services
- Script tags indicate what layer is contributing to issues, speeding root cause analysis

Workflow Integration with 3rd Party Tools

- Immediate notifications from Slack, TOPdesk, ServiceNow, etc.

One Touch Deployment with Aruba CX Mobile App

- Accelerate day zero config, view and manage using your mobile device

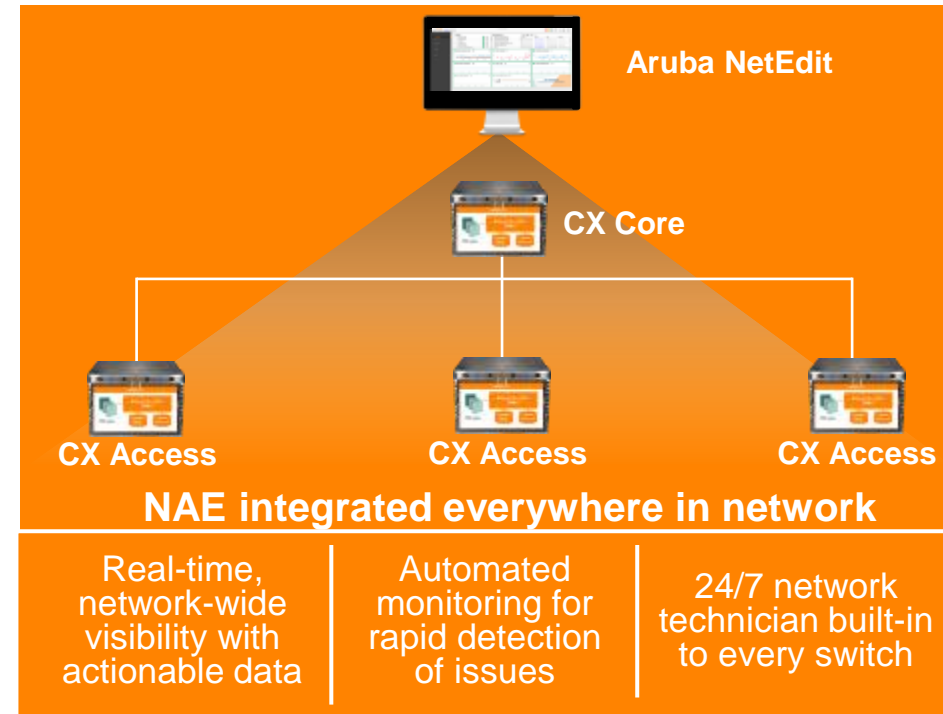# Turning Network Telemetry into Actionable Insights

Intelligent pre-processing with Aruba Network Analytics Engine

Legacy Approaches

Probes and Show Commands	Telemetry Streaming	Third-Party Monitoring Tools
Needle in the haystack	Latency and large, unfiltered data sets	Manual correlation and limited actionable insights
Difficult to recreate and/or identify issues	Delays in data processing and analysis	Resource intensive with longer MTTR

vs

Aruba CX Approach

Aruba NetEdit

CX Core

CX Access   CX Access   CX Access

NAE integrated everywhere in network

Real-time, network-wide visibility with actionable data	Automated monitoring for rapid detection of issues	24/7 network technician built-in to every switch

Simplifying the Operator Experience
From Day 0 through Day 2 operations

Install a new switch using mobile app and connect to management

New switch and its config are **automatically** imported

Resolve issues using always-on monitoring with built-in diagnostics and dynamic actions within every node

Manage, automate, validate, and verify configuration and network state including compliance

Aruba Fabric Composer

Data-first modernization requires a modern, next generation data center fabric

Data Centers Deployments – Made Easy!

