

# MOBILITY-CENTRIC UNIFIED ACCESS

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# Mobility Explosion – Emerging IT Challenges



From nomadic use to  
always-on and connected



BYOD  
Security  
& Support



QoS for Unified  
Communications  
& Collaboration



Wi-Fi  
Capacity  
Challenges

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# Why BYOD – Key Enterprise Benefits

## Users

- Freedom of device choice
- Collaboration
- Mobility

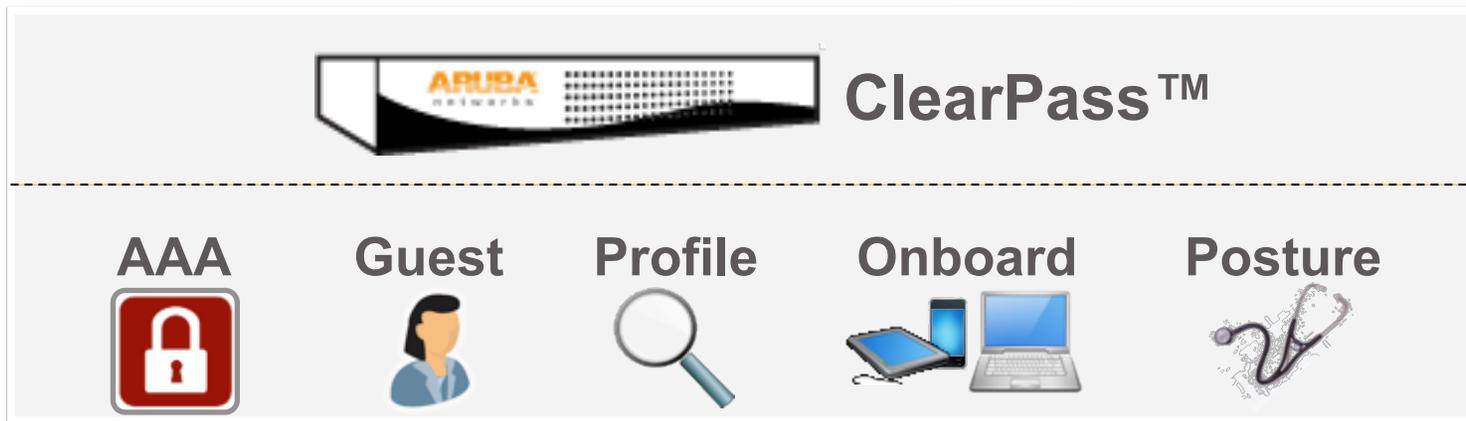
## CIO

- Redirect budgets from legacy IT infrastructure to strategic business critical initiatives

