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Aruba 360 Secure Fabric

SECURING THE EXPERIENCE EDGE

Anatomy of An Attack On the Inside

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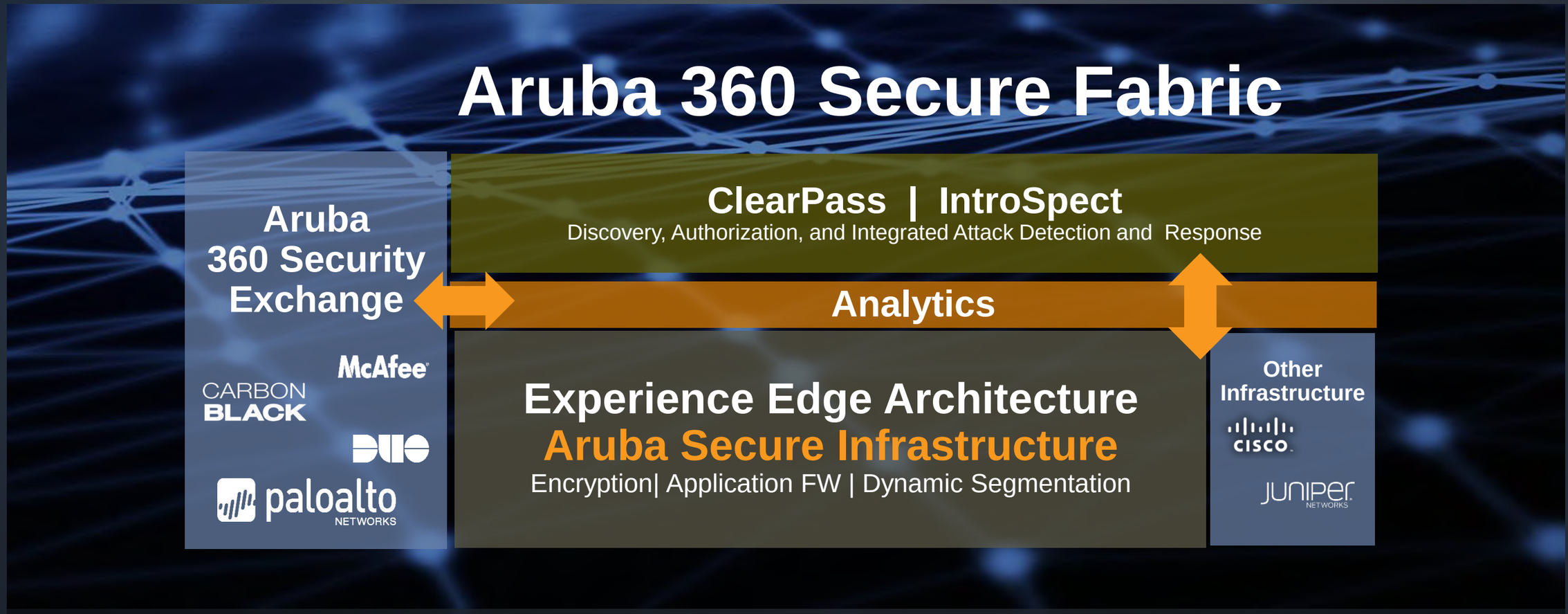
UNIQUELY POSITIONED TO DELIVER ADVANCED PROTECTION

Visibility, Detection and Control



Security Exchange –140+ Integrated Solutions

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cisco

service now

Hewlett Packard Enterprise

SIEMENS

ACCESS POINT

CONTROLLER

SWITCH

INFRASTRUCTURE

paloalto NETWORKS

Check Point SOFTWARE TECHNOLOGIES LTD.

