



aruba[®]
a Hewlett Packard
Enterprise company

ADAPTIVE TRUST SECURITY

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@ifredriks

COMPUTERWORLD
EVENT

<https://youtu.be/xHqZNmvKuSM>

Better Together

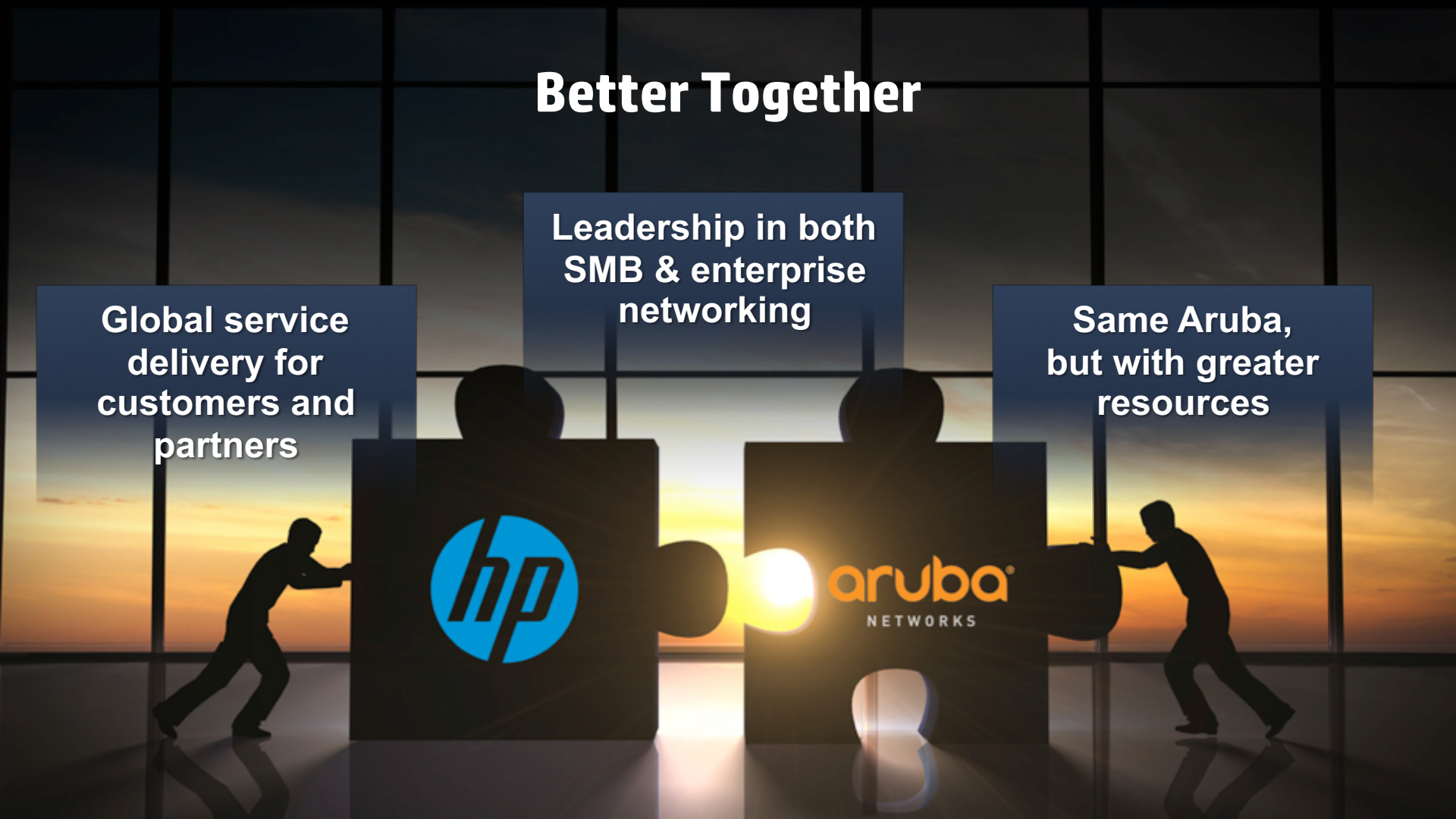
Global service
delivery for
customers and
partners