Spine

Leaf

VXLAN Overlay
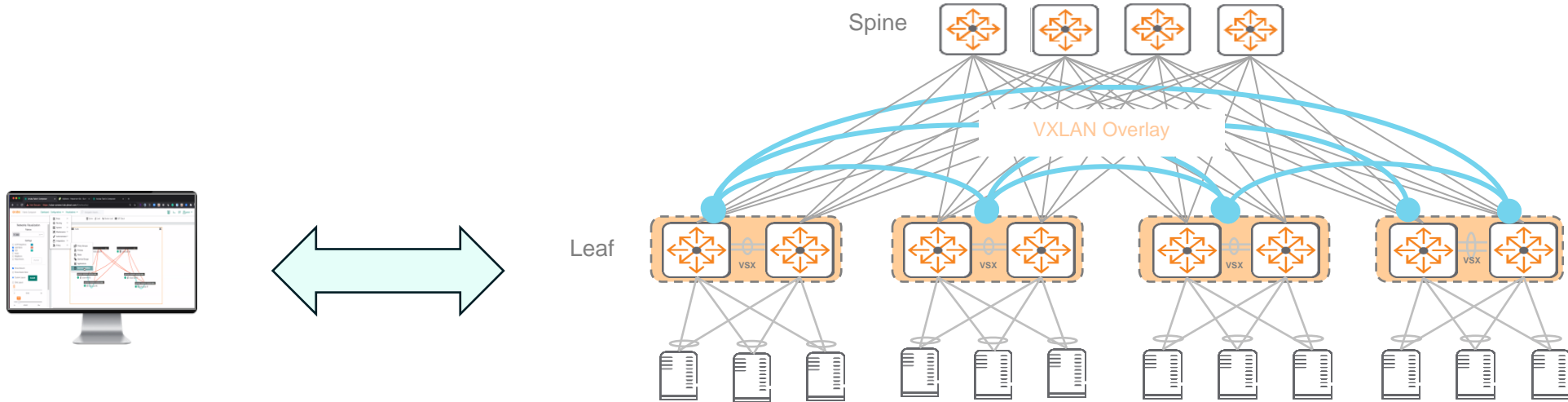
Automate deployments
Maintain, monitor & optimize

With less than 30 minutes of training, an engineer with basic networking knowledge can implement a complex topology in under 5 minutes.

Network and security policy automation with full visibility

Hyperscale-like efficiencies for enterprise DC/private cloud

- Deployment automation

- Easy-to-install API integration packs

- Automate everyday networking tasks

- Simplified troubleshooting

- Centralized policy management

- Real-time telemetry streaming

API ECOSYSTEM INTEGRATIONS

System console

Single API Integration point

3rd party automation and orchestration toolsets

Real-time telemetry streaming

Distributed stateful firewall, macro/micro-segmentation and real-time telemetry streaming

Machine learning & analytics
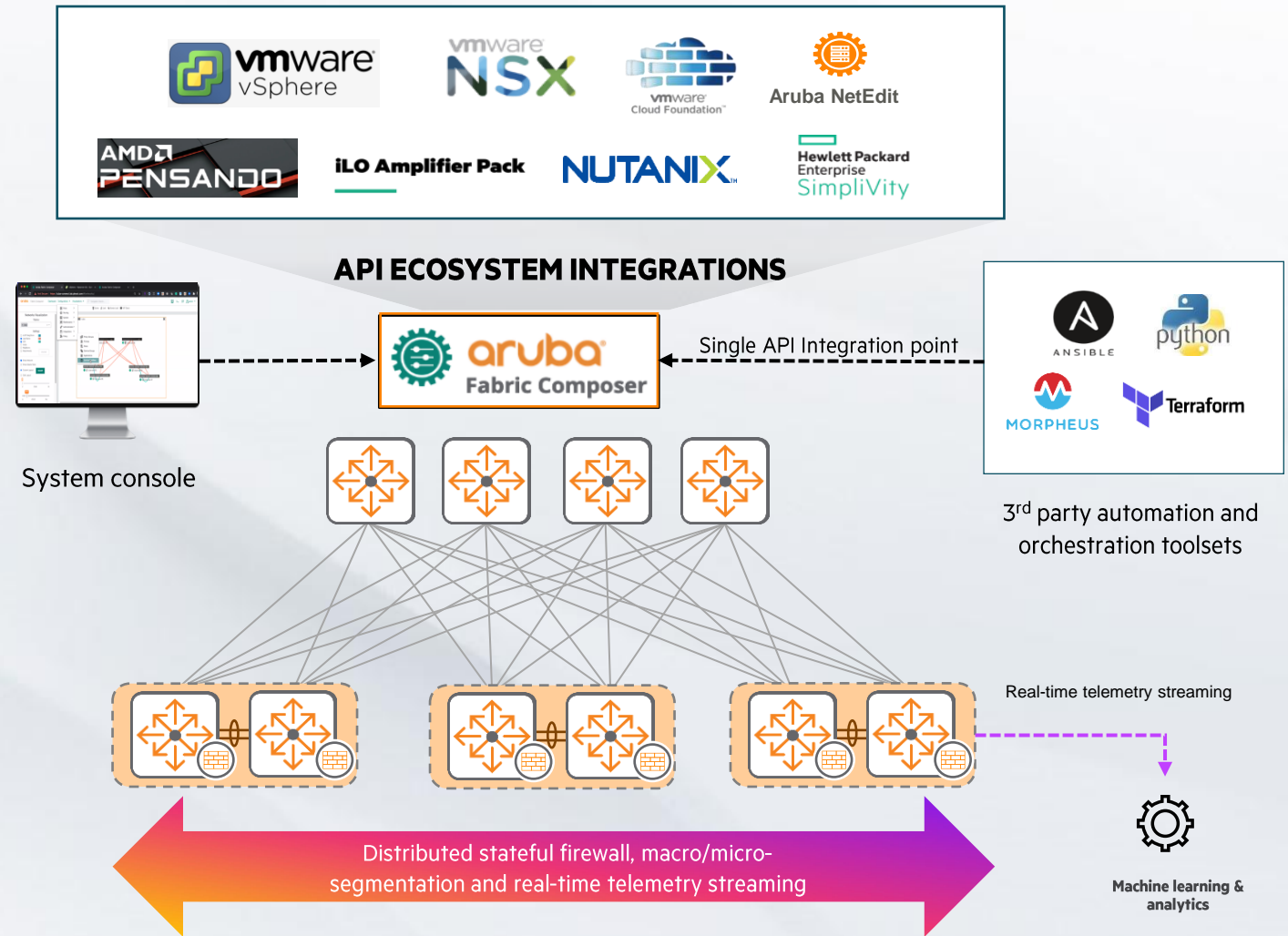
Automated VLAN Provisioning

