



# TILT, TÚR VAGY TÁMOGAT PRIVÁT ESZKÖZÖK A VÁLLALATI HÁLÓZATBAN?

Luky Gábor  
2013. Október

# PRIVÁT ESZKÖZÖK A VÁLLALTI HÁLÓZATBAN - B.Y.O.D.

## **B.Y.O.D.** (Bring Your Own Device)



# INDUSTRY BYOD DRIVERS

**Smartphone and Tablet Growth**



**Growing Mobile Workforce**



**Rise of Mobile Apps**



**One reliable prediction for 2013: BYOD is still a bear for IT.**

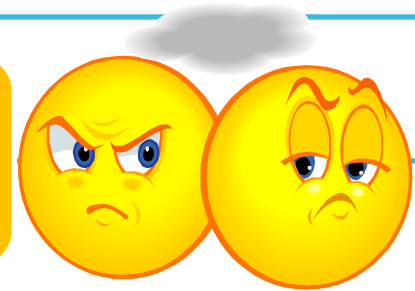
**Gartner, 2013**

# PRIVÁT-ESZKÖZ KEZELÉSI STRATÉGIÁK

Megtűr



Megtilt



Támogat



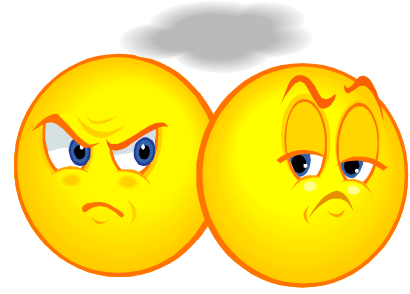
# PRIVÁT-ESZKÖZ KEZELÉSI STRATÉGIÁK - MEGTŰR



- Nem tudunk vagy nem foglalkozunk idegen eszközök hálózatba hordozásával
- Veszélyes stratégia:
  - fertőzött eszközök
  - Hálózatbiztonsági kockázat
  - Felhasználói visszaélések
- Szeparált hálózati szegmens saját tulajdonú eszközök számára
- Megvalósítás: Vendég WLAN, dedikált Internet kapcsolat
- Problémák: vezetékes portok védelme, vendég hozzáférés kompromittálása (PSK = VállalatunkNeve), vállalati erőforrások nem elérhetőek, nehezen ellenőrizhető, stb.



# PRIVÁT-ESZKÖZ KEZELÉSI STRATÉGIÁK - MEGTILT



- Az idegen eszközök vállalati hálózatra csatlakozásának blokkolása
- Csatlakozáskor végpontok azonosítása
  - MAC cím alapján
  - Tanúsítvány alapú 802.1x autentikáció (EAP-TLS)
    - OmniSwitch termékcsalád
    - OmniAccess WLAN termékcsalád
    - Alcatel-Lucent Clearpass Policy Manager AAA megoldás
- Problémák: felhasználói elégedetlenség(!)

# PRIVÁT-ESZKÖZ KEZELÉSI STRATÉGIÁK - TÁMOGAT



How do I onboard personal devices?

How do I keep enterprise data safe?

How do I protect my network?

What if a mobile device is lost?

How do I maintain user privacy?



**NETWORK:**

NAC?

**DEVICE:**

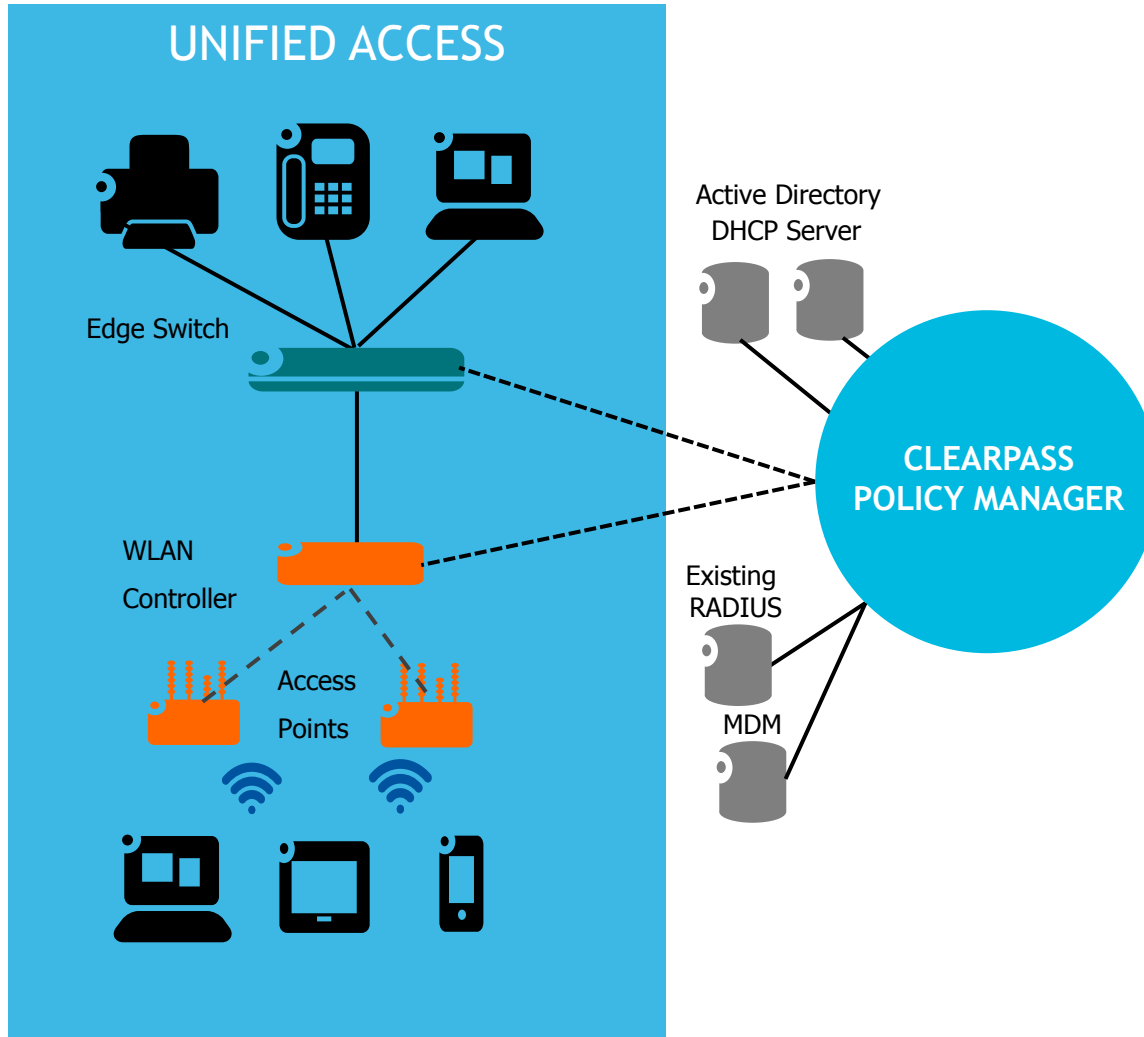
MDM?