Leadership in both
SMB & enterprise
networking

Same Aruba,
but with greater
resources



aruba®
NETWORKS



GenMobile
The New Fight –
**ENTERPRISE
ROAMING**



The New Fight — GenMobile HOME OFFICE



The New Fight –
GenMobile
ROAD WARRIOR



The New Fight – GenMobile **BRANCH SITES**



Top Customer Drivers



1. Mobility



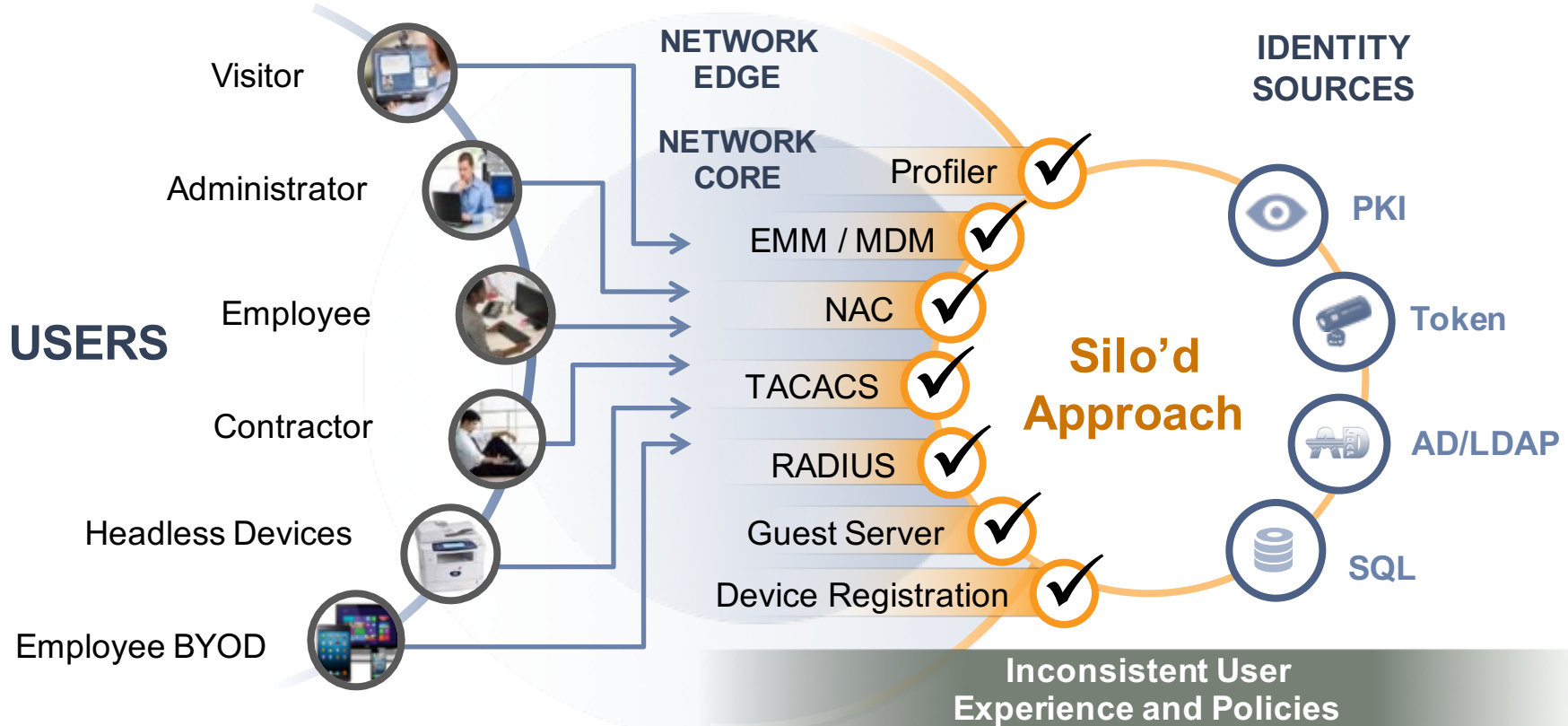
2. BYOD/Device Loss



3. Authentication

1. Who and what can connect regardless of device and location
2. Personal devices, privileges and loss of data
3. Enforcing separate enterprise and guest authentication with policies

Why A Move to Policy Management?



The ClearPass Platform

Guest



Onboard



OnGuard



Expandable Applications



Hardware or
VM Appliances
(500, 5,000 or 25,000)

Remote Location



ClearPass Policy Manager

What's Inside

Base Services

Policy Engine
RADIUS/CoA
TACACS+
Profiling+
+100 RADIUS
dictionaries
Advanced reporting

IT Tools

Policy simulation
Access tracking
Template-based policy
creation
LDAP browser
Per session logs

