Hewlett Packard
Enterprise

Netzwerk 2.0 – Durchgehend Sicher

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Accelerating adoption of new models can be challenging

Zero Trust

- Eliminates implicit trust
- Provides least-privilege access to resources
- Requires continuous monitoring

Secure Access Service Edge (SASE)

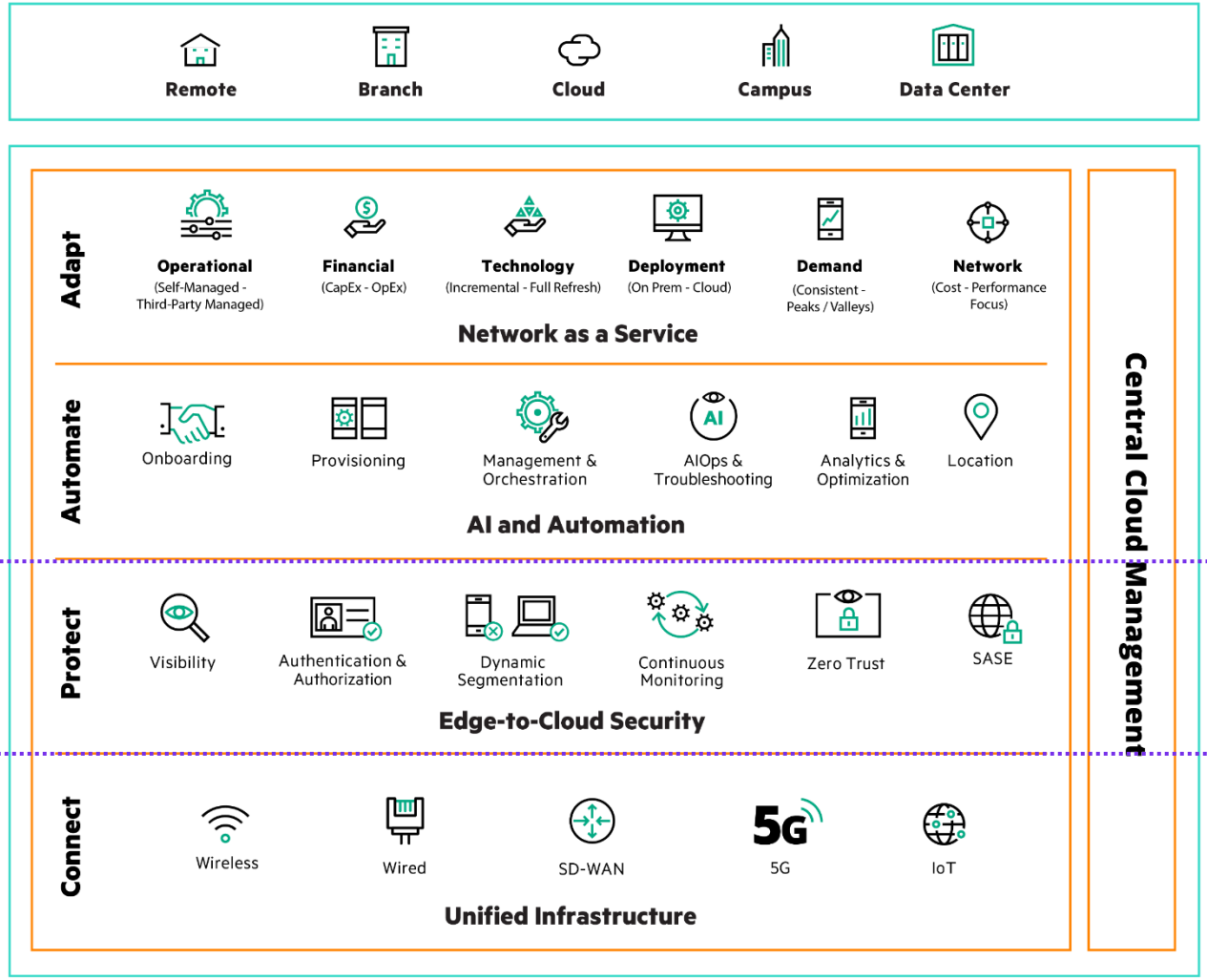
- Builds on Zero Trust security services with WAN capabilities
- Delivers security services via the cloud

Yves Wedekind

Thomas Latzer

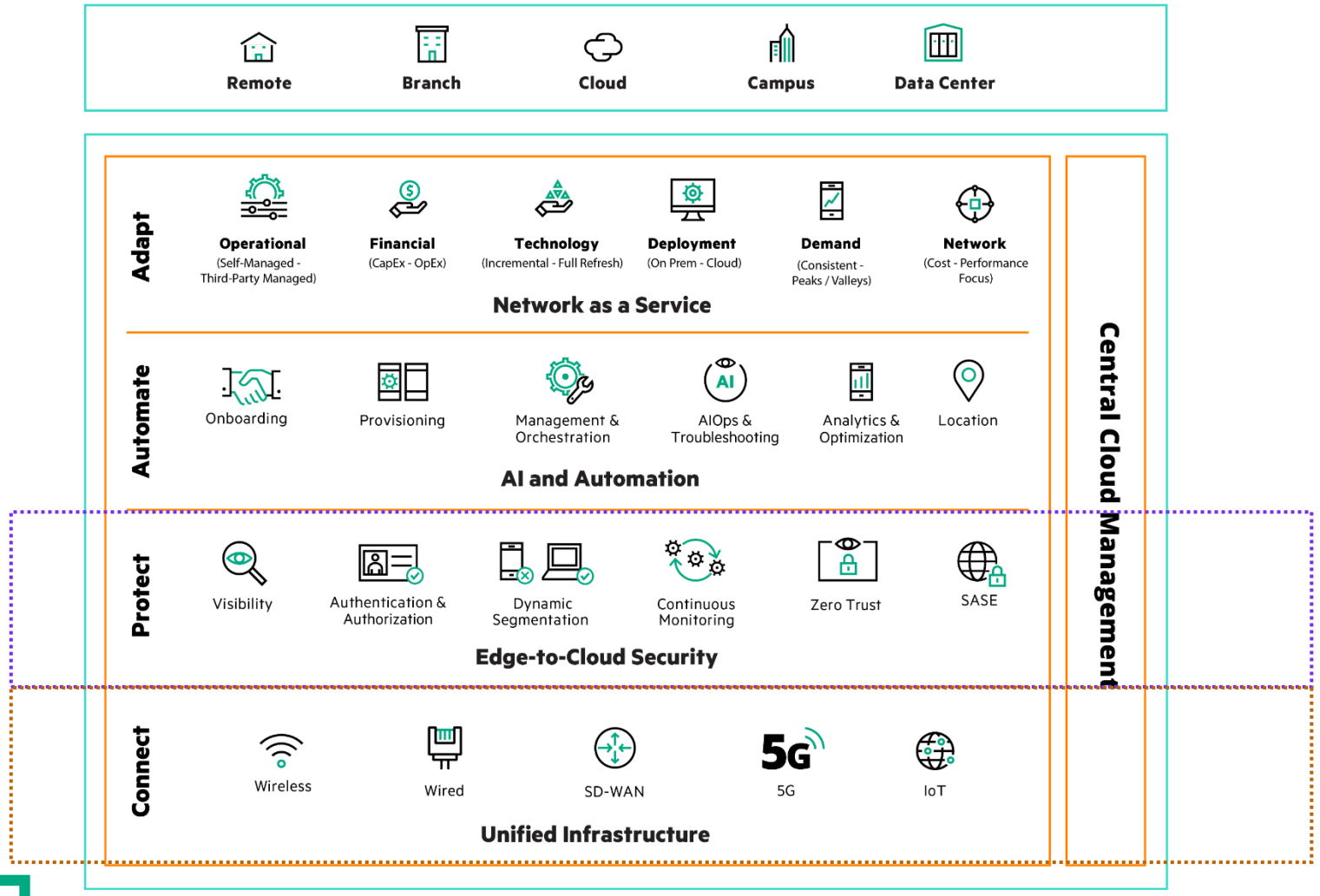
1. Gartner, May 2022
2. Forrester, Jan. 2022