**APP:**

MAM?

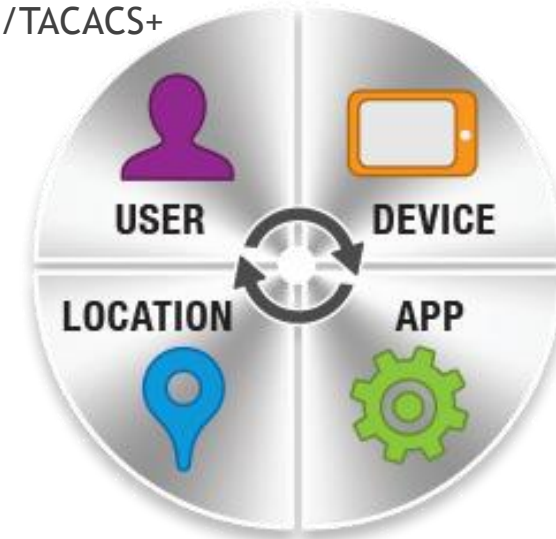


# CORE COMPONENTS OF UNIFIED ACCESS FOUNDATION FOR BYOD



## POLICY MANAGEMENT

- Role-based network access enforcement for Wi-Fi, wired and VPN
- Advanced reporting of all user activity, authentications and failures
- Mobile Device management
- RADIUS/TACACS+





# MULTI-VENDOR POLICY ENFORCEMENT

## ClearPass Policy Manager



POLICY ENFORCEMENT:

Permit

Deny

Whitelist

Blacklist

Redirects

Role-based Security

Bandwidth Mgmt

Optimized Multimedia

Any Network

Alcatel-Lucent



ARUBA  
networks



BROCADE

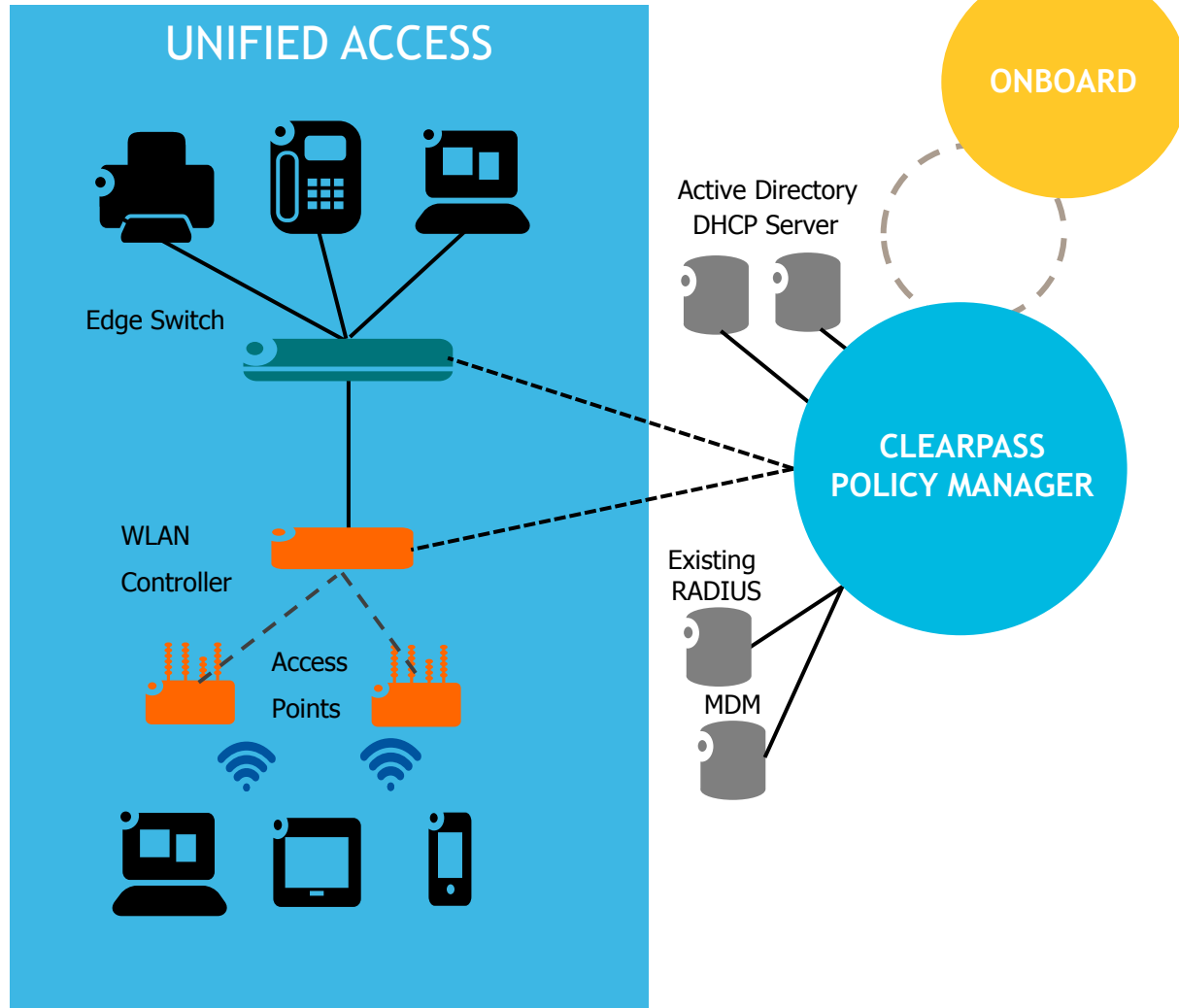
JUNIPER  
NETWORKS

CISCO

Policy Enforcement Optimized for Alcatel-Lucent,  
But Works with Any



# CORE COMPONENTS OF UNIFIED ACCESS FOUNDATION FOR BYOD

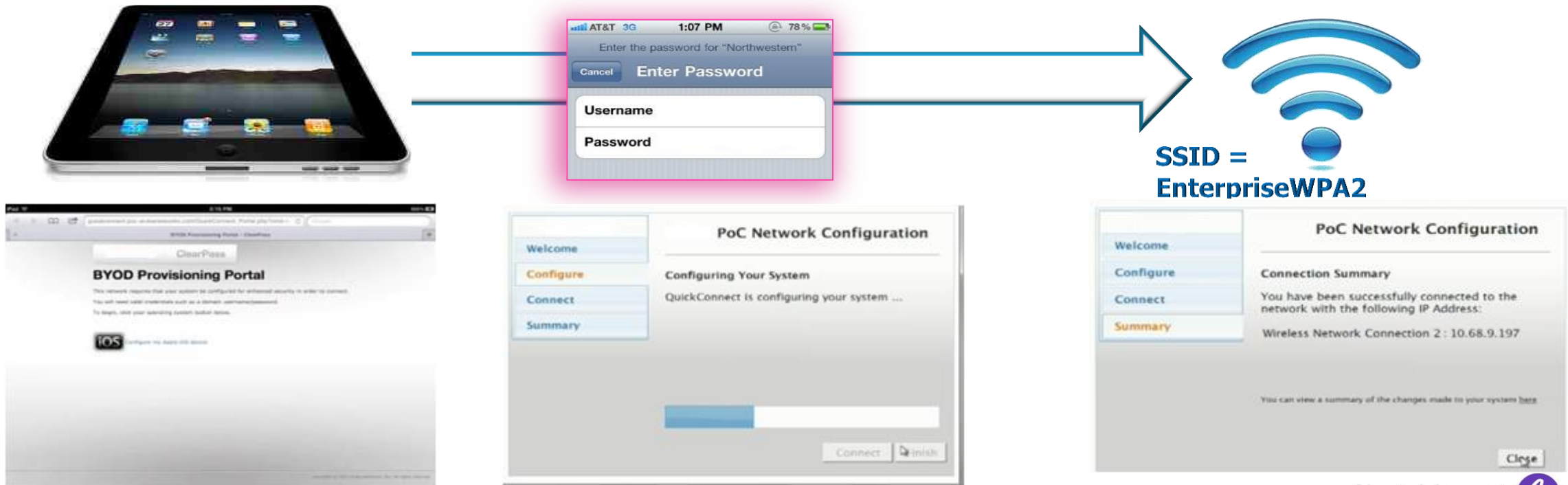


## DEVICE PROVISIONING

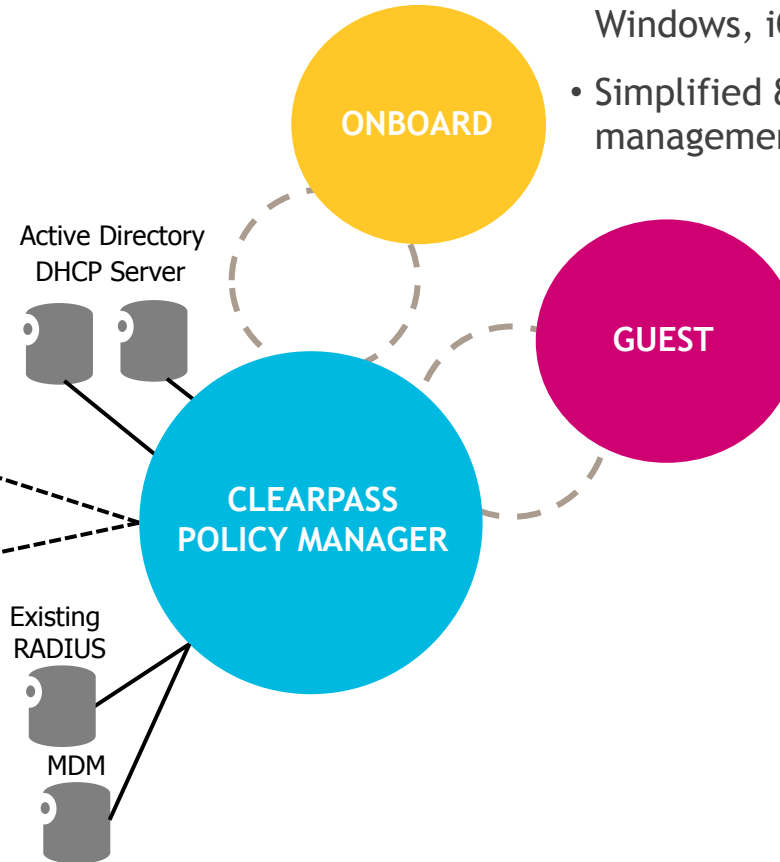
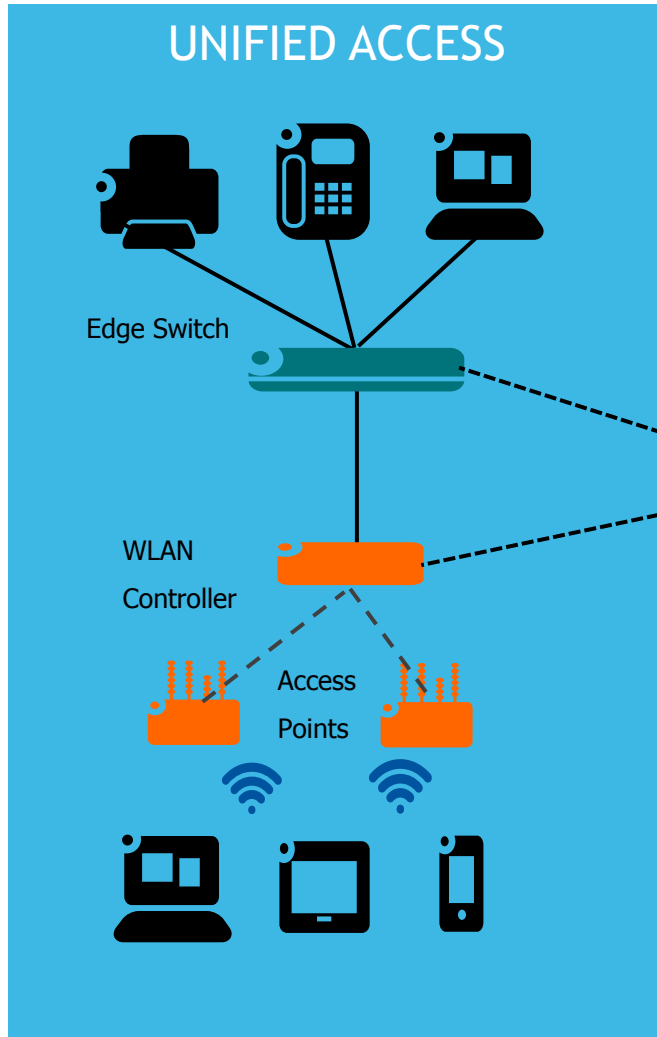
- Self-Provisioning for Wired & WiFi Windows, iOS, Android devices
- Simplified 802.1X deployment and management for Unified Access

# ONBOARDING - INTUITIVE USER EXPERIENCE

1. Device type automatically detected & redirected to portal
2. Settings & credentials are auto-configured after user enters domain credentials
3. User automatically placed on proper SSID & network segment



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## DEVICE PROVISIONING

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## ADVANCED GUEST MANAGEMENT

- Simplified management of HotSpot with advanced customizable portal
- Guest management in enterprise with self and sponsor registrations workflows

# CLEARPASS GUEST - FEATURES

## Guest Registration

### Guest Self-Registration

Please register to access the network.

#### Visitor Registration

\* **Your Name:**

Please enter your full name.

\* **Email Address:**

Please enter your email address. This will become your username to log into the network.

\* **Gender**

## Guest Registration

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

### Visitor Registration

\* **Sponsor's Name:**

Name of the person sponsoring this visitor account.

\* **Sponsor's Email:**

Email of the person sponsoring this visitor account.

\* **Your Name:**

Please enter your full name.

