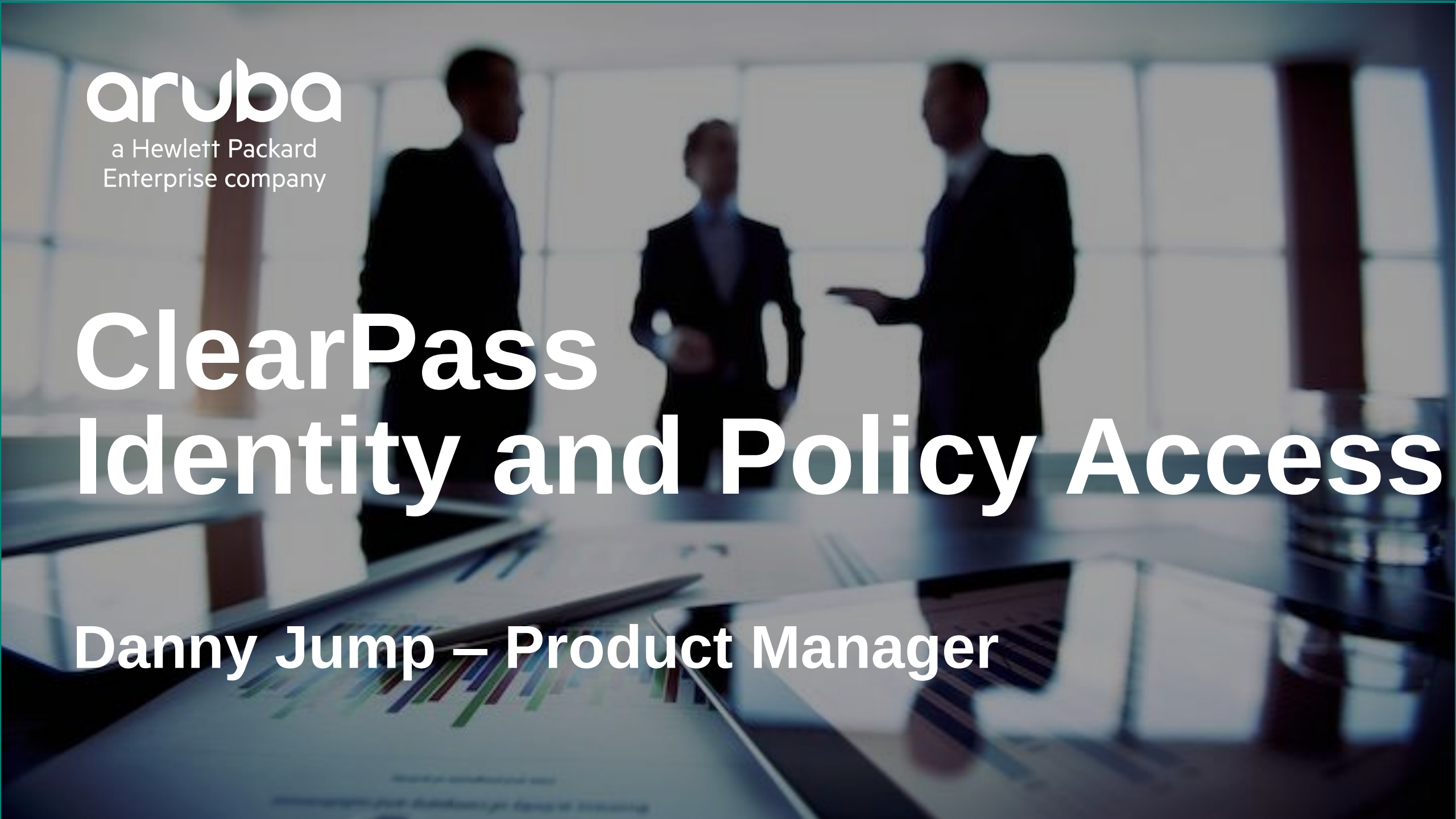
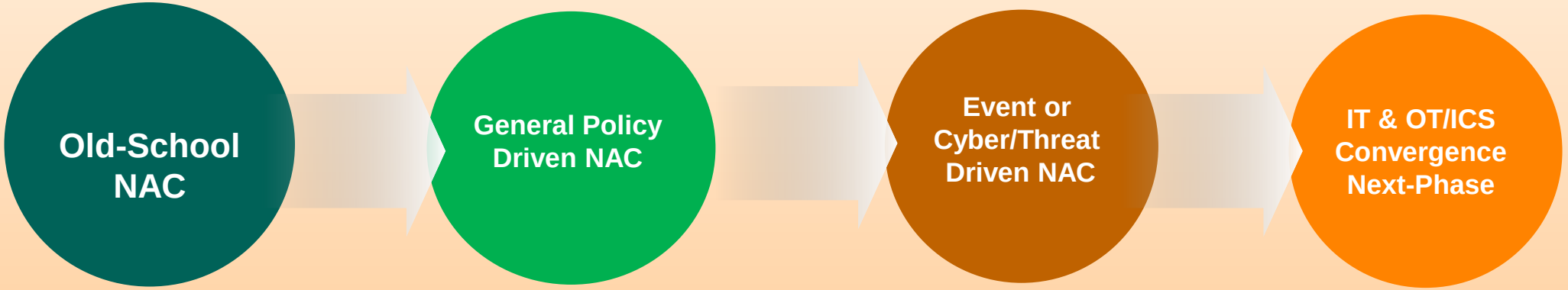