HPE Aruba Networking
Powered by ESP (Edge Services Platform)



Built-in support for Zero Trust and SASE security frameworks that increases protection while simplifying operations

HPE Aruba Networking
Powered by ESP (Edge Services Platform)



Built-in support for Zero Trust and SASE security frameworks that increases protection while simplifying operations

It begins at the Hardware level -> TPM Chip for signed FW

HPE Aruba Networking Zero Trust Security foundation

ClearPass Policy Manager

Client Insights
ClearPass Device Insight

Policy Enforcement Firewall
SD-WAN
Unified Threat Management/IDS/IPS
360 Security Exchange

Cloud Auth
ClearPass Policy Manager

Centralized

- ClearPass Policy Manager
- Policy Enforcement Firewall

Dynamic Segmentation

***Distributed w/* Central NetConductor**

- Policy Manager, Flexible NAC
- Inline Enforcement via Switches & Gateways

HPE Aruba Networking Zero Trust Security foundation

What do I have on the network?

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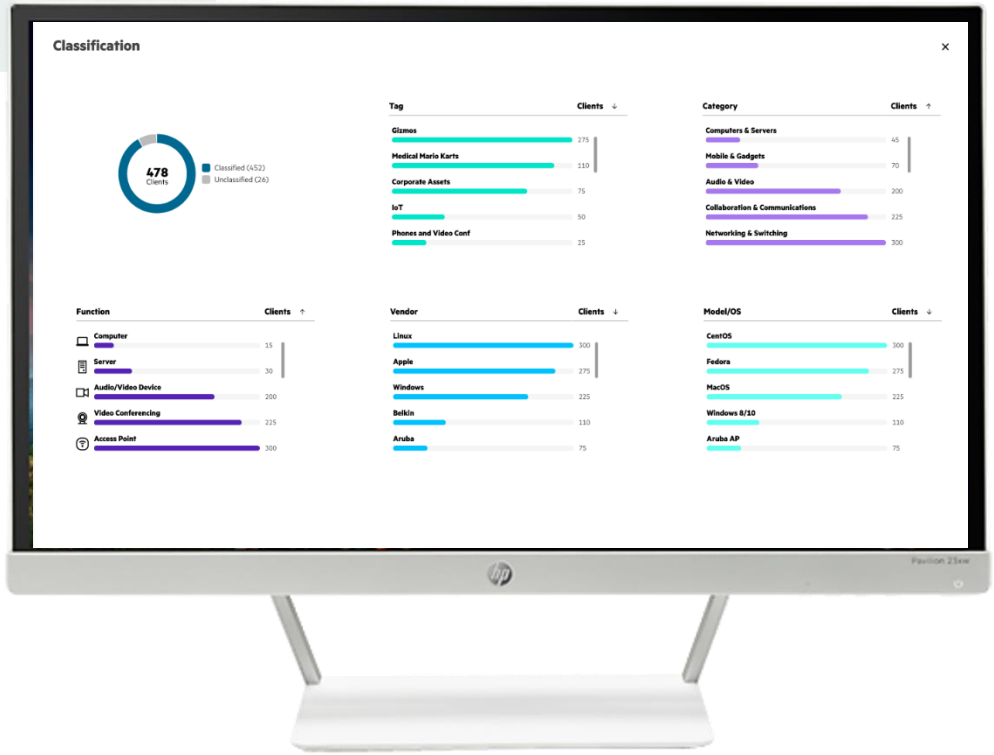
AI-powered Client Insights

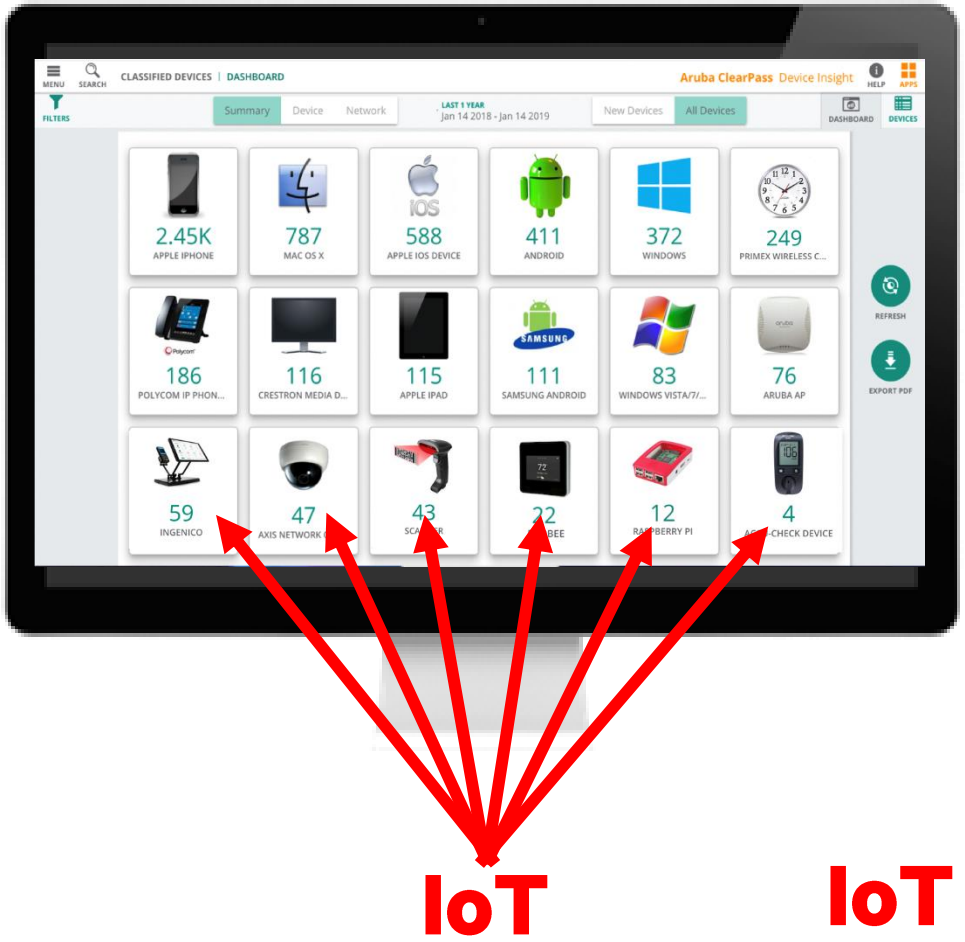
Complete endpoint inventory solution built into HPE Aruba Networking Central cloud

HPE Aruba Networking Central



- Accurate AI/ML profiling with **up to 99% profiling accuracy of known clients** with <5% rate of unknowns
- Profiling for over **200M endpoints** and counting
- Detailed **categorization of policy and behavior context** for Zero Trust Security

Central Client Insights (CI) Use Cases



Reduces Risk by Eliminating Blind Spots
through existing infrastructure telemetry discovery and profiling of devices

Automatically Clusters Devices and Recommends Classification
using advanced machine learning and crowdsourcing intelligence

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ClearPass Policy Manager

Who do I let on my network?