**Email Address:**



## Self-registration

- Customizable, automated workflows
- Notification via SMS, email, badge printer
- One time registration

## Sponsored Guest Access

- Reception sponsor interface
- Email sponsor approval workflow
- Enable any employee to instantly sponsor

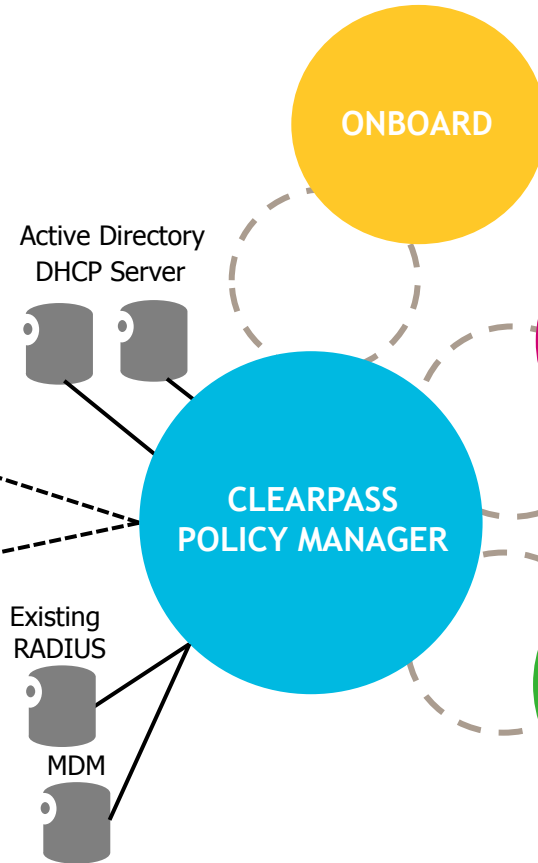
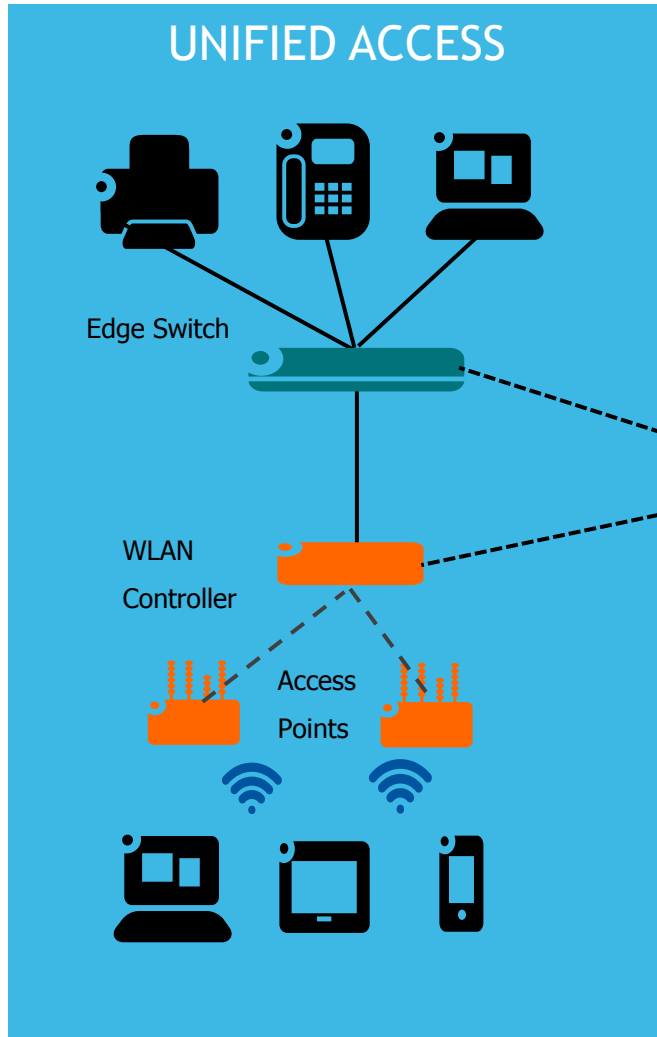
## Pre-registration

- Bulk import from file eg. Excel, text
- Generate visitor badges or notify via branded email templates

## 3<sup>rd</sup> Party Integration

- XML API's for integration with existing applications

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## POSTURE/HEALTH CHECKS

- Enforced constantly security policy of devices accessing the corporate network
- Profile and Role based security enforcement management solution