aruba
a Hewlett Packard
Enterprise company
ClearPass
Identity and Policy Access
Danny Jump – Product Manager

What's your "NAC" journey looking like?



Danny's three+ 'trimesters' of NAC

You won't find this in Gartner, Forrester, IDC, Ovum….

aruba
a Hewlett Packard Enterprise company

ClearPass at a Glance

VISIBILITY

- Know what's connected, connecting in your wired & wireless multivendor environment

aruba a Hewlett Packard Enterprise company · Hewlett Packard Enterprise · JUNIPER NETWORKS · BROCADE · CISCO · Extreme networks · ARISTA · Infoblox NEXT LEVEL NETWORKING

CONTROL

Infoblox NEXT LEVEL NETWORKING · servicenow

- Reduce risk and workload through Automation
- All devices are Authenticated or Authorized – NO UKNOWN DEVICES

RESPONSE

- Adaptive response brokering best of breed security solutions

Infoblox NEXT LEVEL NETWORKING · splunk> · ArcSight · MobileIron · DUO · intel Security · Microsoft · Check Point SOFTWARE TECHNOLOGIES LTD. · paloalto NETWORKS

ClearPass Policy Manager Platform

Guest

Onboard

OnGuard

Hardware, Virtual or Cloud Deployment (1,000, 10,000, 50,000)

REMOTE LOCATION

ClearPass Policy Manager

aruba
a Hewlett Packard Enterprise company

3rd party integrations – why they matter to us…

aruba
a Hewlett Packard Enterprise company

more 3rd party integrations……let's focus on Infoblox

Services

UBA/UEBA

Deception

IIoT

'Other'

MFA

Endpoint

SQL

MIoT

aruba
a Hewlett Packard Enterprise company

CPPM Exchange/Extensions: End to End Control

Internet of Things (IoT)

Multi-vendor switching

BYOD and corporate owned

Multi-vendor WLANs

Aruba ClearPass with Exchange Ecosystem

REST API

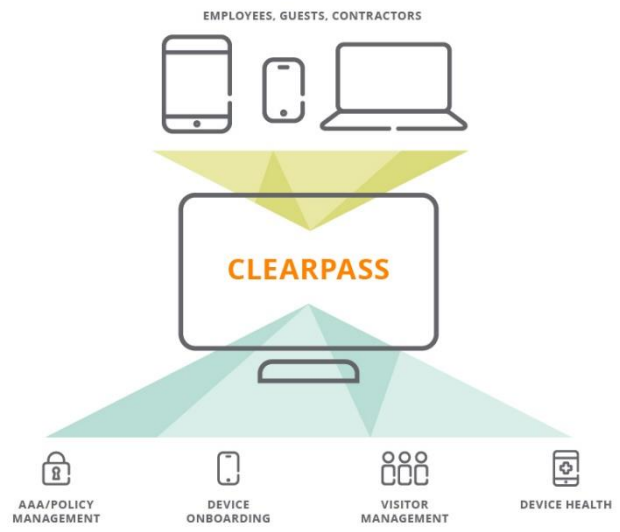
Security monitoring and threat prevention

Device management and multi-factor authentication

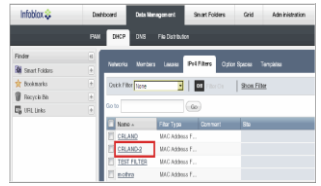
Helpdesk and voice/SMS service in the cloud

aruba
a Hewlett Packard Enterprise company

ClearPass Exchange Integration with Infoblox



ClearPass Exchange sends Username to MAC Address mapping information to Infoblox's MAC Address Filters