Centralized

- ClearPass Policy Manager
- Policy Enforcement Firewall

Dynamic Segmentation

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Authentication

1. 802.1X and AD Integration
2. MAC Authentication
3. Captive Portal (NOT just for Guest Access!)

Only what we know is on the network

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ClearPass Policy Manager

How do I control access and segment it?

Centralized

- ClearPass Policy Manager
- Policy Enforcement Firewall

Dynamic Segmentation

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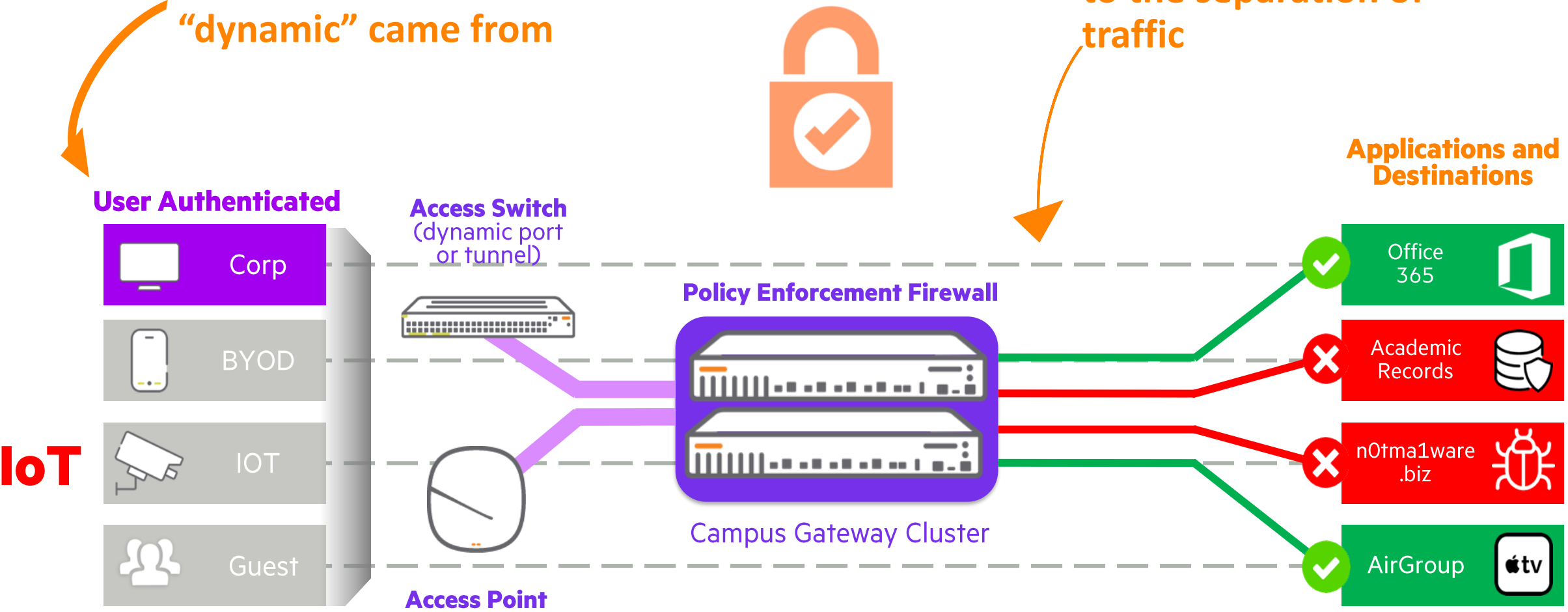
What is Dynamic Segmentation?

Roles are where the "dynamic" came from

"Segmentation" refers to the separation of traffic

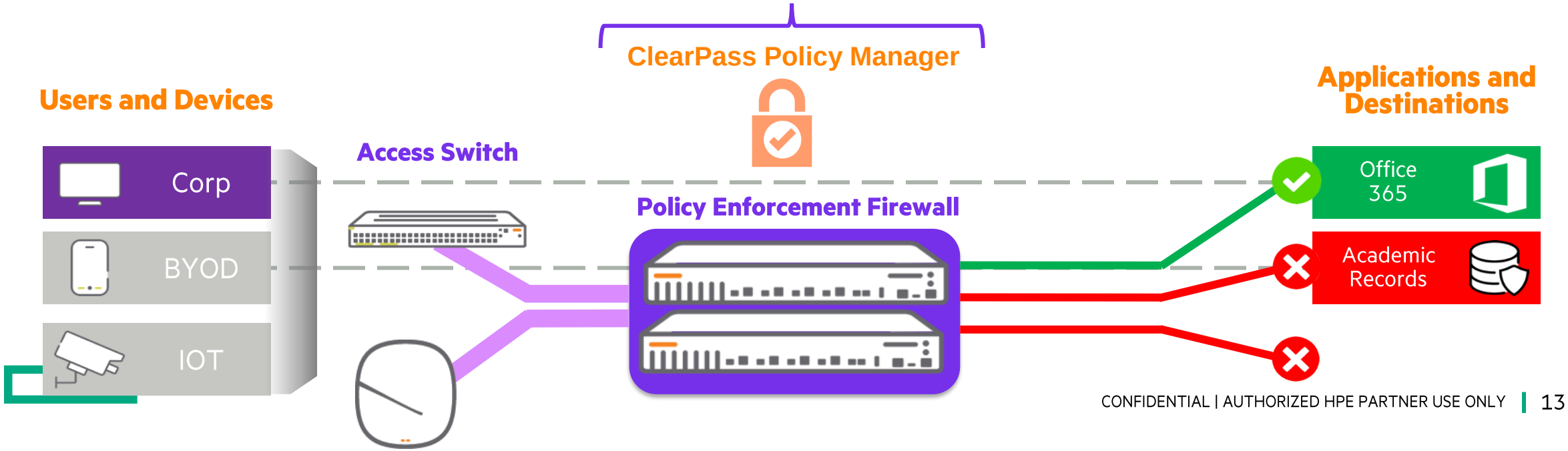


Role:

Context Enabled Dynamic Segmentation

Role: (simplified)