Auto-Discovery & Configuration

- ESX Auto discovery
- Automated discovery of VMs, vSwitches, NICs, Port Groups
- Powerful end-to-end visualization of virtual and physical components

- Fabric optimization
- Visualization simplifies troubleshooting
- vSphere Plugin

VLAN Auto-Configuration

- Automatically respond to VM lifecycle events
- Auto-configure VLANs on Switch ports

- Learns & displays vswitches and PGs
- Supports VM migrations across switches

Create   Start   Move   VM Migrations   Shutdown

GUI and automation drives all

Dashboard includes information about fabrics, switches, hosts, VMs, …

Workflow Automations and Guided Setup

Network and Switch Visualizations

Integrations and End to End Host Visibility

THE POWER OF integration delivers automation and visibility

Custom Integration via StackStorm Marketplace
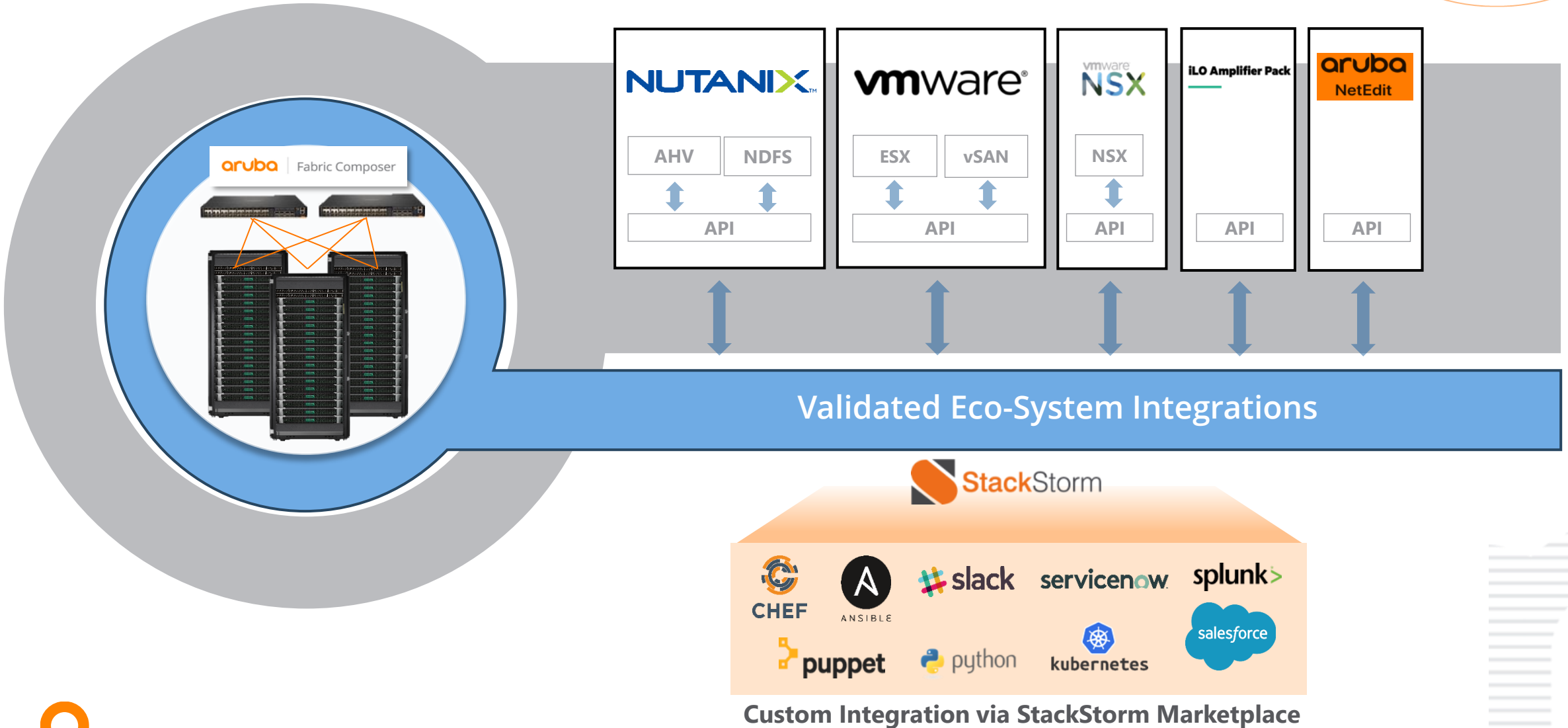
HPE Aruba