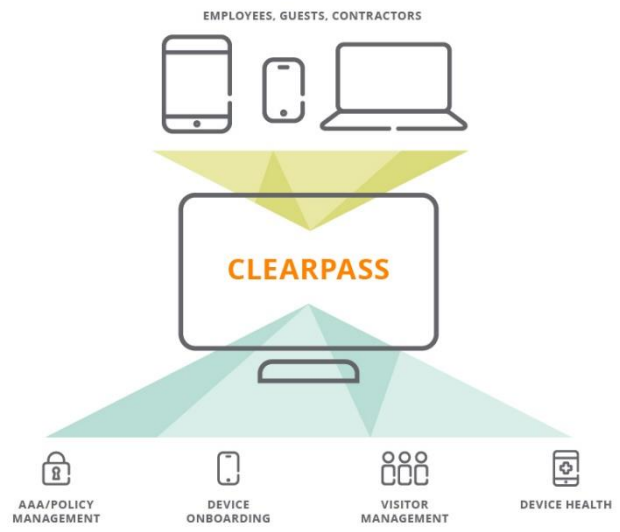
Infoblox
NEXT LEVEL NETWORKING

ClearPass acts as a single point of policy control across all wired, wireless and remote infrastructure.

Infoblox appliances will only provide a DHCP IP address to device that is listed in the MAC filter, preventing unauthorized devices from connecting to wired/wireless networks.
Can also return context like VLAN #

aruba
a Hewlett Packard Enterprise company

ClearPass Exchange Integration with Infoblox

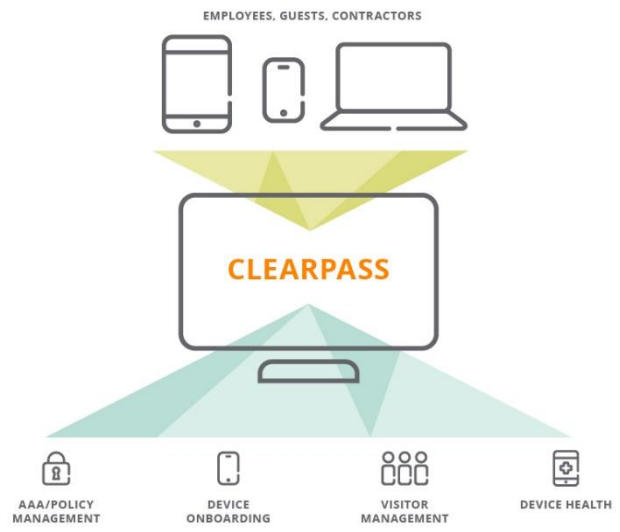


ClearPass acts as a single point of policy control across all wired, wireless and remote infrastructure.

Infoblox provides enhanced visibility into connected devices on the network supplementing and enhancing CPPM's own visibility, becomes a source of truth.

aruba
a Hewlett Packard Enterprise company

ClearPass Exchange Integration with Infoblox



ClearPass acts as a single point of policy control across all wired, wireless and remote infrastructure.

Infoblox provides visibility into endpoint domain usage, bad domain e.g. CnC server could trigger disconnect/quarantine actions