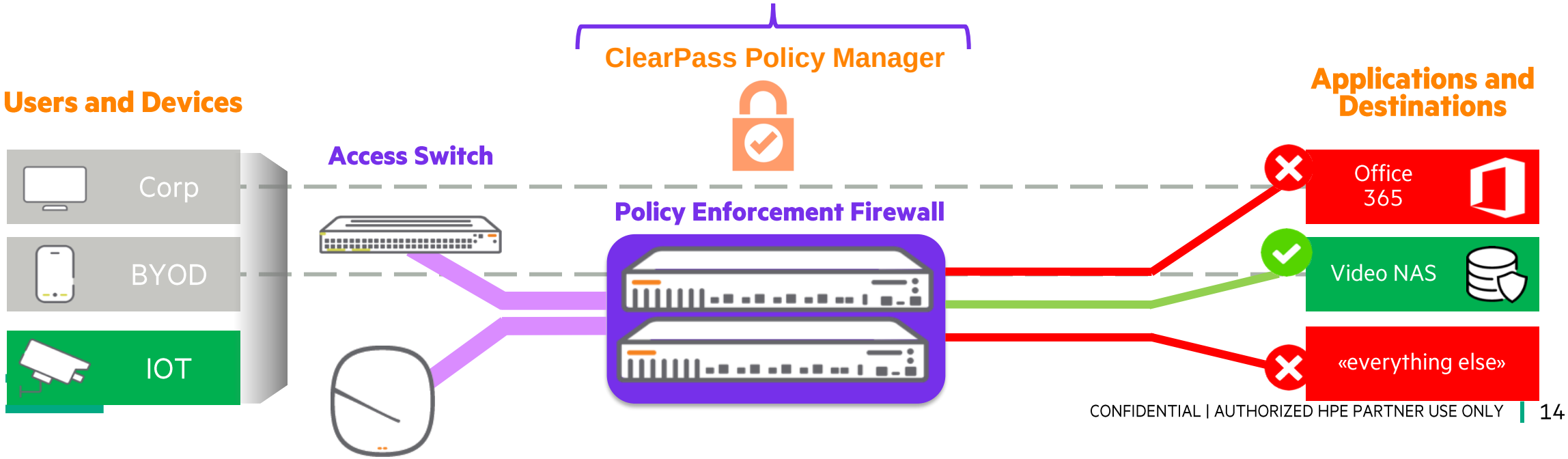
1) Allow: user to www.office365.com with priority
2) Allow: user to “internet”
3) Allow: user to ERP (192.10.x.x)
4) Block: any to any



Context Enabled Dynamic Segmentation

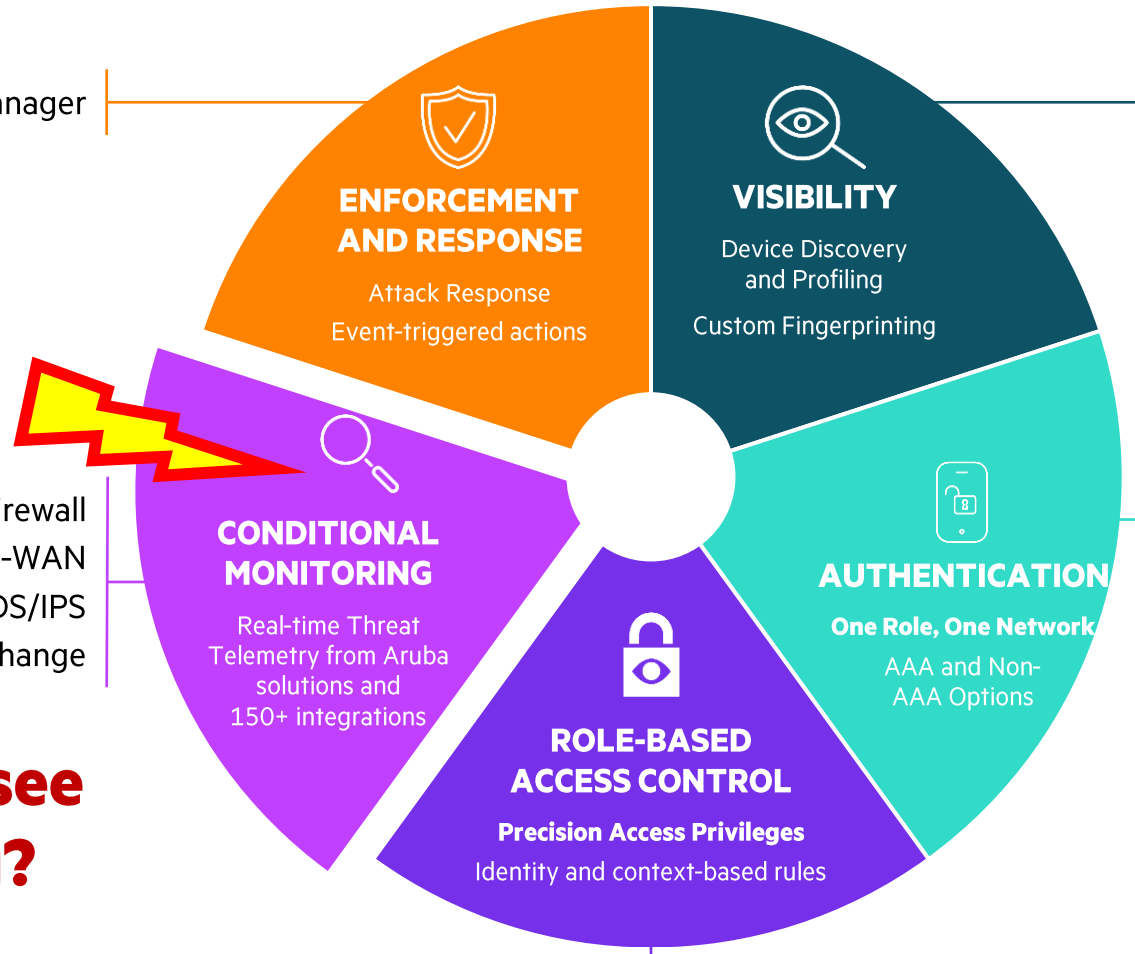
Role: (simplified)

1) Allow: user to “video NAS”
2) Block: any to any



IoT

HPE Aruba Networking Zero Trust Security foundation



ClearPass Policy Manager

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Cloud Auth
ClearPass Policy Manager

What do I see happening?

Centralized

- ClearPass Policy Manager
- Policy Enforcement Firewall

Dynamic Segmentation

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HPE Aruba Networking 360 Security Exchange

Certified interoperability between technologies to ensure hassle-free operations

SECURITY

Attivo Networks
Carbon Black.
Check Point Software Technologies Ltd.
BlackBerry Cylance
FireEye
Fortinet
Juniper Networks
tenable
McAfee
paloalto Networks
Symantec
tenable
BIGFIX

AUTH

Auth0
Azure Active Directory
DUO
Envoy
Cloud Identity
ImageWare Systems, Inc. Securing The Future
okta
Ping Identity
sine
team by wework
zoom

OT

CLAROTY
Indegy
CyberX
NOZOMI Networks

LOGGING

ArcSight
splunk>
IBM QRadar
solarwinds loggly

HOTSPOT

Authorize.Net
PayPal
worldpay from FIS

MESSAGING

Microsoft Teams
pagerduty
Twilio SendGrid
servicenow
slack
twilio

PROPERTY

Agilysys
Oracle Micros Opera
protel
Silverbyte

ENDPOINT

CROWDSTRIKE
BlackBerry
CITRIX
G Suite
IBM MaaS360
Intune
jamf
mobileiron
SAP
SOTI
Workspace ONE

IoT

ordr
Zingbox
aruba

IoMT

ASIMILY
Cynerio
MEDIGATE

NDR

Flying Cloud
DARKTRACE

- **Over 150 partner integrations** including Medigate, Microsoft Azure, Ordr, Bastille, Zscaler, and Splunk
- **Bidirectional contextual data sharing** for continuous monitoring and threat defense
- **Reduce risk** with joint support from HPE Aruba Networking and participating technology partners
- **Gain flexibility** to build a best-of-breed solution

HPE Aruba Networking Zero Trust Security foundation

How do I act?