4th Generation Data Center Network Architecture

Data Center Network Architecture Evolution

1st generation

1990
Layer 2
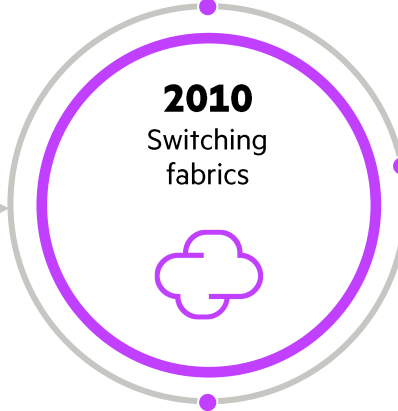switches
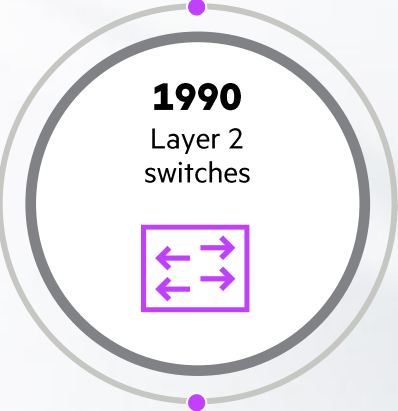
Flat networks, spanning
tree, protocol agnostics

2nd generation

2000
Layer 3
switches
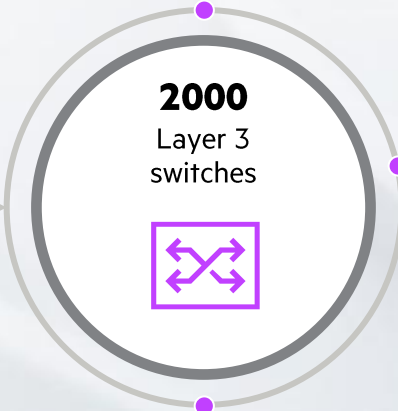
IP becomes the dominant protocol,
L3 switching

Core-distro-access designs

Mostly north/south traffic

3rd generation

2010
Switching
fabrics

Clos topology, spine-leaf underlay
and overlay, VXLAN/VTEPs

Built for east/west traffic

Centralized L4 Architecture
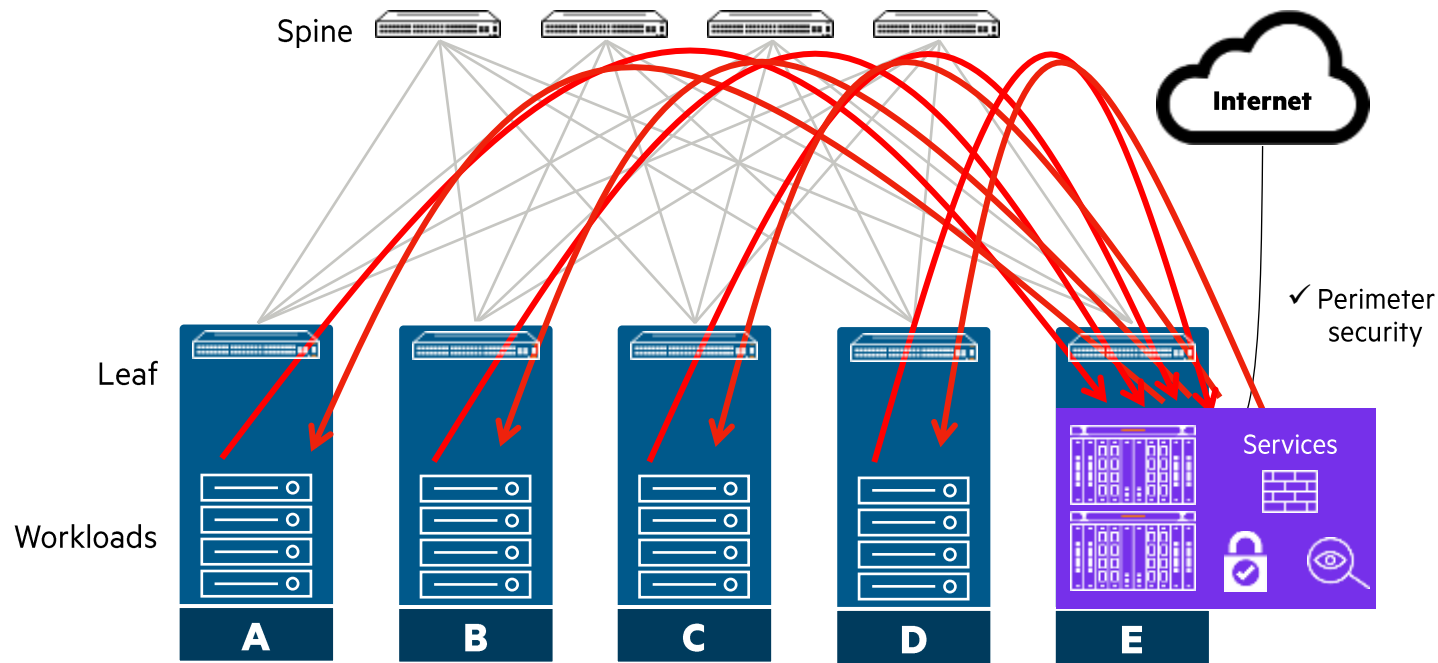
4th generation