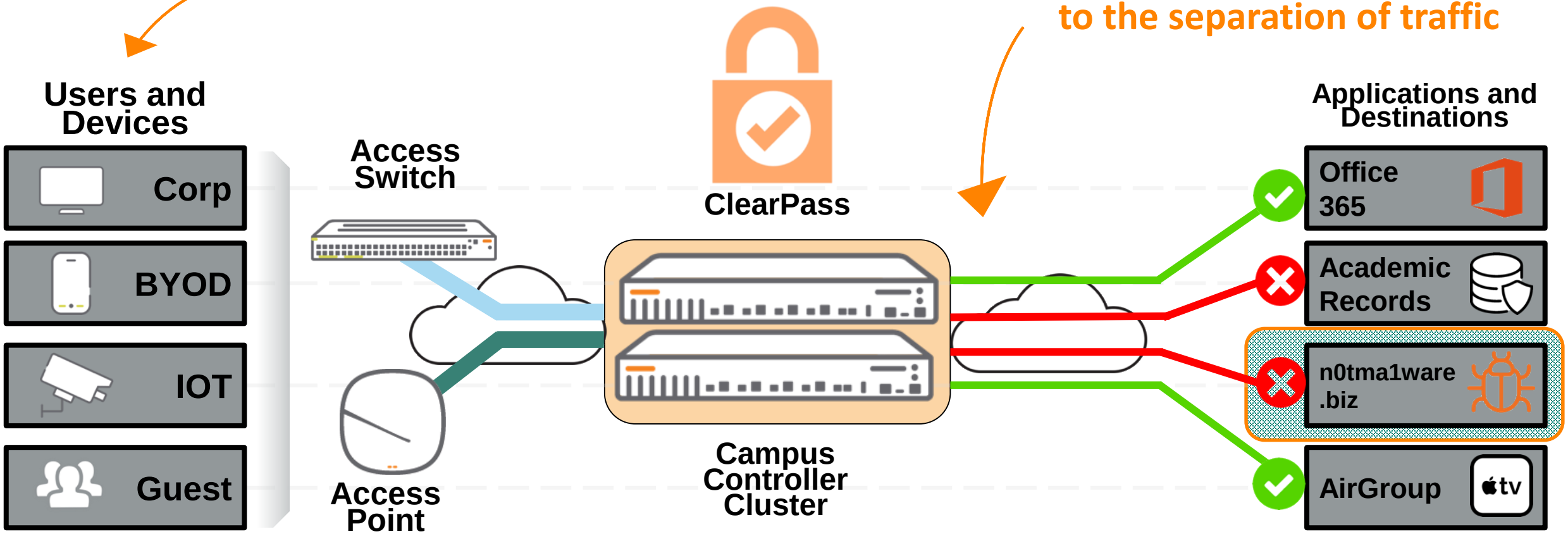
aruba
a Hewlett Packard Enterprise company

Example of technology integrations where Infoblox contextual data drives additional value

DYNAMIC SEGMENTATION: FAST AND SIMPLE

Roles are "Dynamic"