User Tools

AirGroup
Bonjour/DLNA
Device registration
Certificate revocation
Basic guest

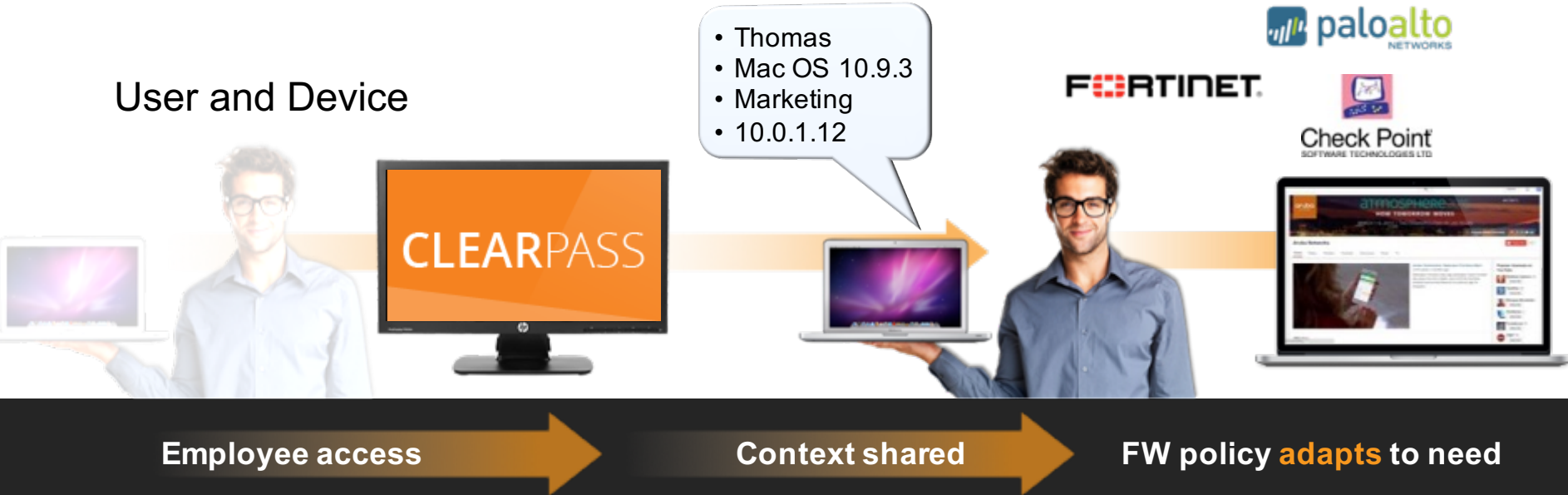
Free Add-ons

Pool of 25 Lic.
Onboard
Guest
OnGuard
Exchange
API
Syslog



Adaptive Trust Context Sharing

User and Device



- Works with AD, LDAP, ClearPass dB, SQL dB
- No agents/clients required

Adaptive Policy Using Device Ownership

Enterprise Laptop

Authentication → EAP-TLS
SSID → CORP-SECURE



Internet and Intranet



ORACLE



box

Exchange



BYOD Phone

Authentication → EAP-TLS
SSID → CORP-SECURE

Internet Only

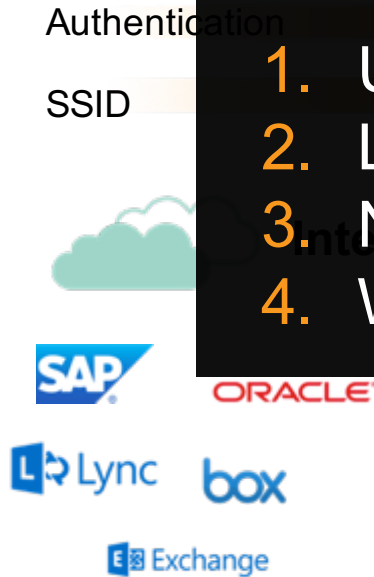


Adaptive Policy Using Device Ownership

Enterprise Laptop

BYOD Phone

1. Uses same identity store and EAP type
2. Leverages profiling and owner data
3. No need for separate SSIDs
4. Works at the office and over VPN