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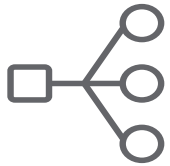
Proactive Problem Identification and Resolution

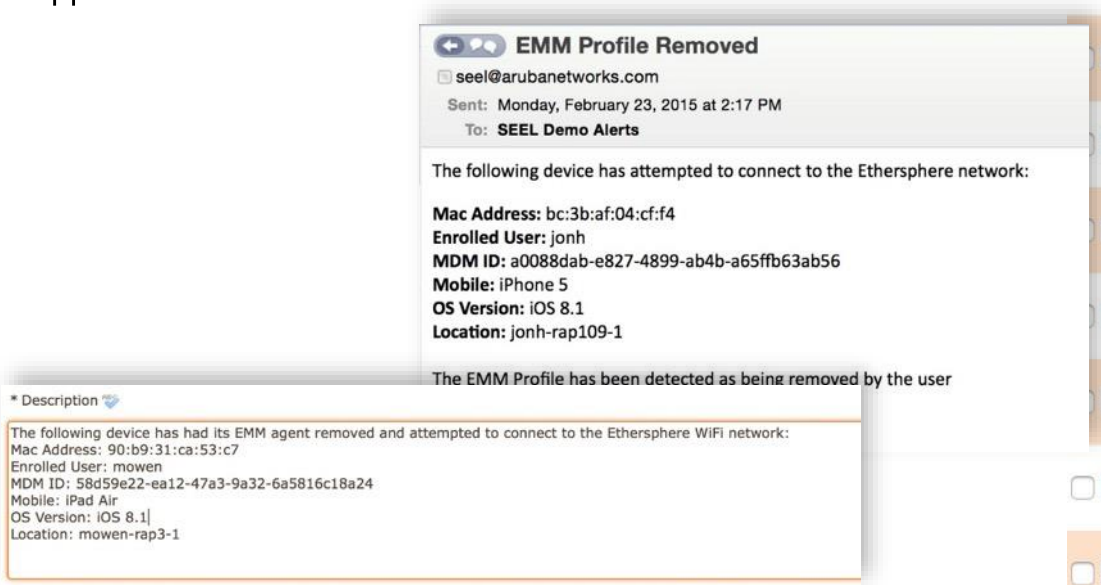
Use ClearPass to notify/alert helpdesk systems