# COMPLIANCE CONTROL FOR LAPTOPS/DESKTOPS

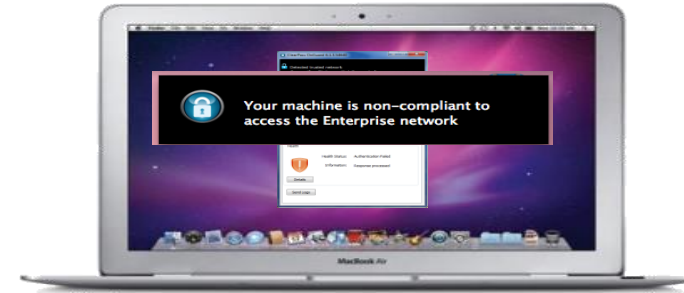
Checks prior to Access

- Out of date A/V, A/S
- VM not allowed
- Firewall off
- USB Device not allowed



- Firewall on
- Encrypted disk
- All Services on
- Current A/S, A/V Dat file

Restricted / Denial of Access



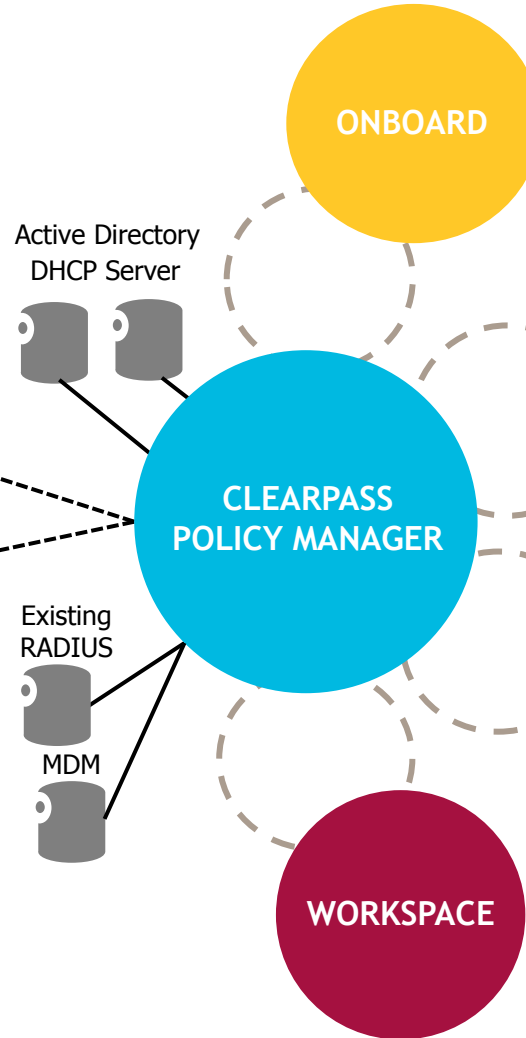
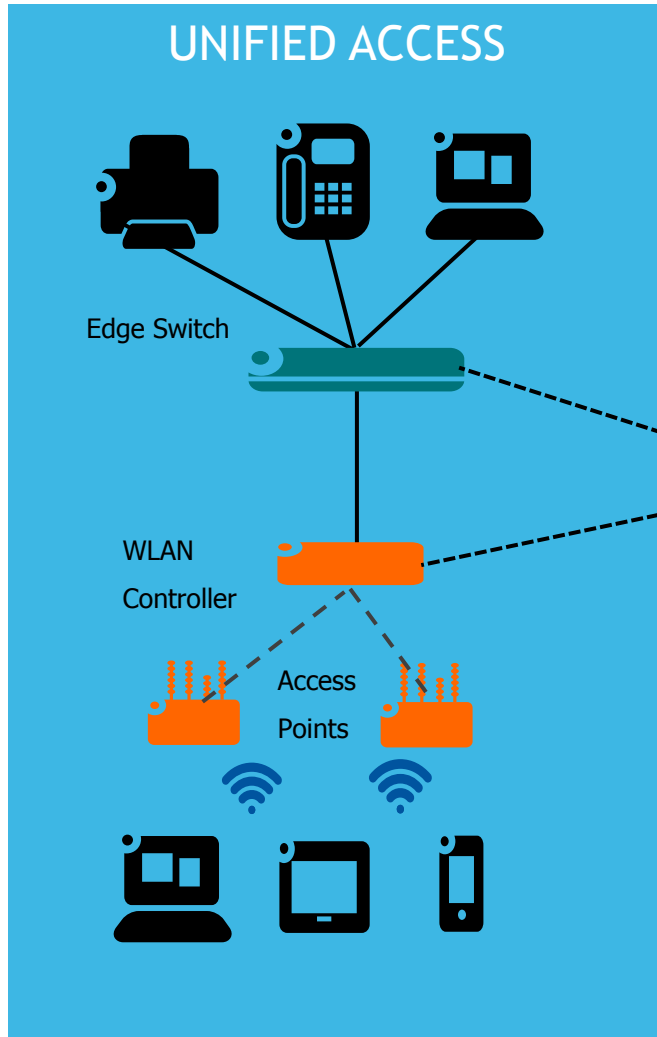
Quarantine / Remediation