Today's Reality – What the Media is Blowing Up

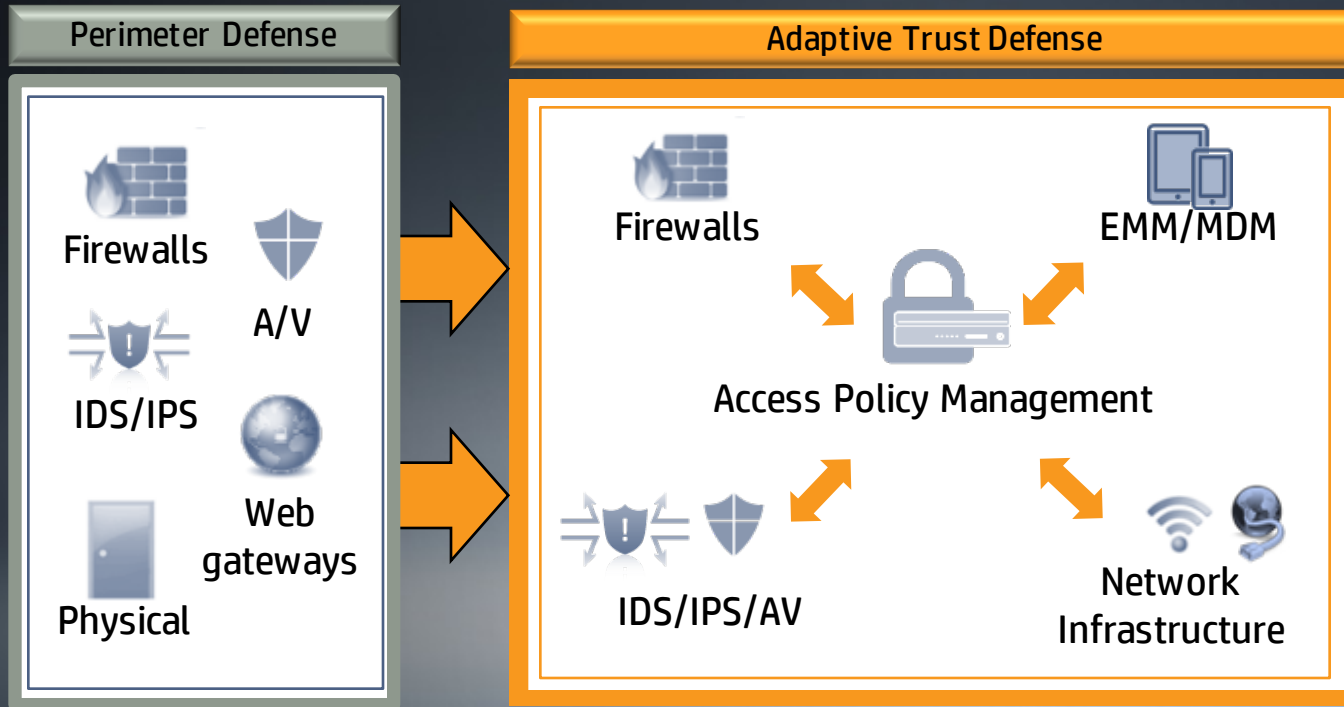


Traditional security
perimeter is broken



Mobility means threats
originate from within

Time for a New Mobility Defense Model



ClearPass Exchange – 3rd Party Integration

Traffic
protection:
user and
device data

Perimeter Defense



paloalto
NETWORKS

TippingPoint

Check Point
SOFTWARE TECHNOLOGIES LTD.

FORTINET



MDM / EMM

Google



MobileIron

Device-
based
Controls
and
Policies



Visibility
and
interactive
control
features

RSA SecurID

ArcSight
An HP Company

splunk >

Auth & Automation



JUNIPER
NETWORKS

aruba
NETWORKS
an HP company

BROCADE

Infrastructure

Controls
for Wi-Fi
and
wired

Why ClearPass versus Legacy AAA?

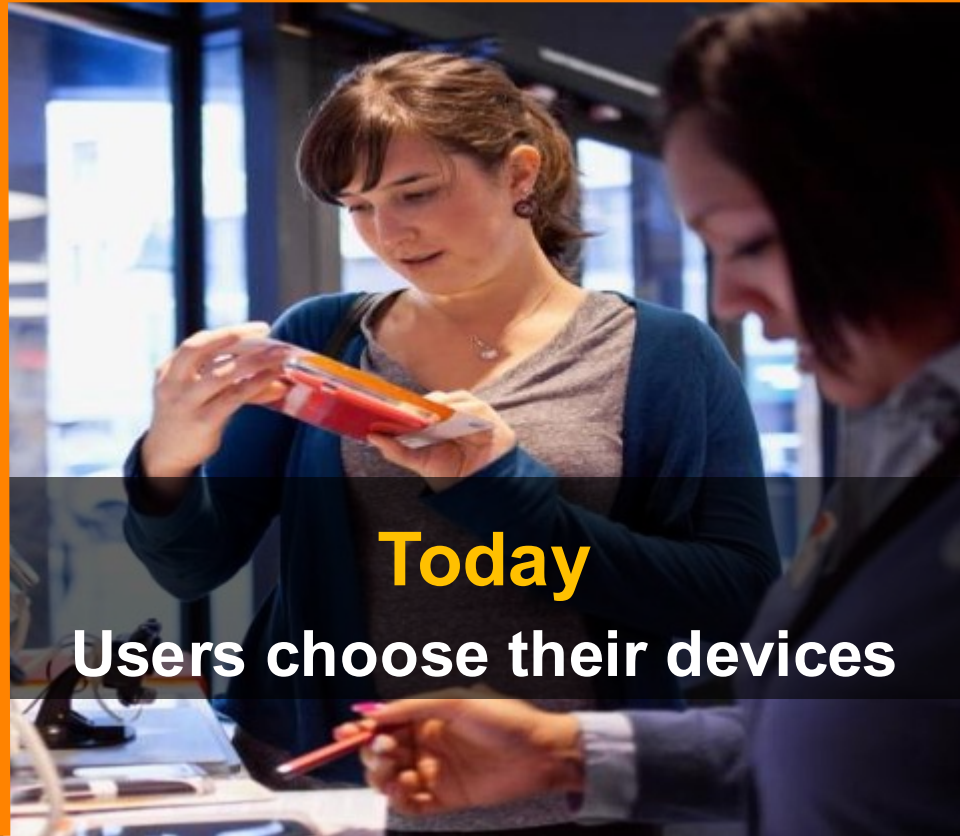
Provides policy management with differentiated access

Scales for mobility – re-authentications, locations, many device types

Session context captured and shared – users, devices, location...