- The right teams with the right information
- As soon as a problem happens

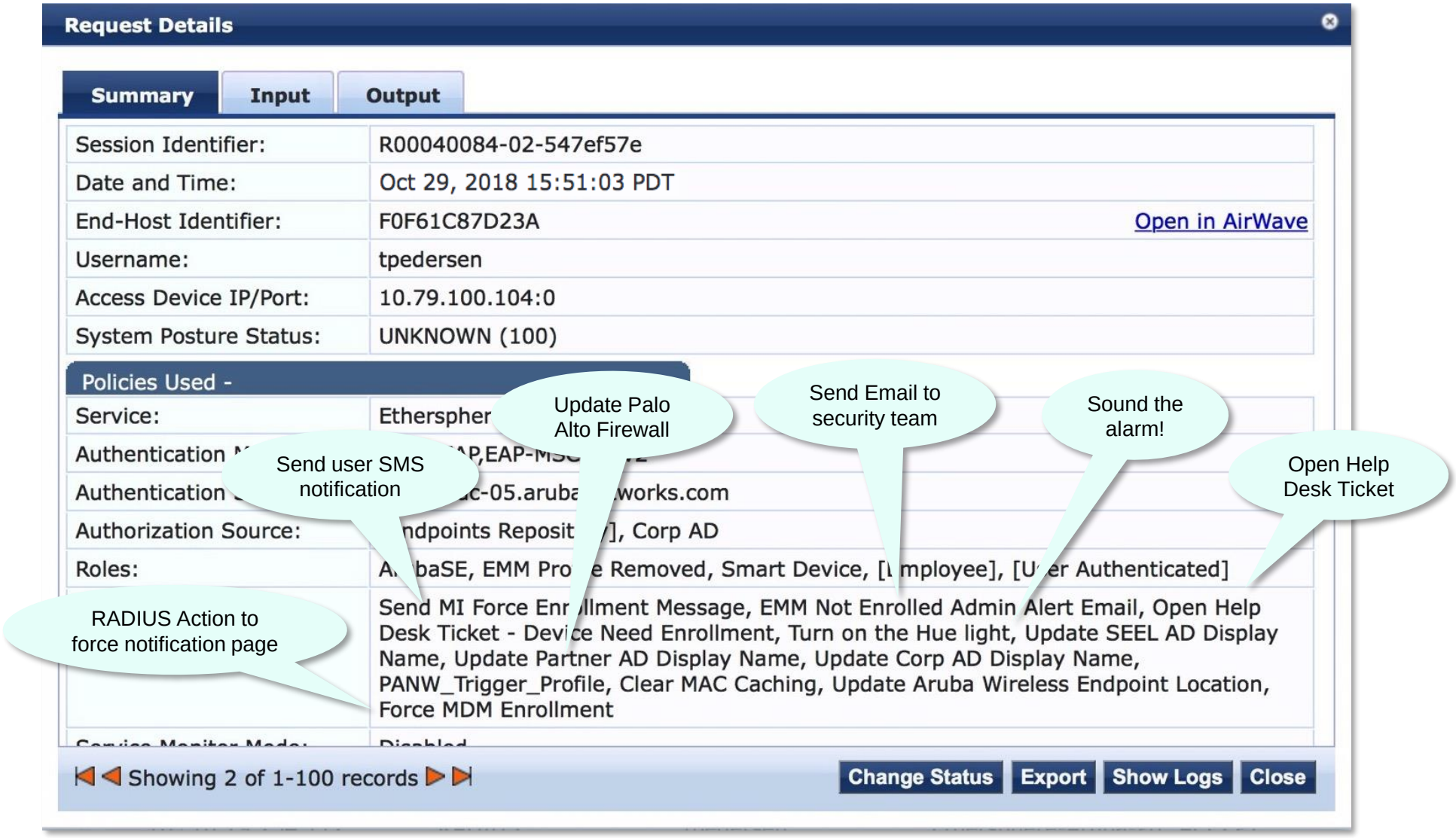


Not just Syslog/SNMP

- Email
- HelpDesk Ticketing Systems
- SMS/Voice



Service Chaining Example

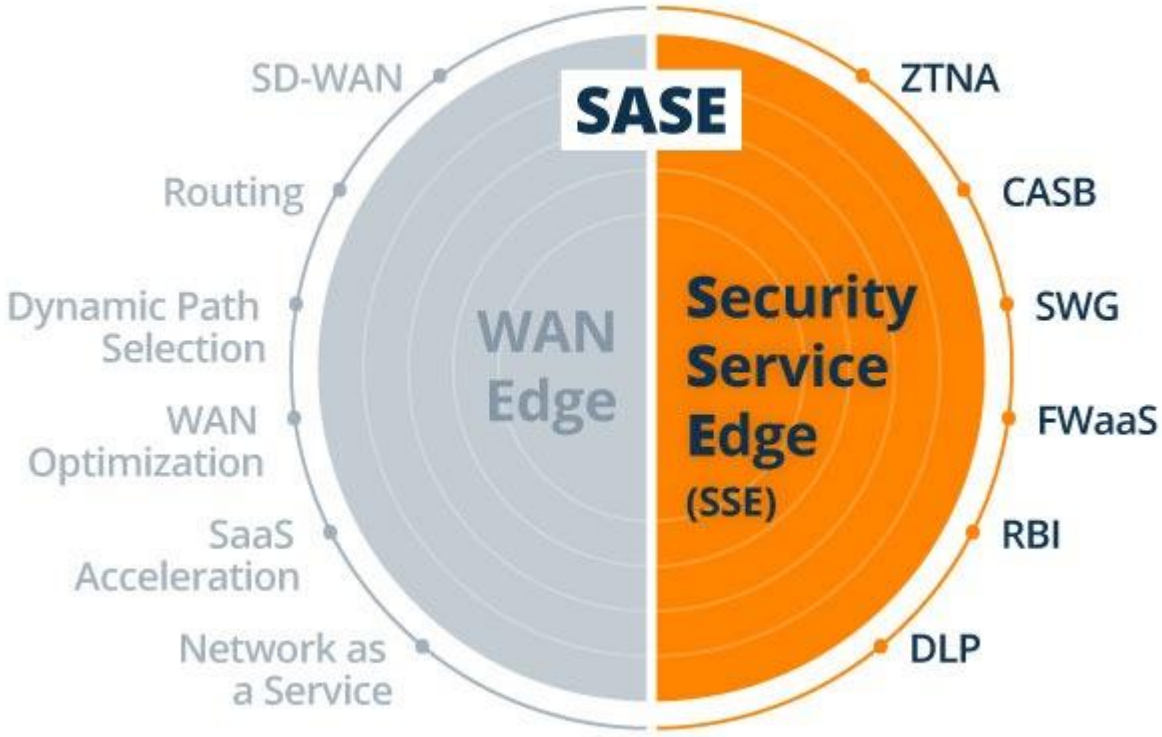


Secure Access Service Edge (SASE)

What is SSE / SASE?

Security Service Edge

- Eine neue Gartner Kategorie und Magic Quadrant, eingeführt February 15, 2022
- **Secure Access Service Edge (SASE) framework has evolved with the two major segments represented by**
  - WAN Edge (SD-WAN) and
  - New Secure Service Edge (SSE) Magic Quadrant
- **SSE includes**
  - Secure Web Gateway (SWG)
  - Cloud Access Security Broker (CASB)
  - Zero Trust Network Access (ZTNA)
  - Other cloud-delivered security functions, e.g., FWaaS, RBI, SD-WAN integration

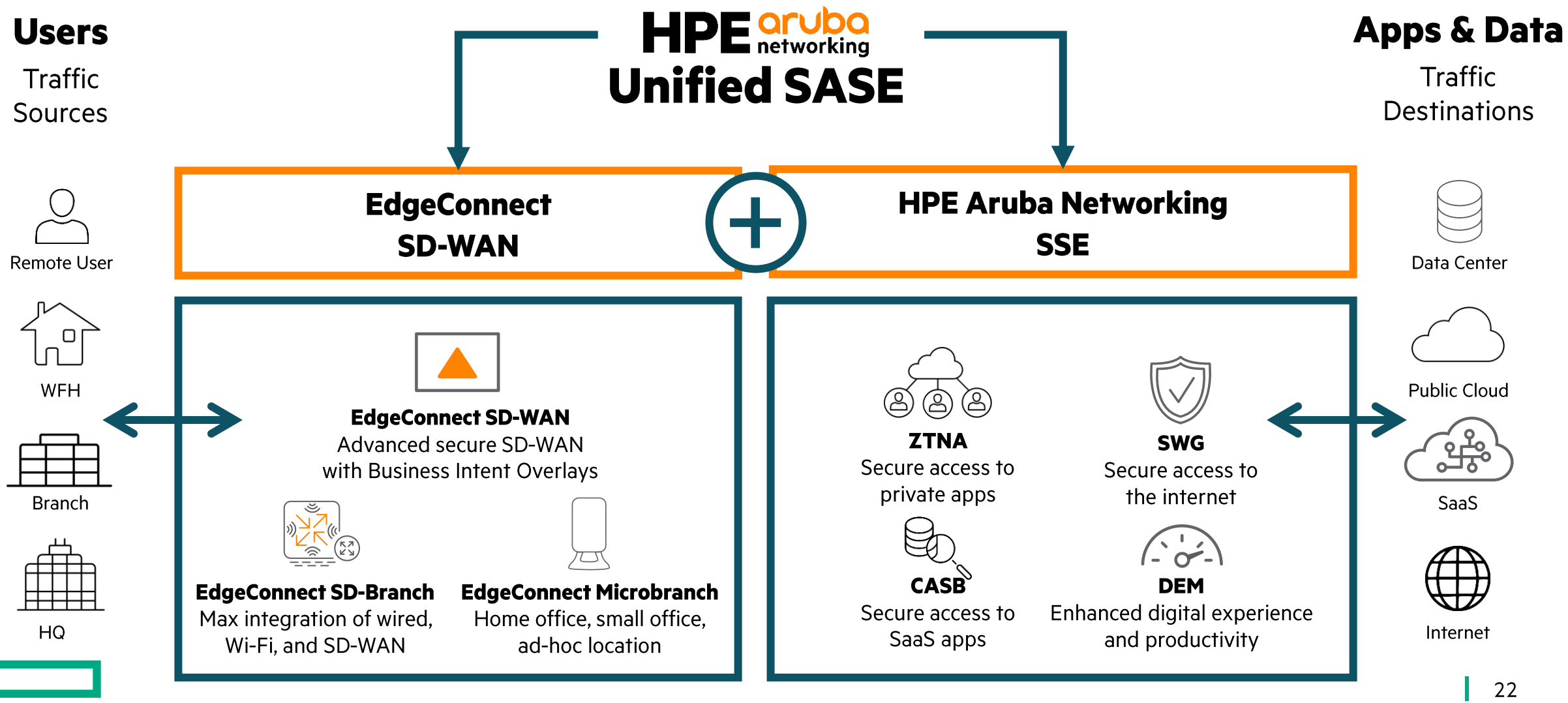


> "Security service edge (SSE) secures access to the web, cloud services and private applications. Capabilities include access control, threat protection, data security, security monitoring, and acceptable-use control enforced by network-based and API-based integration. SSE is primarily delivered as a cloud-based service and may include on premises or agent-based components." *

**Gartner, "Magic Quadrant for Security Service Edge," February 15, 2022* Gartner

HPE Aruba Networking Unified SASE

Deploy industry-leading EdgeConnect SD-WAN with the cloud-native HPE Aruba Networking SSE platform