TippingPoint by TREND MICRO

zscaler

Firewall / IPS

PERIMETER/CLOUD

XenMobile

DUO

airwatch by vmware

splunk>

MobileIron

Radar

SECURITY & ENDPOINT MANAGMENT

AUTOMATED, CLOSED-LOOP SECURE CONNECTIVITY

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TRADITIONAL PROFILING TECHNIQUES LACK DEVICE CONTEXT

STATIC ATTRIBUTES

NMAP | SNMP | WMI

GENERIC “WINDOWS” OR “LINUX” DEVICE

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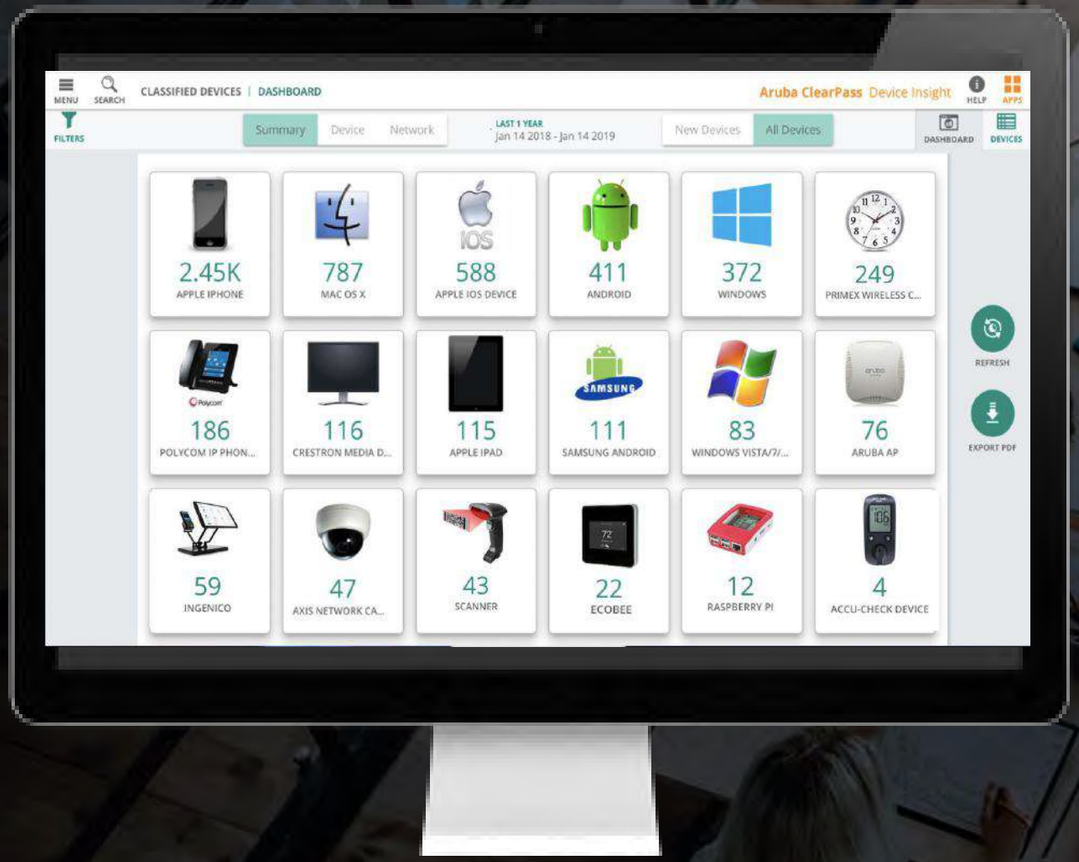
SECURITY STARTS WITH VISBILITY

CLEARPASS DEVICE INSIGHT



Delivers automated, AI-powered device identification combined with policy-based access control

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CLEARPASS DEVICE INSIGHT:
FROM GENERIC TO GRANULAR DEVICE VIEW

DEEP PACKET INSPECTION (DPI)