- ✓ Replaces ACS, NPS and others
- ✓ Supports high scale environments
- ✓ Built-in profiling and reporting

Why Automated and Secure Workflows

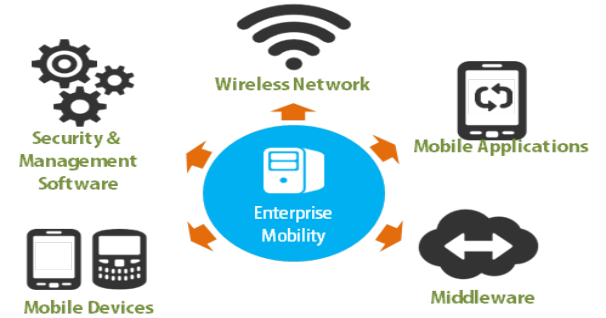


Challenges You Can Solve

Repetitive Help Desk and IT Calls



Device and app management

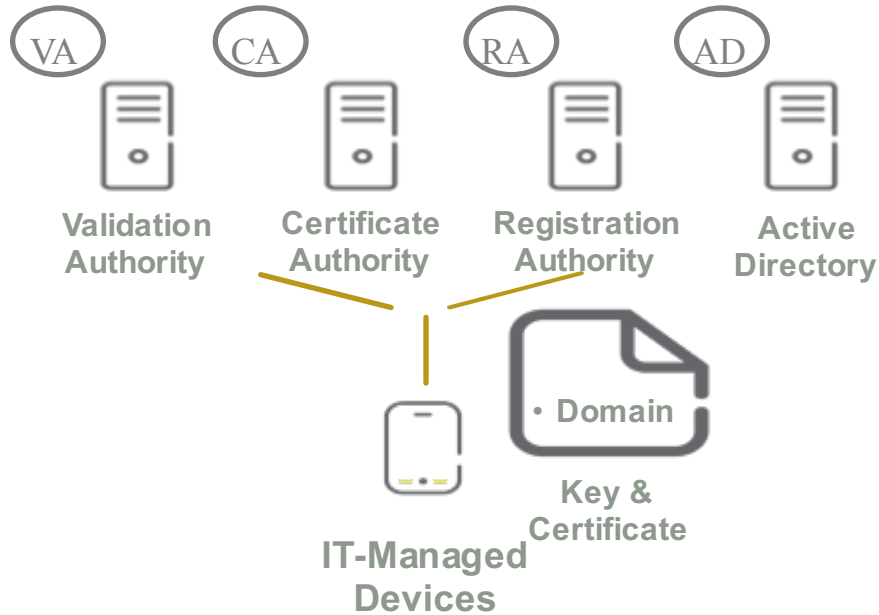


Policy enforcement

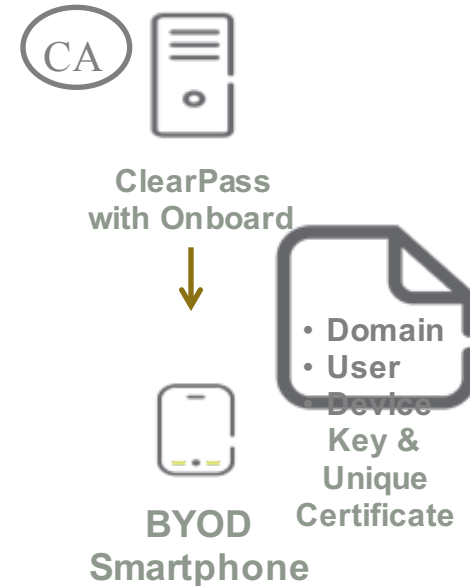


Password issues and theft

ClearPass Advantage - CA Purpose-built for BYOD



Built-in ClearPass CA



No Pollution of Enterprise Public Key Infrastructure (PKI)