"Segmentation" refers to the separation of traffic



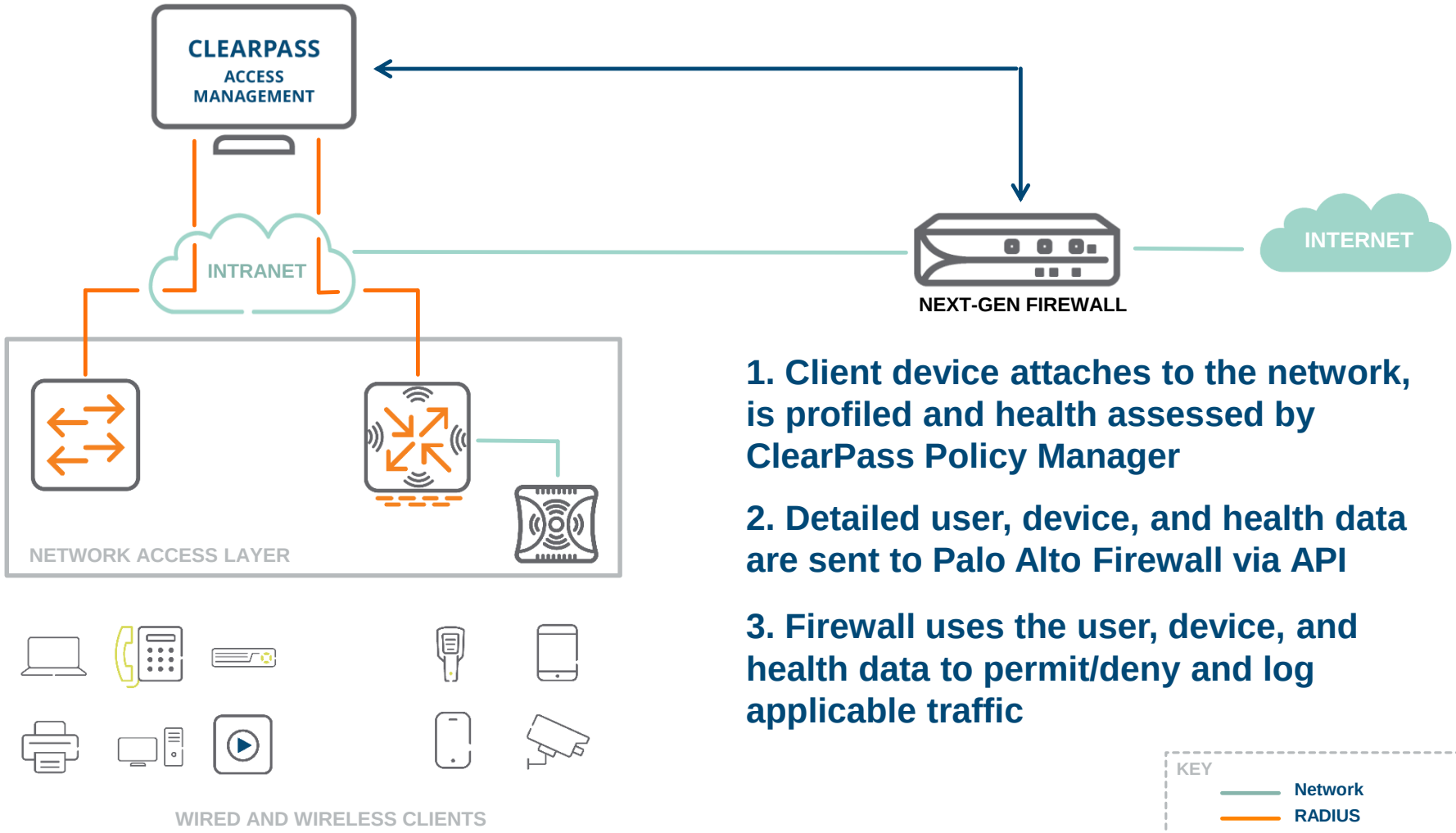
…is something we just invented

…is just for wired users and devices

…always requires tunneling of traffic

aruba
a Hewlett Packard Enterprise company

Palo Alto/Checkpoint and ‘other’ NGFW vendors



1. Client device attaches to the network, is profiled and health assessed by ClearPass Policy Manager

2. Detailed user, device, and health data are sent to Palo Alto Firewall via API

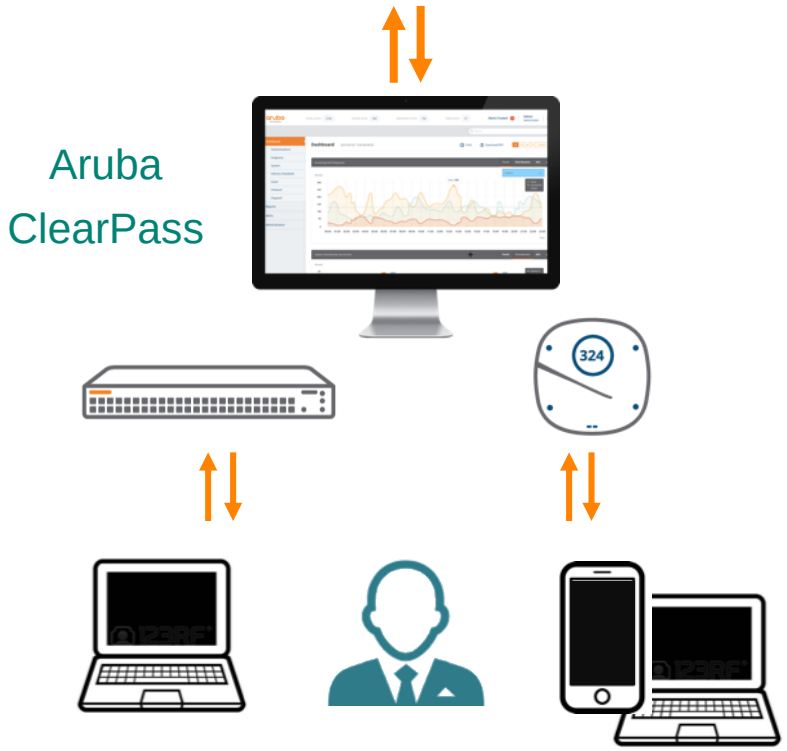
3. Firewall uses the user, device, and health data to permit/deny and log applicable traffic

KEY
- Network
- RADIUS
- PANOS XML API
- Syslog Event Feed

aruba
a Hewlett Packard Enterprise company

Open and Nimble

ClearPass Extensions - New 3rd Party Integration Option



- Opens doors for new Exchange partnerships
  - Device authorization, MFA, visitor registration, EMM/MDM and more…
- Extends use of existing security, productivity solutions
- Fast, no heavy lifting integration model.