2024+
Distributed
services
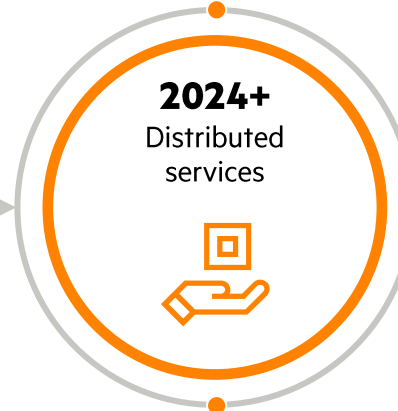
Spine-leaf underlay/overlay

Rich collection of wire rate stateful
services

No scalability limitations

**Security services collocated -
delivered inline/per port**

Third gen: centralized services architecture

Spine

Leaf

Workloads

A B C D E
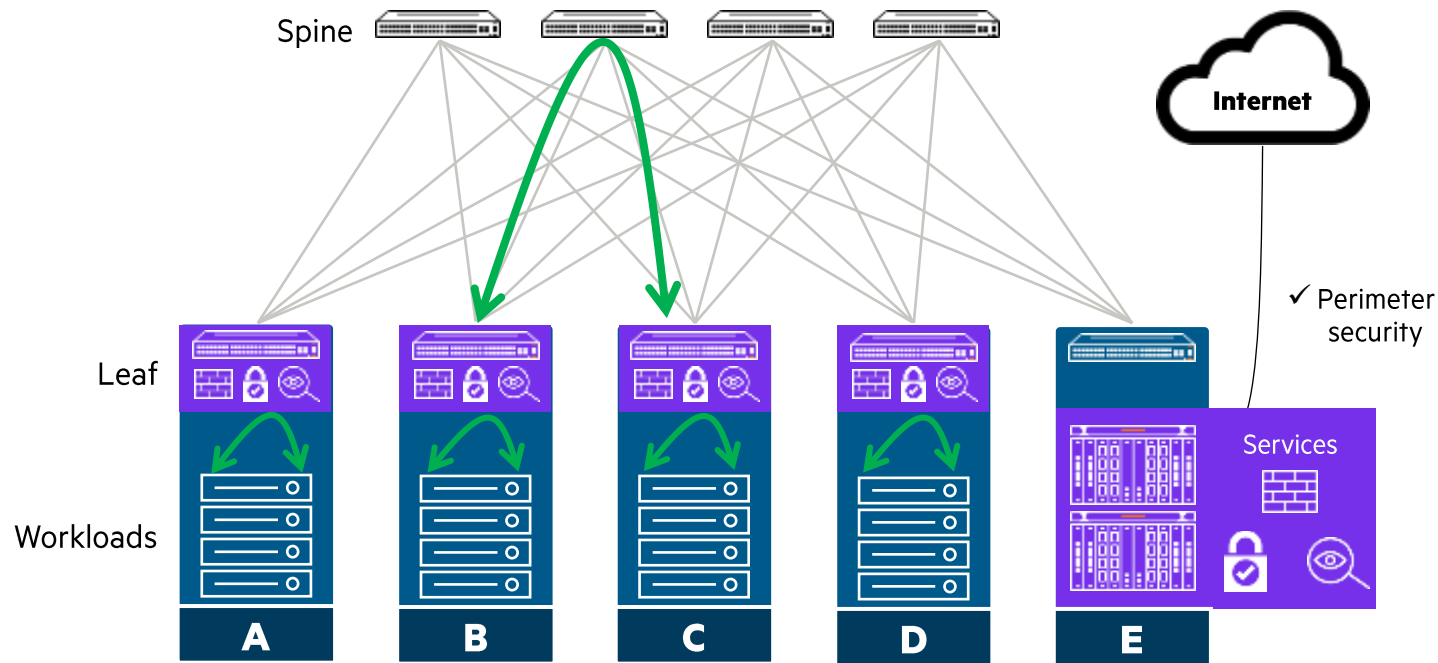
Internet

✓ Perimeter security

Services

Centralized services architecture

Design challenges

- Traffic having to hairpin to L4-7 services leaf/rack

- Unable to scale to match volume/velocity e-w traffic

- High and cost complexity (appliance sprawl, licensing)

Fourth gen: distributed services architecture

Spine

Leaf

Workloads

A   B   C   D   E

Distributed services architecture

Internet

✓ Perimeter security

Services

Design advantages