ClearPass Advantage - CA Purpose-built for BYOD

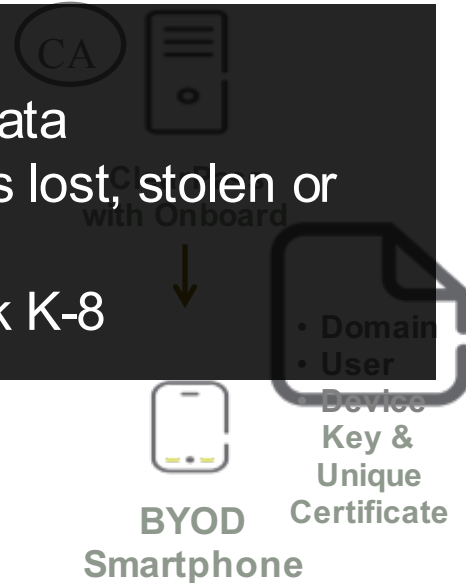


Built-in ClearPass CA

Validation Authority

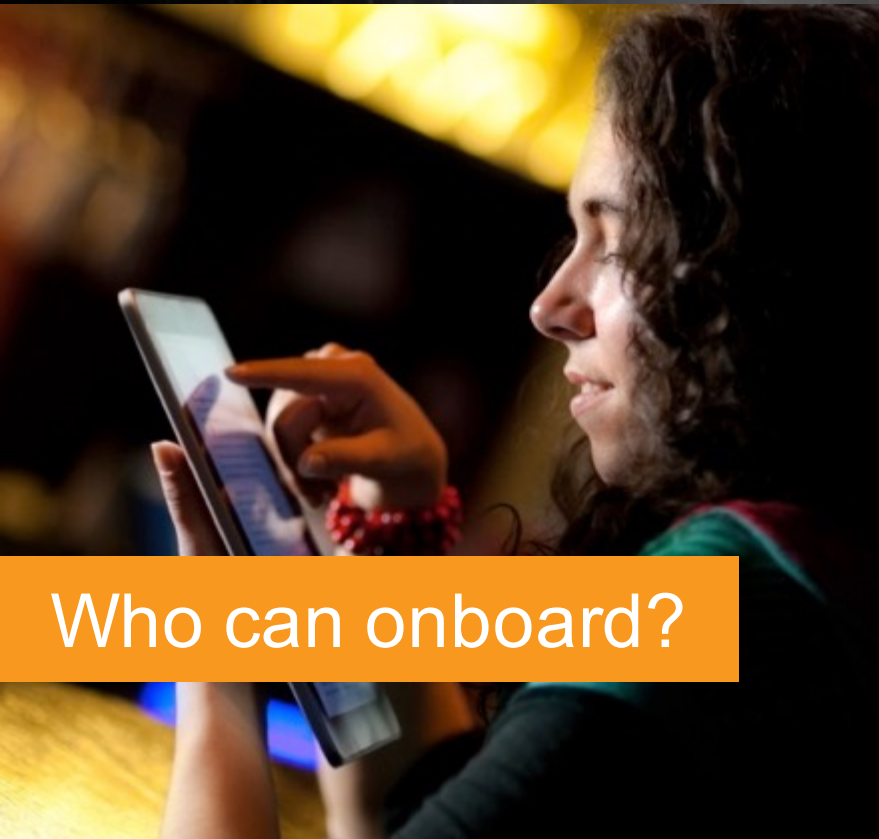
1. Onboard CA complements a PKI
2. Certificates include user and device data
3. No need to touch an AD when devices lost, stolen or replaced
4. Social logins work when no AD – think K-8

IT-Managed
Devices



No Pollution of Enterprise Public Key Infrastructure (PKI)

Managing Personal Devices



Who can onboard?



User owned



Replaced often



Access from anywhere



Android, iOS, Windows



Work & personal use

Why ClearPass Onboard?