STATIC + BEHAVIORAL ATTRIBUTES

APPLICATIONS
WEB SITES
PORTS
PROTOCOLS

MACHINE LEARNING

CROWD-SOURCING

STATIC ATTRIBUTES

NMAP | SNMP | WMI

WINDOWS DEVICE

AXIS DEVICE

AXIS SECURITY CAMERA

AXIS Q35 NETWORK CAMERA

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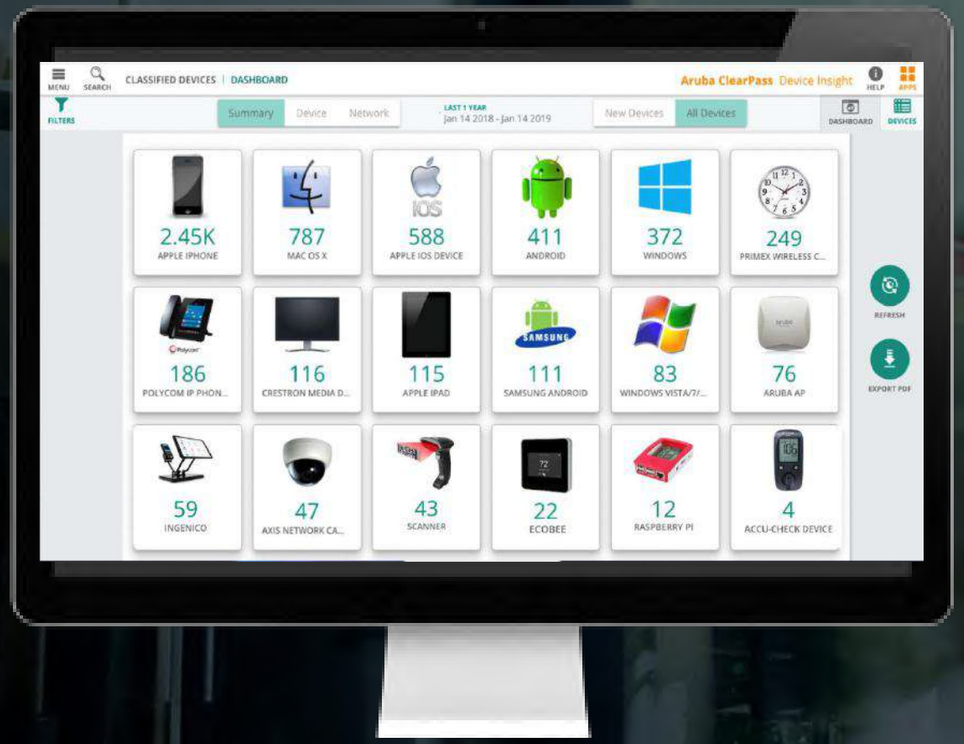
CLEARPASS DEVICE INSIGHT
VALUE PROPOSITIONS



Reduces Risk by Eliminating Blind Spots
through DPI-based discovery and profiling of devices

Automatically Classifies Unknown Devices
using advanced machine learning and crowdsourcing intelligence

Automates Secure Access
via seamless integration with ClearPass Policy Manager

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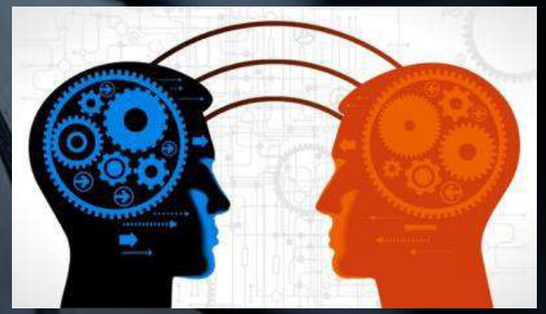
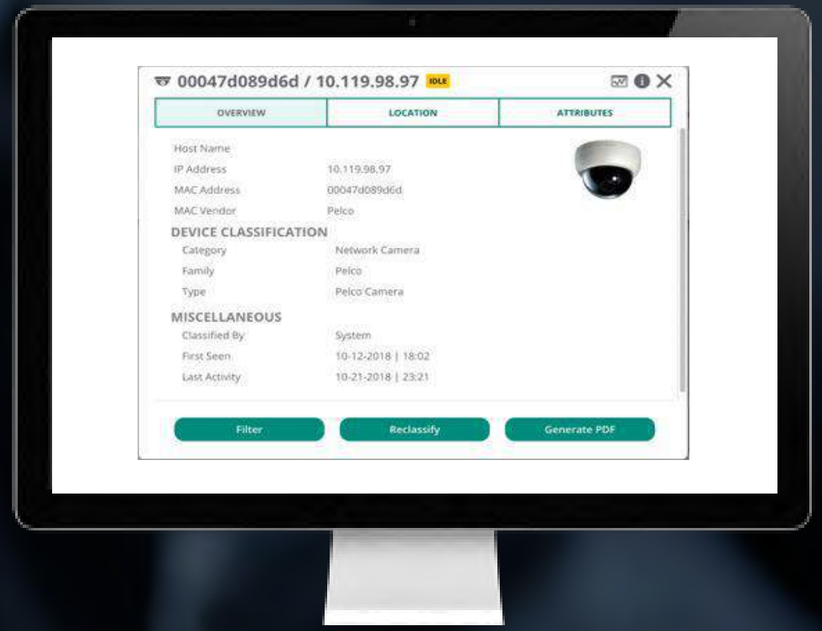
CLASSIFIES UNKNOWN DEVICES

Deep Packet Inspection (DPI)

- Device Attributes
- IP/MAC Address
- Application Access
- Communication Protocols
- Communication Frequency