- Better security posture—firewall on every leaf port

- Lower TCO, cap/retire legacy appliances/software agents

- Real-time telemetry

- Automated network and security policy and provisioning

- Improved app latency/perform

Distributed services switch, a new switching category

HPE Aruba Networking CX 10000

AMD PENSANDO

L4-7 stateful software services
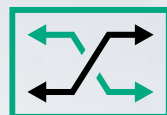
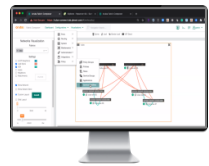| Firewall | DDoS | Telemetry | Encrypt | NAT | SLB* |

Full network functionality,
plus 800G firewall performance

A stateful firewall behind every switch port with built-in telemetry streaming

Eliminates/reduces need for appliances and host software, delivering 100x scale, 10x performance at 1/3 TCO
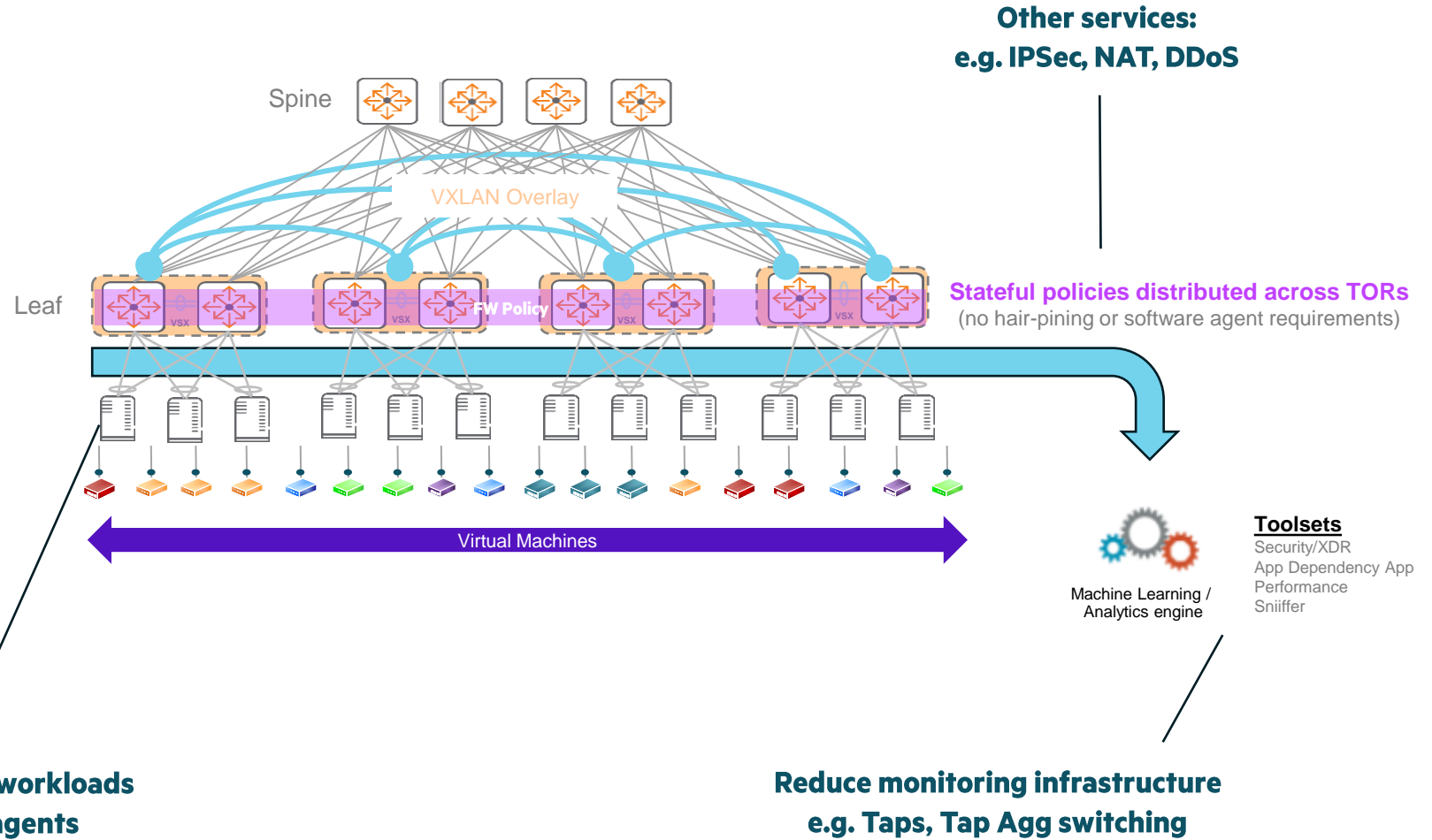
Enhance Your Data Center Ecosystem