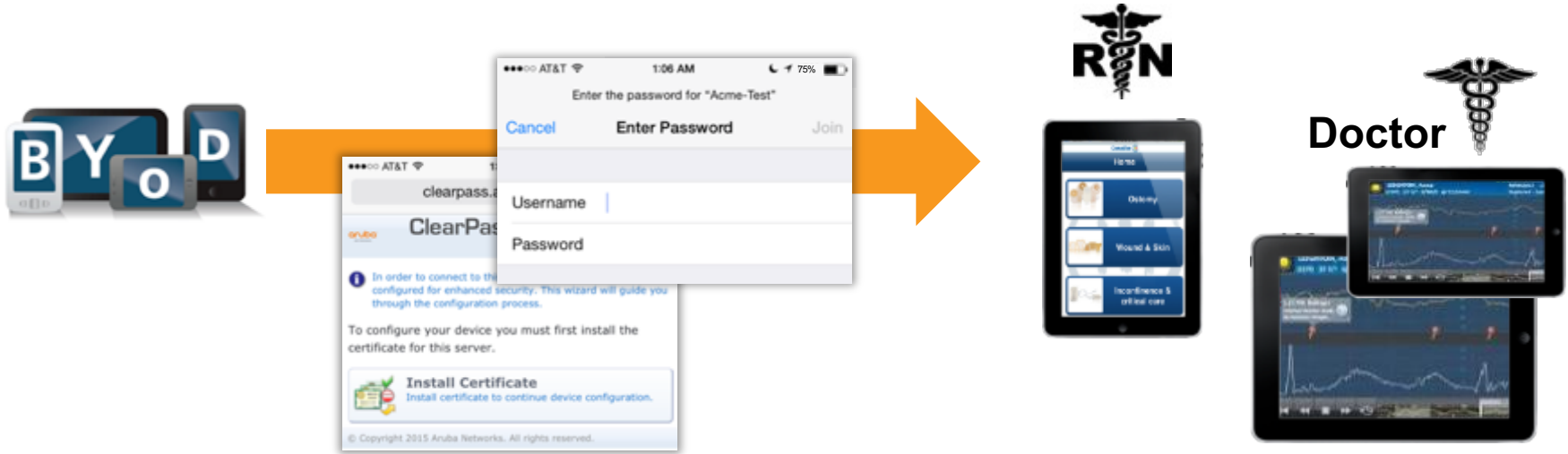


Self-service workflows

- Automated configuration:
Network settings and certs
- Built-in certificate authority (CA):
Including user and device data
- Can include in MDM/EMM
workflows
- Add security without increasing
IT workload or user frustration

Authentication Using Unique Device Certificates

- 1 User's device redirected to portal
- 2 User enters AD credentials to start onboard
- 3 Automatically places user on proper network segment



Easy



Secure



No Passwords

Authentication Using Unique Device Certificates

- 1 User's device redirected to portal
- 2 User enters AD credentials to start onboard
- 3 Automatically places user on proper network segment

- IT determines who can onboard devices
- Access differentiated by role and device
- Devices not entered into active directory
- No need for employees on guest network

Easy



Secure



No Passwords

Onboard Highlights

**Sponsor
Approved**

**Social
Login**

**Web-based
Enrollment**



**SPONSOR
APPROVED**

Google

Office 365



**Windows
Phone**

Challenges Delivering Guest Access

Open Network!



- ✗ Everyone expects access – even employees
- ✗ Little to no security & reporting
- ✗ Often requires staff to assist each guest

Why ClearPass Guest?

Any industry,
any # of guests

Only secure guest
app in industry

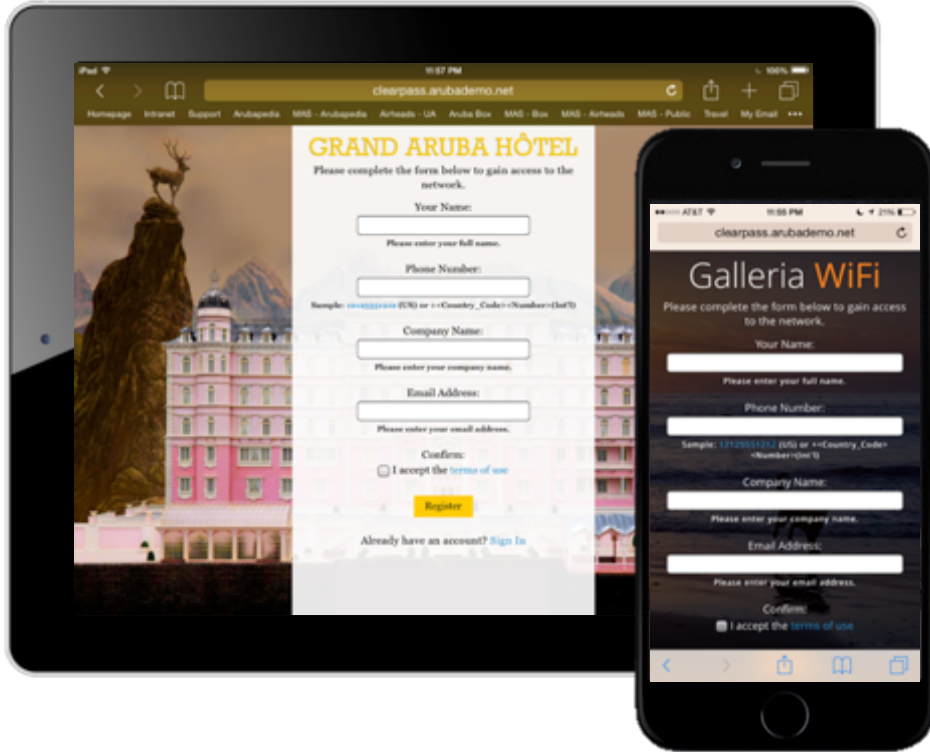
Any device, any
network vendor

Internet / managed
Intranet

Self-service /
sponsor / social

Portal fits phone,
laptop, tablet

Customizable Portal Features



- ✓ Your branding and data fields
- ✓ Advertising – mobile app, more...
- ✓ Integration with 3rd party billing & property management systems
- ✓ Portal per department, location
- ✓ Social login, MAC cache, QoS

Self-service with Sponsor Example



Scalable for Any Environment



Set # of Guests

Standard Guest for Enterprise, EDU



High Guest Turnover

High Capacity Guest (HCG) for Airports,
Arenas, Entertainment Venues

Guest Highlights

Galleria WiFi

Please complete the form below to gain access to the network.