Full Access



Wireless, Wired, VPN

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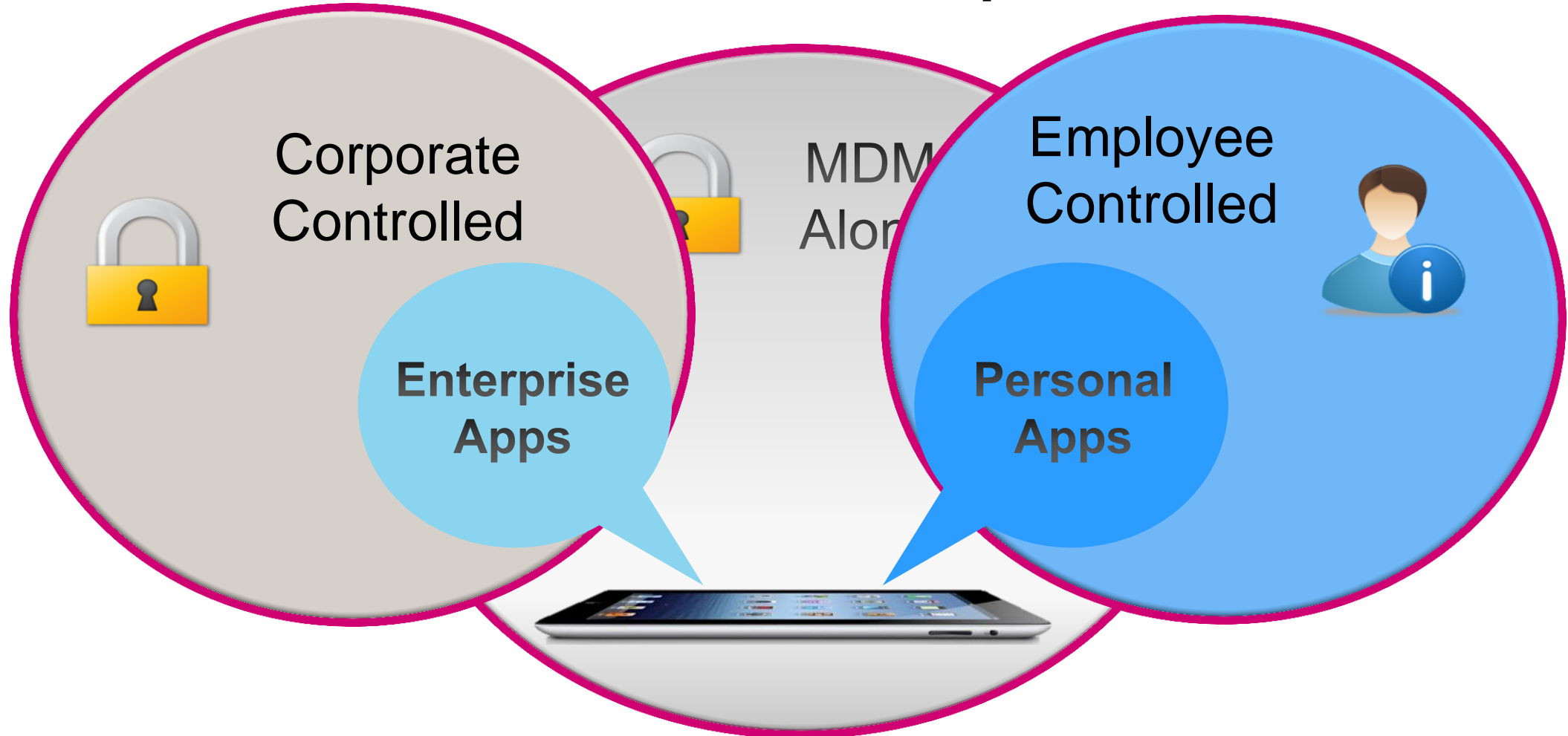
## APPLICATION MANAGEMENT

- First integrated solution to control devices, users, network and applications altogether
- Leverage investments of MDM/MAM and extends it to the Network Access Control