aruba
a Hewlett Packard Enterprise company

More Ways to Talk To ClearPass

ClearPass continues the process of enabling automation and orchestration

ClearPass API Explorer

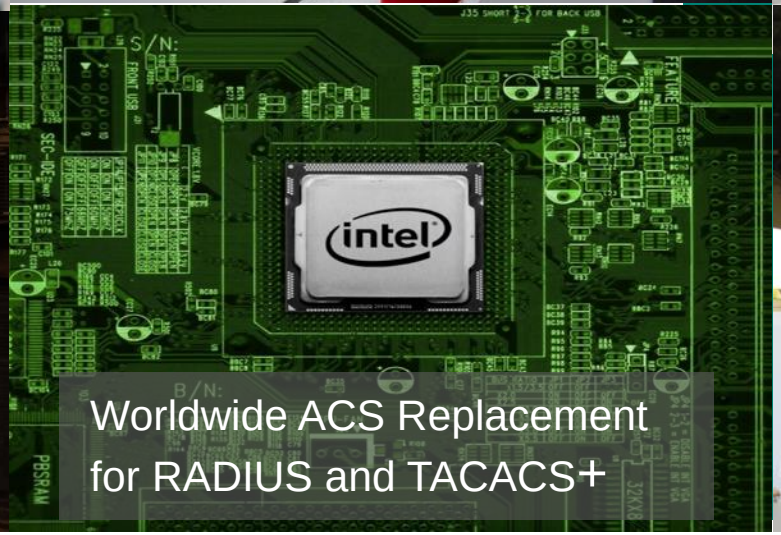
API	Services	Versions
ApiFramework	ApiAuthentication, ApiClient	v1
Authentication	AuthMethod	v1
Certificates	CertSignRequest, CertTrustList, CertTrustListDetails, ClientCert, RevocationList, SelfSignedCert, ServerCert, ServiceCert	v1
ClearPassPortal	ClearPassPortal	v1
Configuration	NetworkScan, Services	v1
Dictionaries	Attribute, ContextServerAction, Fingerprint	
DigitalPass	DigitalPass	
Events	LoginAudit, SystemEvents	
Extension	Instance, InstanceConfig, InstanceLog, InstanceReinstall, InstanceRestart, InstanceStart, InstanceStop, Store	
ExternalServers	EndpointContextServer, FileBackupServer, SnmpTrapReceiver, SyslogExportFilter, SyslogTarget	
GuestManager	ActiveSession, ActiveSessionDisconnect, ActiveSessionReauthorize, Configuration, Device, Guest, GuestDigitalPas GuestReceipt, GuestSponsor, PrintTemplate, RandomMpsk, RandomPassword, SMSReceipt, SMTPReceipt, WebLog	
Identity	Endpoint, LocalUser, LocalUserPasswordPolicy, Role, RoleMapping, StaticHostList	
Insight	Endpoint	
Licensing	ApplicationLicense	
MessagingServices	EmailSend, MessagingSetup	
Network	EventSources, NetworkDevice, NetworkDeviceGroup, ProxyTarget	
Onboard	Certificate, CertificateChain, CertificateExport, CertificateImport, CertificateNew, CertificateReject, CertificateReq CertificateRevoke, CertificateSign, Device, User	
OnGuard	GlobalSettings, Settings	
OperatorLogins	GetAccount, GetPrivileges, ListAllPrivileges, OperatorProfile	
Platform	AccessControl, ClusterDbSync, ClusterWideParameter, CppmVersion, ServerConfiguration, ServerFips, ServerSnmp, ServerVersion, Service, ServiceParameter	v1
SmsServices	SmsSend	v1
UsersAndPrivileges	AdminPrivilege, AdminUser, AdminUserPasswordPolicy	v1

AuthMethod : Manage authentication methods

Show/Hide | List Operations | Expand Operations

GET	/auth-method	Get a list of authentication methods
POST	/auth-method	Create a new authentication method
GET	/auth-method/{auth_method_id}	Get an authentication method
PATCH	/auth-method/{auth_method_id}	Update some fields of an authentication method
PUT	/auth-method/{auth_method_id}	Replace an authentication method
DELETE	/auth-method/{auth_method_id}	Delete an authentication method
GET	/auth-method/name/{name}	Get an authentication method by name
PATCH	/auth-method/name/{name}	Update some fields of an authentication method by name
PUT	/auth-method/name/{name}	Replace an authentication method by name
DELETE	/auth-method/name/{name}	Delete an authentication method by name

Global Wins



aruba
a Hewlett Packard Enterprise company

aruba

a Hewlett Packard Enterprise company

Thank You

jump@hpe.com