EdgeConnect Secure SD-WAN Platform

Improve app performance, streamline management, reduce hardware footprint

App performance with SaaS and WAN Optimization & Path Conditioning

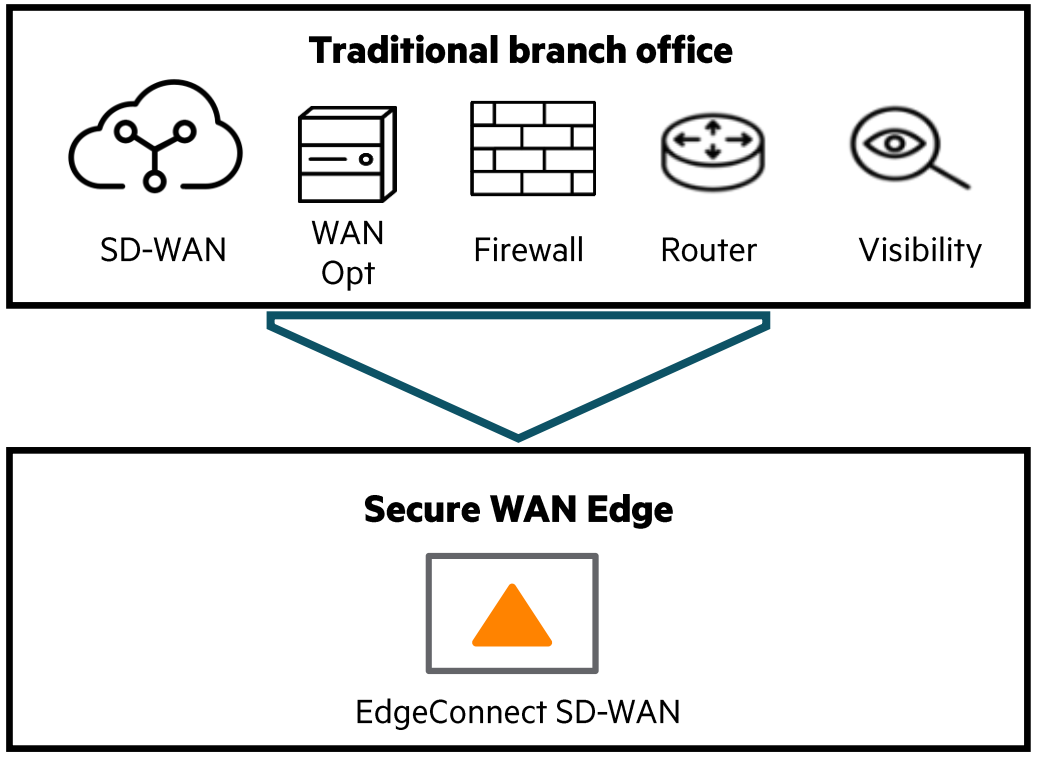
End-to-end next-generation firewall including DPI, IDS/IPS and role-based segmentation

Multi-cloud networking

Dynamic routing with BGP and OSPF support

Application & Network visibility and reporting

Automation and zero-touch provisioning



HPE Aruba Networking EdgeConnect SD-WAN Key Use Cases

Combine advanced SD-WAN capabilities with built-in application-aware next-gen firewall

Support cloud-first organizations

- Build unified SASE or tightly integrate with multiple cloud-security vendors
- Intelligently steer traffic to the cloud and eliminate the need for backhauling traffic
- Deploy EdgeConnect to any cloud providers (Azure, AWS…)

Replace branch firewalls & routers

- Consolidate branch network and security functions
- Built-in next-generation firewall with IDS/IPS, DDoS protection and role-based segmentation
- Protect data in transit with IPsec tunnels
- Full support for OSPF and BGP
- Easily deploy security policies with zero-touch provisioning

Improve app performance

- Prioritize mission-critical applications with business intent overlays
- Run high quality voice and video over broadband internet
- Get the highest quality of experience with path conditioning, SaaS and WAN optimization capabilities

Secure IoT devices

- Implement zero-trust network segmentation to complement SASE
- Ensure that users and IoT devices can only reach network destinations consistent with their role
- Go beyond what is defined by SASE

Transforming Secure Business Access with HPE Aruba Networking SSE

ZTNA

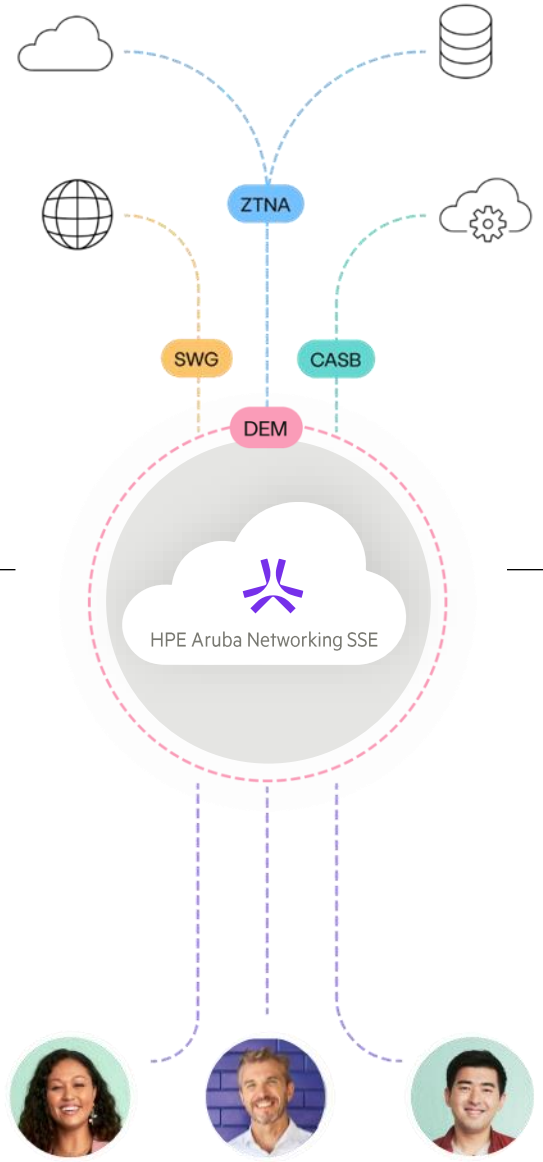
Secure access to private applications in the data center or cloud.

i.e VPN/VDI replacement

SWG

Secure access to the Internet and protect against malicious online threats.

i.e URL filtering gambling/malware sites, DNS control, SSL inspection for malware



CASB

Secure access to SaaS applications and protect against data loss.

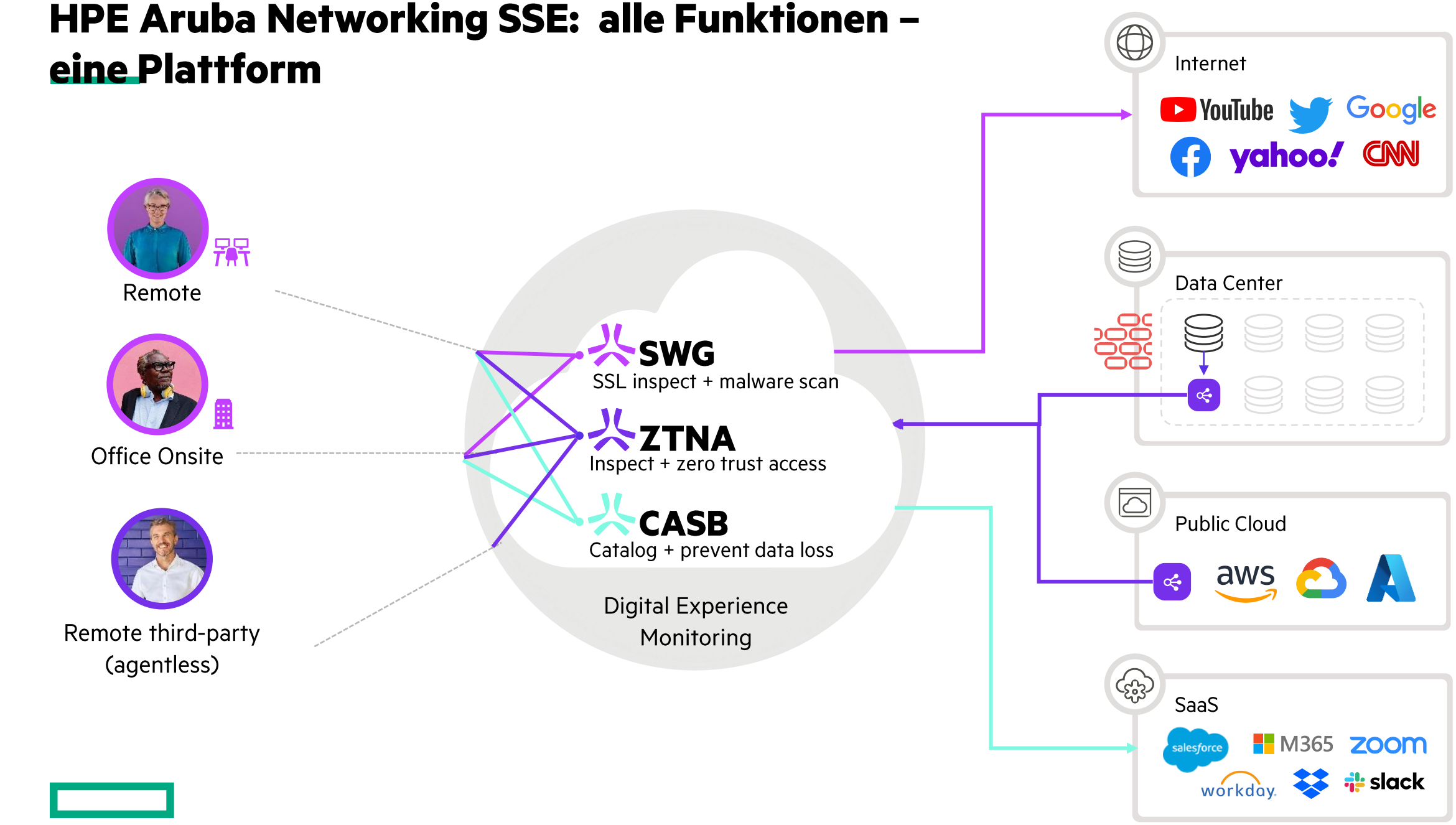
i.e Control block upload/download from Box, Sharepoint, Facebook, Salesforce