Streamline operations

Spine

VXLAN Overlay

Leaf

FW Policy

VSX VSX VSX VSX

**Other services:
e.g. IPSec, NAT, DDoS**

Stateful policies distributed across TORs
(no hair-pining or software agent requirements)

Automate deployments
Maintain, monitor & optimize

Virtual Machines

Machine Learning /
Analytics engine

Toolsets
Security/XDR
App Dependency App
Performance
Sniiffer

**Optimize server workloads
e.g. Reduce agents**

**Reduce monitoring infrastructure
e.g. Taps, Tap Agg switching**

The TCO Advantage of
Fourth Generation Data Center Fabrics

3-Year TCO analysis - implementing Micro Segmentation (E-W Firewall)
across 500 servers, 24 racks, 400 Gbps/rack with 75% E-W traffic

Traditional/Legacy
Third Generation

Vs. ⟶

Next Generation
Fourth Generation

$2.69M
$321/Gbps

Key advantages
61% lower total cost
Superior 4th Gen design -
Higher scale/performance
Future service insertion

$1.05M
$125/Gbps

Traditional design configured with
Standard L2/3 Top-of-Rack switches and
Next-Gen Firewall appliances

HPE Aruba Distributed Services
Architecture using CX 10000 with
embedded stateful services

VMware Sales Play
Compelling Event: Significant Increase VWware License Cost, CX 10K Opportunity

Market discontinuity creates opportunity

- Broadcom acquisition & 2024 licensing changes causing significant customer disruption – *VMware used in ~80% of all data centers*

- New **vSphere Foundation** license doesn't include NSX micro-seg or distributed firewall (DFW) capabilities anymore

- Customers must now purchase **VMware Cloud Foundation** license to get NSX security features, ~200-300% + license renewal cost

- Customers opting to deploy lower cost vSphere option are seeking a micro-seg/firewall alternative

HPE Aruba Networking alternative

- CX 10000 provides a superior micro-seg/firewall alternative;
  - Higher performing (800G stateful firewall) with ZERO CPU server impact
  - Hypervisor agnostic and seamless deployment
  - Additional high performance security services; 400G IPsec, TAP and telemetry

VMware Cloud Foundation™

VMware vSphere®
+

HPE Aruba Networking
CX 10000 with AMD Pensando

Value proposition:
*50% less TCO, 8-month ROI,
returning ~$1.6M to the yearly IT budget*
5-year TCO analysis with 500 servers

Targeting/qualifying DC opportunities and personas

IDEAL ACCOUNT TYPES

❑ Established Aruba CX campus customers, NetOps friendlies who also manage the DC network (value the benefits of Aruba ESP unified infrastructure).

❑ HPE compute/storage customers who are refreshing their servers or consolidating their data centers.

❑ Customers who may be unsatisfied with Cisco ACI and/or the VMware NSX deployment, due to complexity, poor performance, or cost.

Network/Security Admin/Architect

IDENTIFYING OPPORTUNITY

❑ Are you experiencing issues with data center network performance, reliability, or business continuity? Do you have insight into your data flows in the data center?

❑ What is your Hybrid cloud / migration strategy?

❑ Are you migrating from 10-25-100GbE?

❑ Are you moving to a Zero Trust Security framework? Microsegmentation?