MACHINE LEARNING





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ARCHITECTURE OVERVIEW

Combination of on-premises data collector (appliance or virtual) and cloud-based analyzer

Through Deep Packet Inspection (DPI), device attributes are are extracted and metadata is sent to the cloud for analysis

CLOUD-ENABLED
COMMUNITY CROWDSOURCING

Customer labels a device using clusters or rules

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Aruba receives the signature

Signature is tested and validated

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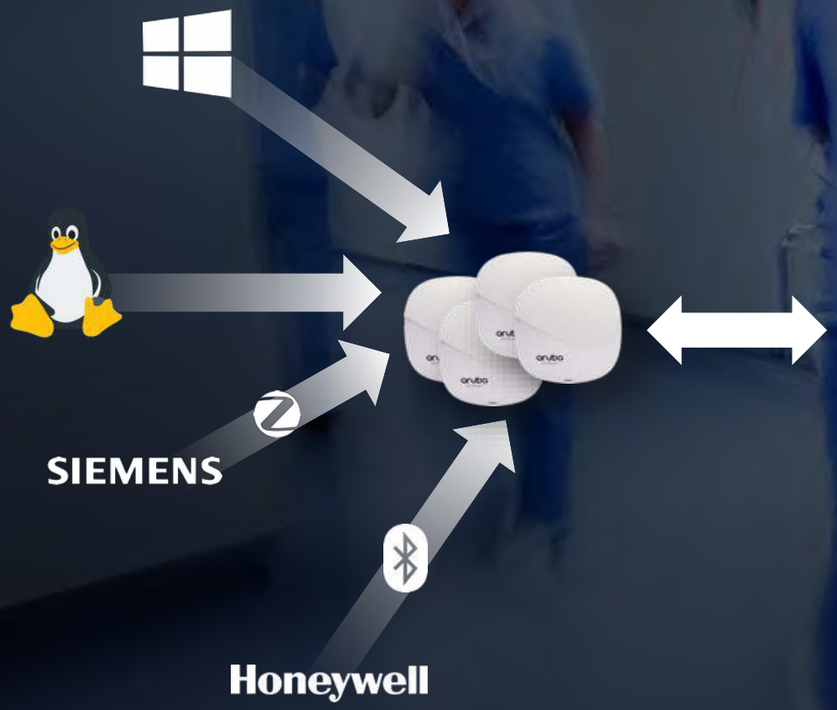
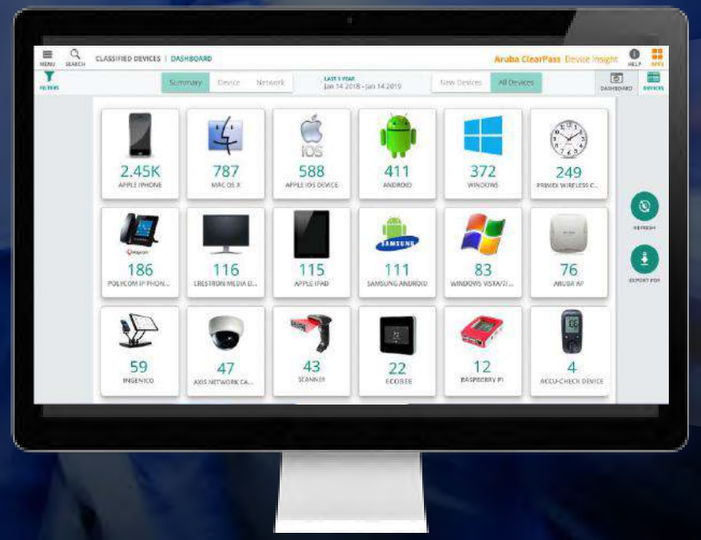
Signature is made available for use by all customers