# MOBILE APP MANAGEMENT

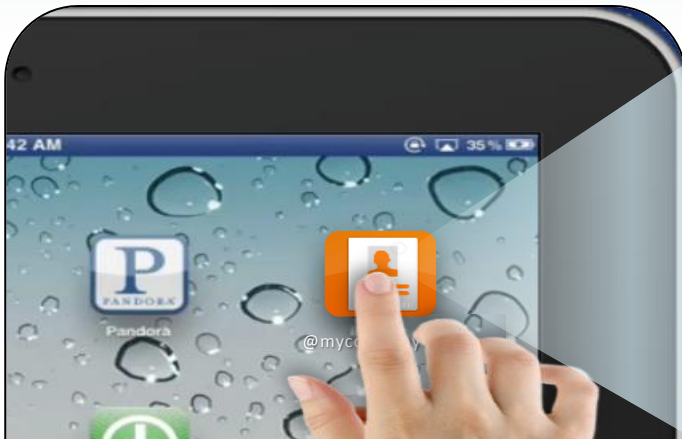
## ClearPass with WorkSpace



# ONE APP WITH EMPLOYEE SELF-SERVICE

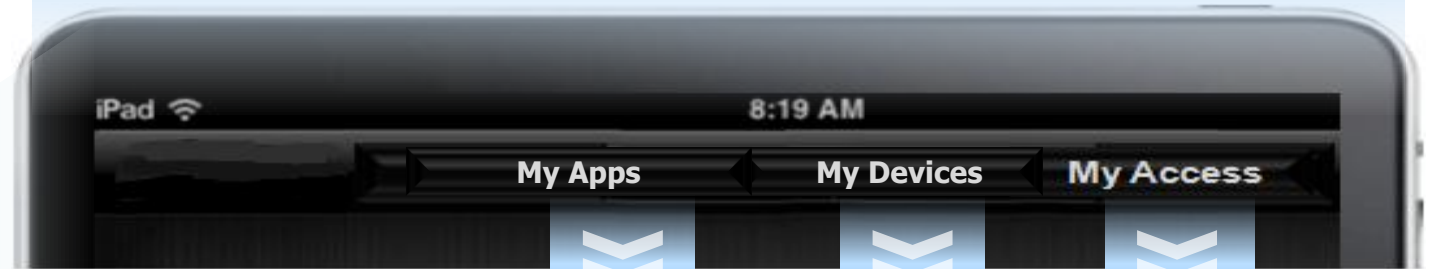
## Personal

- WorkSpace App provisioned to device

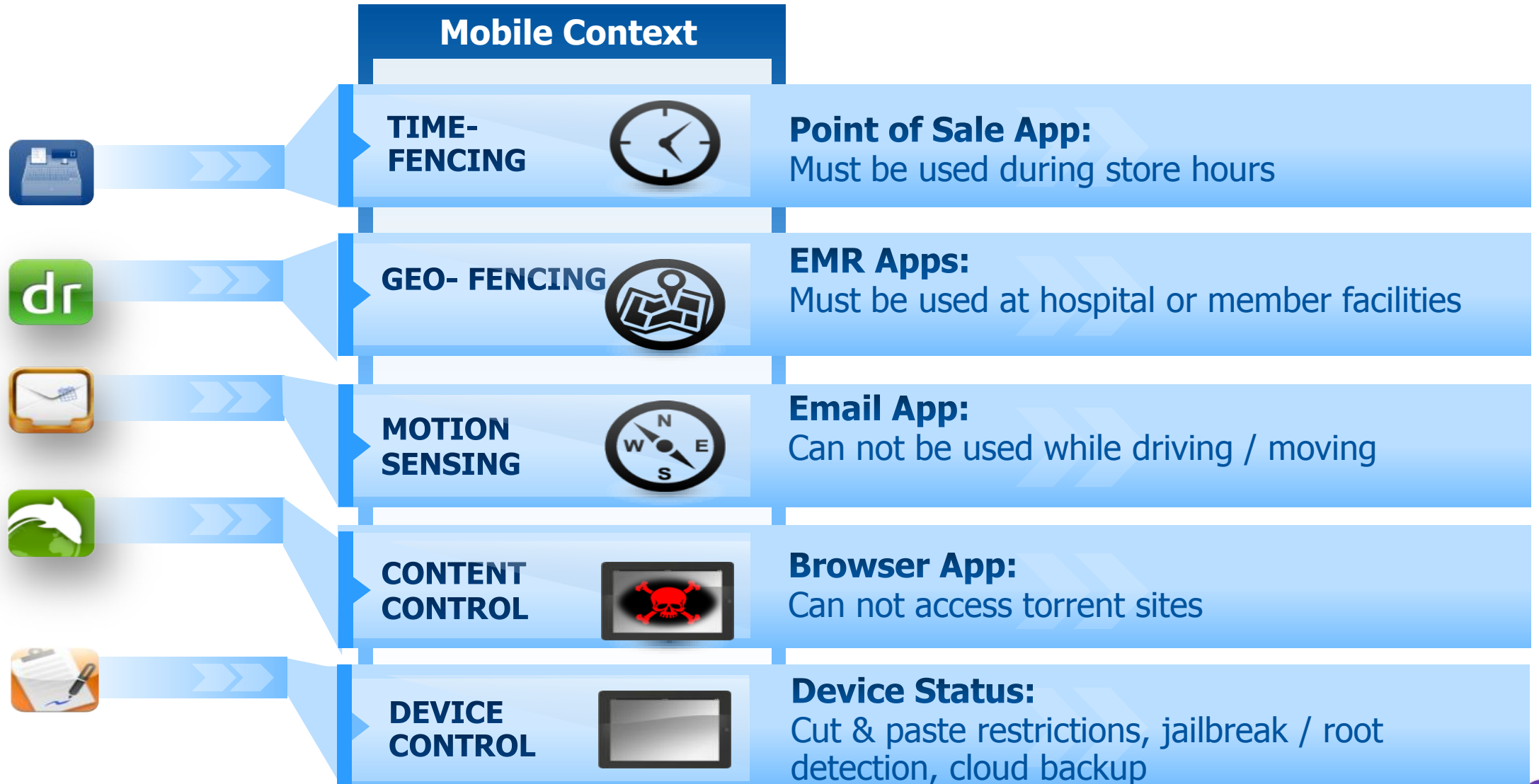


## Corporate

- Employee self-service mobility
- Personalized portal with Single Sign-On



# CONTROL APPS BASED ON CONTEXT



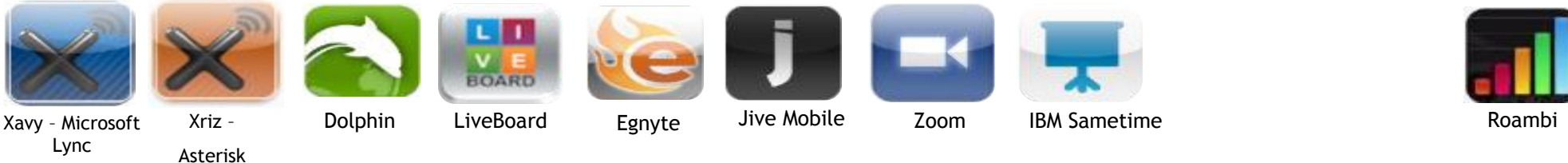
# OVER 50 CERTIFIED WORKSPACE APPS

## Enterprise Productivity



## Collaboration

## Business Analysis



## File Sharing



## Office Doc Editor



## File Access

## Industry

## Customer Developed



Simple Enterprise App Wrapping

# WELCOME TO THE NEW PC ERA

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