Director of Network/ Security Operations

LISTEN FOR:

❑ App modernization, hyperconverged, private cloud, storage networking

❑ New servers/apps ... driving a need for higher performing 25/100 GbE

❑ Poor application performance, outages

❑ Long network provisioning lead times, poor visibility, security issues/concerns

❑ Network segmented and/or multi-tenant DC environments

Virtualization or Server Architect/Engineer
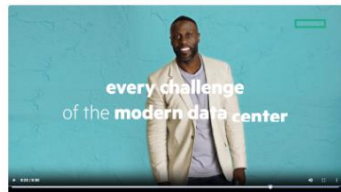
Data Center Marketing Campaign Q1 2024, Q3 2024
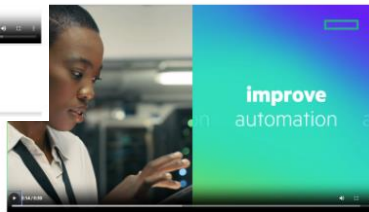
Primary assets: Four new DCN video ads

Video 1: Data center modernization

Video 2: Intelligent data center switching

cure data center networking

Video 4: Reduce data center complexity

New primary assets

Five design principles for a smarter data center

IDC: Achieve performance and security through a modern data center fabric

ESG: The benefits of fourth-generation, secure data center fabrics

Secondary content

Vertical brochures
- A new era of intelligent data center networks for healthcare
- A simplified data center architecture for retailers
- Harnessing data center networks for manufacturing intelligence
- Financial services (coming soon)

Blogs
- Data is at the heart of your business success (Network World)
- Five design principles to get your data center out of first gear *by William Choe*
- Bringing the data processing unit (DPU) revolution to your data center *by Mark Berly*
- From outdated to outstanding—revolutionizing manufacturing data centers *by Vinnie Strey*
- Get rich data center telemetry with DPU-powered switches *by Scott Stevens (AMD)*
- Modernized data centers for retail—secure, efficient, and automated *by Ryan McCarthy*

Customer stories: Altorfer Cat, Canterbury Christ Church University, PQR

Glossary pages: What is a data center? What is data center security? What is an enterprise data center?

Airheads Premium Tech Corner: Switching and Data Center Networking

HPE Aruba Networking DCN Awareness and Demand Generation

New content	Digital marketing	Account based marketing	Demand Generation
4 new DCN videos	**75 million** digital impressions	**7.5 million** digital impressions	**3,600** inquiries
2 new analyst papers	**785K** responses	**22,548** ad clicks	**1,431** AQLs
1 new solution brochure	**1.05%** CTR	**.55%** LinkedIn CTR	**1 ABX outbound**
4 new vertical brochures	**275K** web visits	**166,207** board visits	DCN specific meeting has been scheduled
1 updated and 2 new glossary pages	**61%** bounce rate	**878** Target Accounts Reached (90% more accounts targeted QoQ)	**Field & channel event in a box kit**
10 new DCN blogs	**103 seconds** average time on page	**52%** Target Accounts Engaged	**Partner Demand generation** digital campaign and meeting maker kit
2 new DCN customer stories	**1 in 3 visitors** engaged with the campaign content	**26** reports in-market	**CX Trade up program**
30+ organic social posts			

Questions

Resources

HPE aruba networking

SalesEdge

- Aruba Data Center Networking WinBook

HPE aruba networking

arubanetworks.com

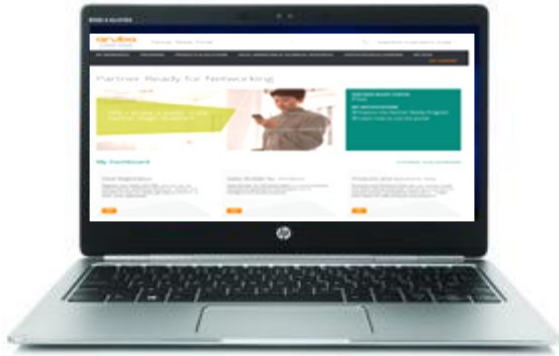- Modern data center networking

YouTube

- 4th Generation Data Center Fabric (4 mins)
- 4th Generation Data Center Fabric (10 mins)

RESOURCES

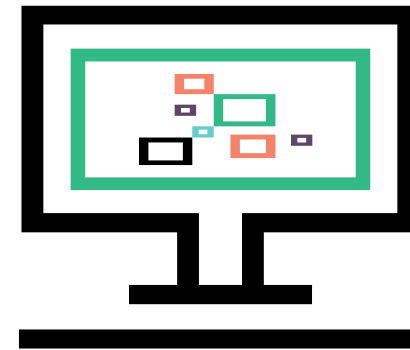**Partner Ready for Networking portal**
([Click here](#))

Ask Questions
Get Answers

Channel Account Managers (CAMs)
Regional channel support

My Learning / The Learning Center
([Click here](#))

Arubapedia for Partners
([Click here](#))

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Thank you