Your Name:

Please enter your full name.

Phone Number:

Sample: 12125551212 (US) or ++Country_Code-<Number>-(int'l)

Company Name:

Please enter your company name.

Email Address:

Please enter your email address.

Confirm:
 I accept the [terms of use](#)

Already have an account? [Sign In](#)

- Agilysys and Protel Property Management Systems
- New RESTful APIs: Guest, Onboard, Platform, SMS
- Media4U SMS Gateway
- Custom Web Status/Error Pages
Prebuilt for error status (can be customized)
- New Galleria Skins Included

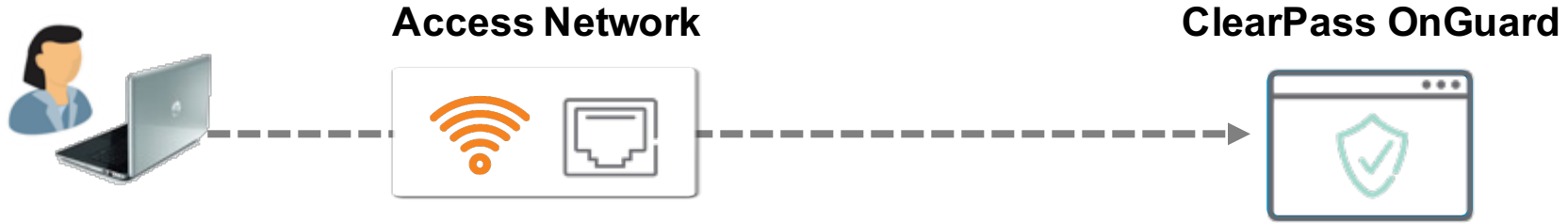
Why ClearPass OnGuard?



Endpoint Health

- Check health before network access
- Multiple operating systems supported
- Persistent and dissolvable agents
- Can also be used with BYOD workflows

Automate Device Health Checking



Minimizes risk to network
Allows user self service



**Auto-remediate
the device**



**Detect
non-compliant
devices**



**Block access to network resources
across wired, wireless & remote**

Resources

www.arubanetworks.com

Exchange, Adaptive Trust, promotions

aruba
NETWORKS

HOME → PRODUCTS → SECURITY → NETWORK ACCESS CONTROL

ClearPass Policy Manager

ClearPass Policy Manager provides secure network access in a mobile world. It features ultra-scalable AAA with RADIUS and TACACS+ and a policy engine that leverages contextual data based on user roles, device types, app usage and location.

- ClearPass Exchange
- ClearPass Guest
- ClearPass OnBoard
- ClearPass OnGuard

Policy management with mobility in mind.

ClearPass takes a fresh approach to solving today's mobility challenges across any multivendor network by replacing outdated legacy AAA with context-aware policies. And ClearPass scales and adapts to your evolving user, security and business needs.

[Get the ClearPass solution overview](#)

Secure mobility leader for the corporate office, remote workplace and public venues.

[Get the new Gartner Magic Quadrant report for Network Access Control](#)

Thank You

A collection of words in various languages expressing gratitude, including:

- Vinaka
- Maake
- Asante
- Shukria
- Dhanyavadagalu
- 감사합니다
- Kam Sab Humnita
- ار كثر
- Manana
- Dankon
- Kiitos
- Binan
- Matondo
- Dank Je
- Blagodaram
- Dziakuje
- Juspapar
- Arigato
- Grazie
- Terima Kasih
- Tack
- Chokwane
- Diolch i Chi
- Taiku
- Uspaxar
- Gracias
- Mochchakkeram
- Ua Tsaug Rau Koj
- Bedankt
- Dakujem
- Grazas
- cám ơn bạn
- Tingki
- Gratias Tibi
- Obrigado
- Djere Dieuf
- Eskerrik Ask
- Suksama
- Dëkuji
- Nirringrazzjak
- Hvala
- Welalin
- Di Ou Mesi
- Kia Ora
- Kop Khun Khap
- ありがとう
- Misaotra
- Rahmat
- Matur Nuwun
- 谢
- xвала
- Danke
- Merci
- Salamat
- Go Raibh Maith Agat
- ਖੋਖੋਖੋਖੋਖੋਖੋ
- Najis Tuke