Experience

Monitor user performance and to troubleshoot user access issues for all traffic.

i.e Network ops for private & public traffic

HPE Aruba Networking SSE: alle Funktionen – eine Plattform



HPE Aruba Networking SSE ist SSE 2.0

Unified Access Plattform

Eine UI, Policy Engine, & Data Lake
(ZTNA, SWG, CASB, DEM)

- ✓ Mehre Funktionen – eine Lösung
- ✓ Weniger operationaler & Administrationsaufwand
- ✓ durchgängige Sicherheitsrichtlinien

Einfache Richtlinien & überprüfen des gesamten Datenverkehr

für Internet, SaaS, und Legacy Apps
(SSH, RDP, VOIP, AS400, ICMP etc.)

- ✓ Einheitliche Konfiguration
- ✓ Höheres Maß an Sicherheit
- ✓ keine zusätzlichen Lösungen & Kosten

Multi-cloud Backbone mit Smart Routing

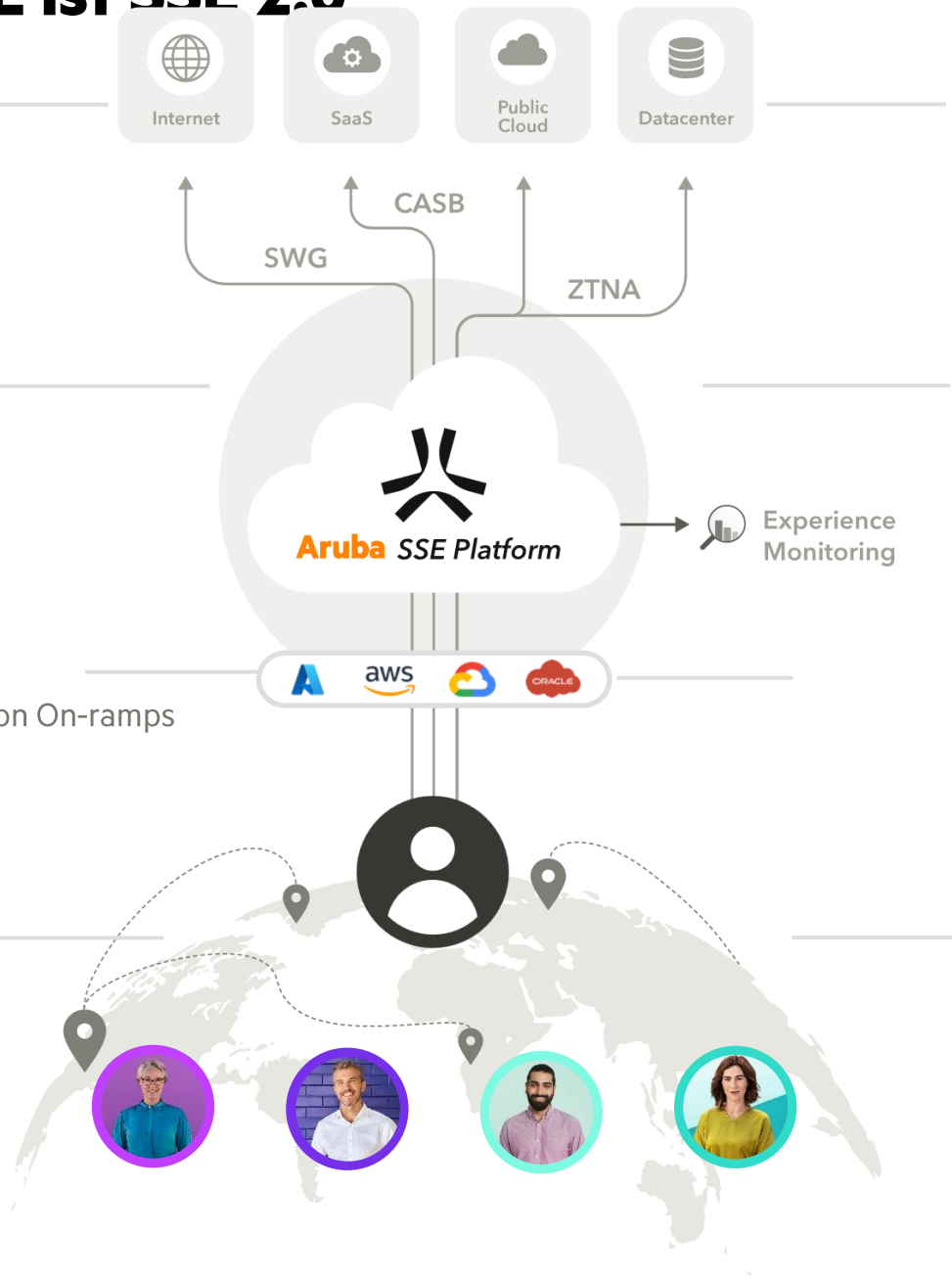
Weltweit harmonisierter Zugang mit 350 NW Acceleration On-ramps
durch Nutzung von Azure, AWS, GCP, & Oracle

- ✓ Ausfallsicherheit
- ✓ Weltweit nahe lokale Präsenz
- ✓ Reduzierte Latenzen

Agent oder Agentless Zero Trust access

Agent – volle SSE Plattform (vollständige VPN Ablöse!)
Agentless – Zero Trust Access für Private Applikationen
(Web/SSH/RDP/VNC/Git/DB Access)

- ✓ Eine Lösung für alle Use Cases
- ✓ Vollständige VPN Ablöse – 1 Lösung genügt
- ✓ Für BYOD Konzepte geeignet (3rd Party Mitarbeiter)



HPE Aruba Networking SASE – simpel, smart & sicher

SIMPEL

Eine Plattform.
Einfache Richtlinien.
Alle Anwendungsfälle.

SMART

Zugang auf jede App von jedem Gerät.
Immer nah beim User.

SICHER

Traffic Inspection – Vollständig.
Zero Trust – konsequent.

THANK YOU