IOT IN HEALTHCARE





ClearPass Device Insight

ENHANCED DISCOVERY / PROFILING

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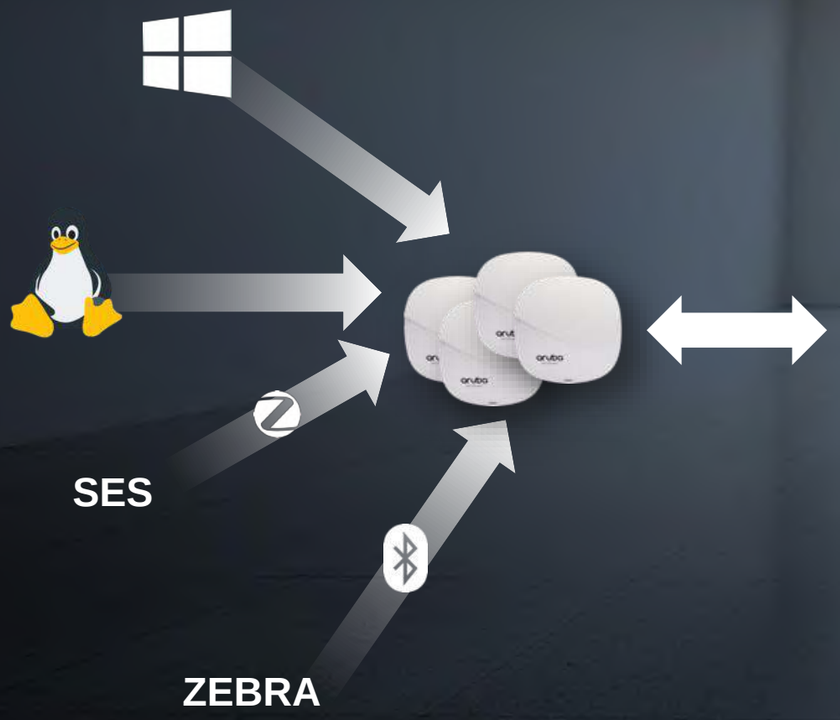
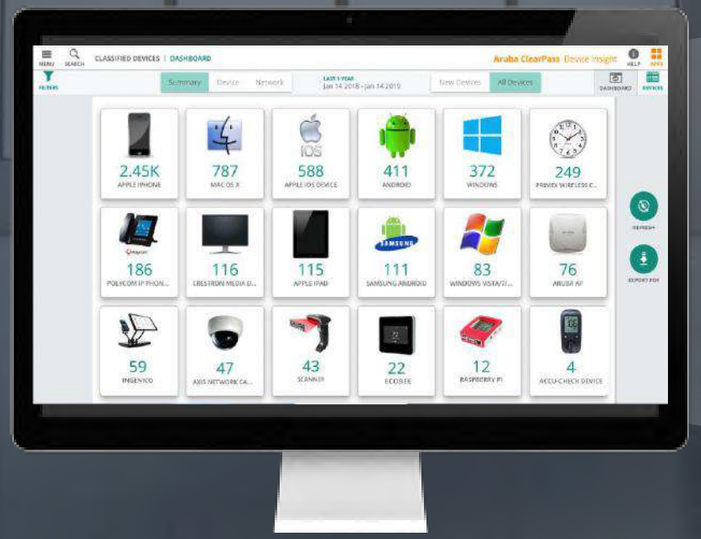
IOT IN RETAIL





ClearPass Device Insight

ENHANCED DISCOVERY / PROFILING

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ClearPass Visibility and Access Control

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DEVICE INSIGHT + POLICY MANAGER
AUTOMATES SECURE ACCESS

ClearPass Device Insight
ENHANCED DISCOVERY / PROFILING

Bi-Directional
Data Exchange

ClearPass Policy Manager
AUTOMATED SEGMENTATION AND ENFORCEMENT

Internet of Things (IoT)

BYOD and Corporate Owned

40%
Of the Global 500

paloalto NETWORKS servicenow
Carbon Black. Check Point SOFTWARE TECHNOLOGIES LTD.
CYLANCE okta

130+ Ecosystem Partners

Multi-Vendor WLANs

Multi-Vendor Switching

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HOW WE'RE DIFFERENT

CONTINUAL INNOVATION IN IOT CONNECTIVITY, SECURITY, AND AI

COMPLETE VISIBILITY ACROSS THE ENTIRE INFRASTRUCTRE

AUTOMATED, MACHINE LEARNING-BASED, DISCOVERY AND PROFILING

CLOUD-ENABLED, CROWDSOURCED

AUTOMATED, POLICY-BASED SECURE ACCESS

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CONTROL: AUTHENTICATION AND AUTHORIZATION

Full range of RADIUS and non-RADIUS authentication

Enterprises define who can access files and applications

Defines **WHO** and **WHAT DEVICES** can connect to:

Which **DEVICES**

Which **DATA**

Which **INFRASTRUCTURE**

Which **APPLICATIONS**

AUTHORIZE: CONTEXT-BASED ACCESS

Enterprise Laptop
Internet and Intranet

Authentication	EAP-TLS
SSID	CORP-SECURE

SAP ORACLE box Lync Exchange

BYOD Phone
Internet Only

Authentication	EAP-TLS
SSID	CORP-SECURE

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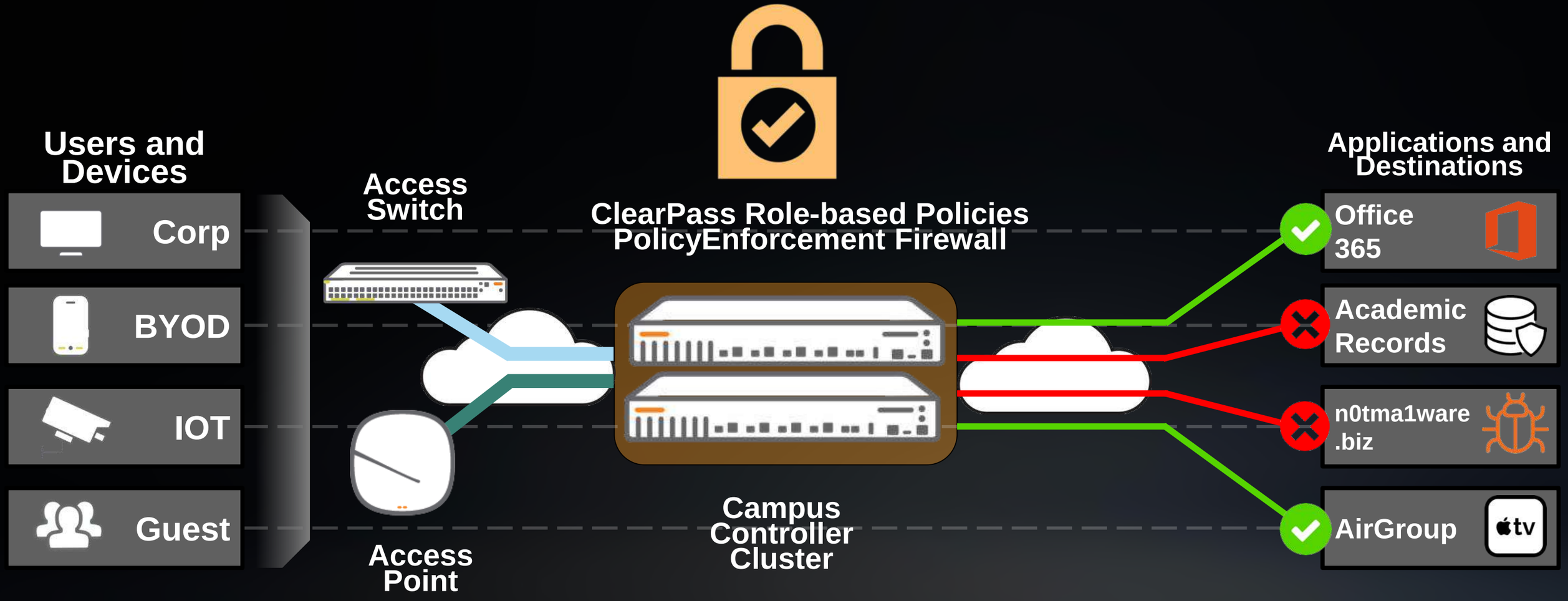
Trust Enforced by Dynamic Segmentation



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ClearPass Family: From Visibility to Control

Guest/ Captive Portal	Policy Engine	Reporting	3rd Party Integrations	TACACS+

Onboard	**OnGuard**	**Device Insight**
Self-service BYOD	Agentless health checks	Total Visibility

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CLEARPASS + INTROSPECT = INTEGRATED PROTECTION

1. Discover and Authorize

User/Device Context

ClearPass Secure Access Control

2. Monitor and Alert

Entity360 Profile with Risk Scoring

IntroSpect UEBA

Actionable Alerts

3. Decide and Act

- Real-time Quarantine
- Re-authentication
- Bandwidth Control
- Blacklist

ClearPass Adaptive Response

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CLEARPASS + PARTNERS = INTEGRATED PROTECTION

1. Discover and Authorize

User/Device Context

ClearPass Secure Access Control

2. Monitor and Alert

McAfee™

paloalto NETWORKS

Radar

CARBON BLACK

360 Security Exchange Partners

Actionable Alerts

3. Decide and Act

- Real-time Quarantine
- Re-authentication
- Bandwidth Control
- Blacklist

ClearPass Adaptive Response

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