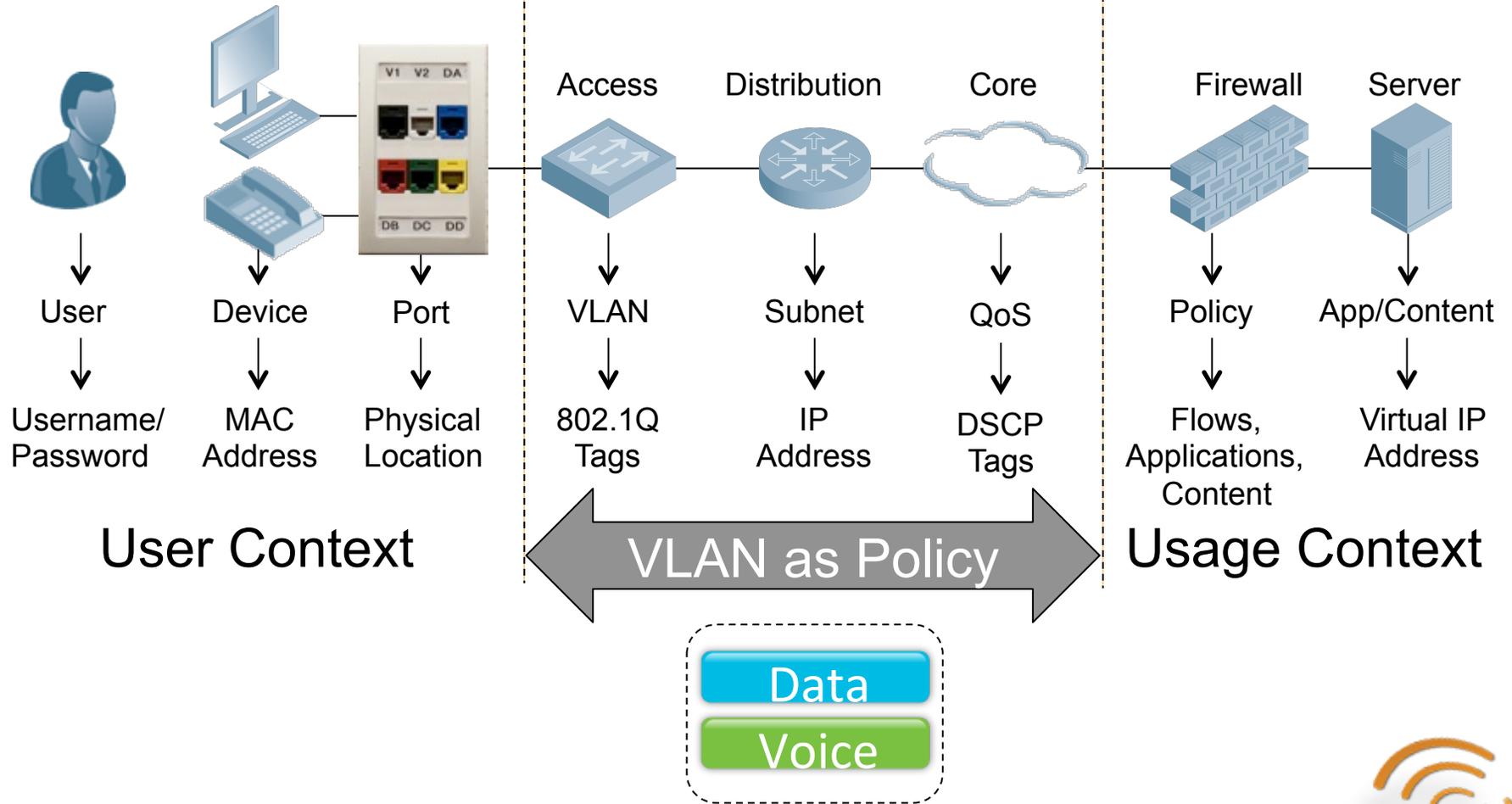
## IT Manager

- Enable user self-service
- Reduce help-desk costs
- More productive internal customer base

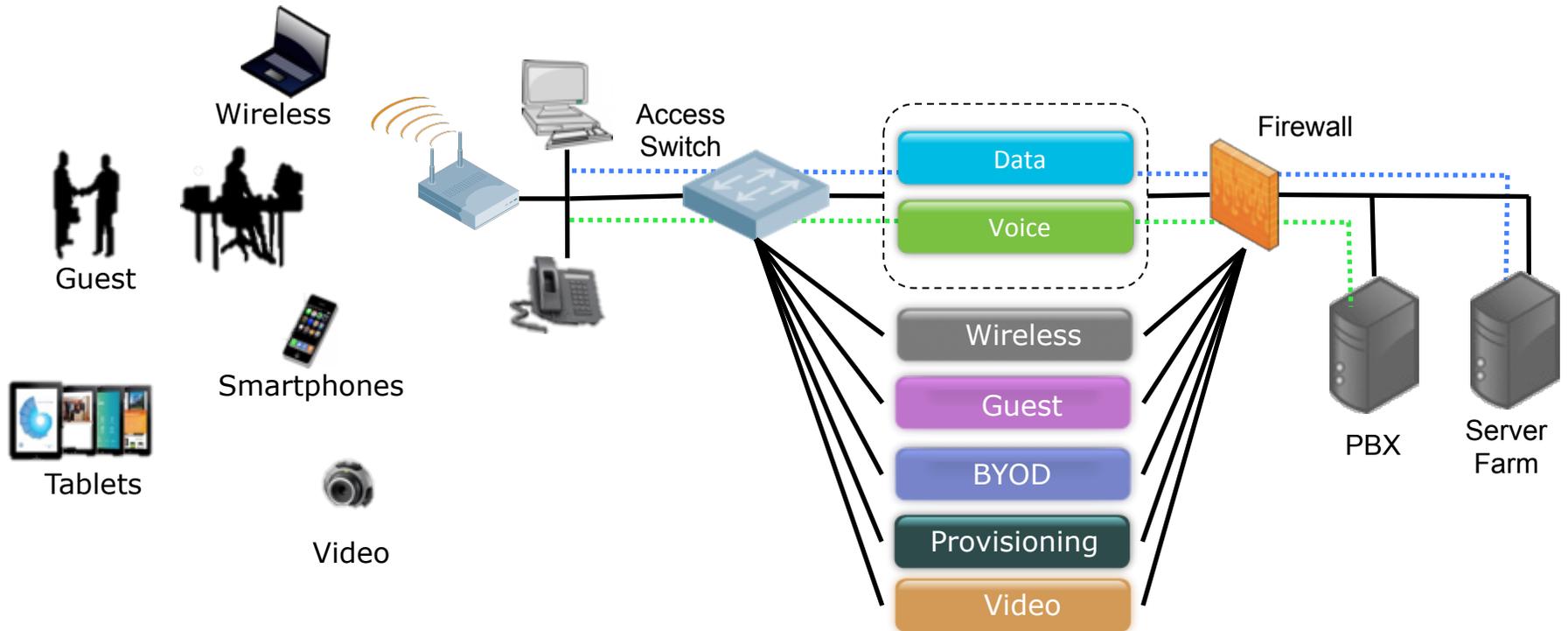
# Policy Definition and Control



# Policy Enforcement in Fixed Networks



# VLAN Policy Enforcement Breaks Mobility



- Transition to mobile devices
- VLAN explosion due to BYOD
- Need to optimize multimedia applications

**Mobility breaks across VLANs**

# Context-Aware L4-7 Policy Enforcement



## Identify the Connection

**Context derived at connect time**

**User:** Joe Smith  
**Role:** Employee  
**Device:** iPad  
**Date:** M-F, 8am-5pm  
**Location:** Campus



## Classify the Traffic

**Applications classified, even when encrypted**

- Citrix ICA
- Microsoft Lync
- Voice
- Video
- Patient monitoring



## Control Access

**Security actions enforced per role**

- Permit / Deny
- NAT
- Redirect
- Provision
- Quarantine
- Disconnect
- Blacklist



## Optimize the Air

**App delivery actions enforced per flow**

- Optimize Multimedia
- Optimize Multicast
- Admission Control
- Spectrum Scanning

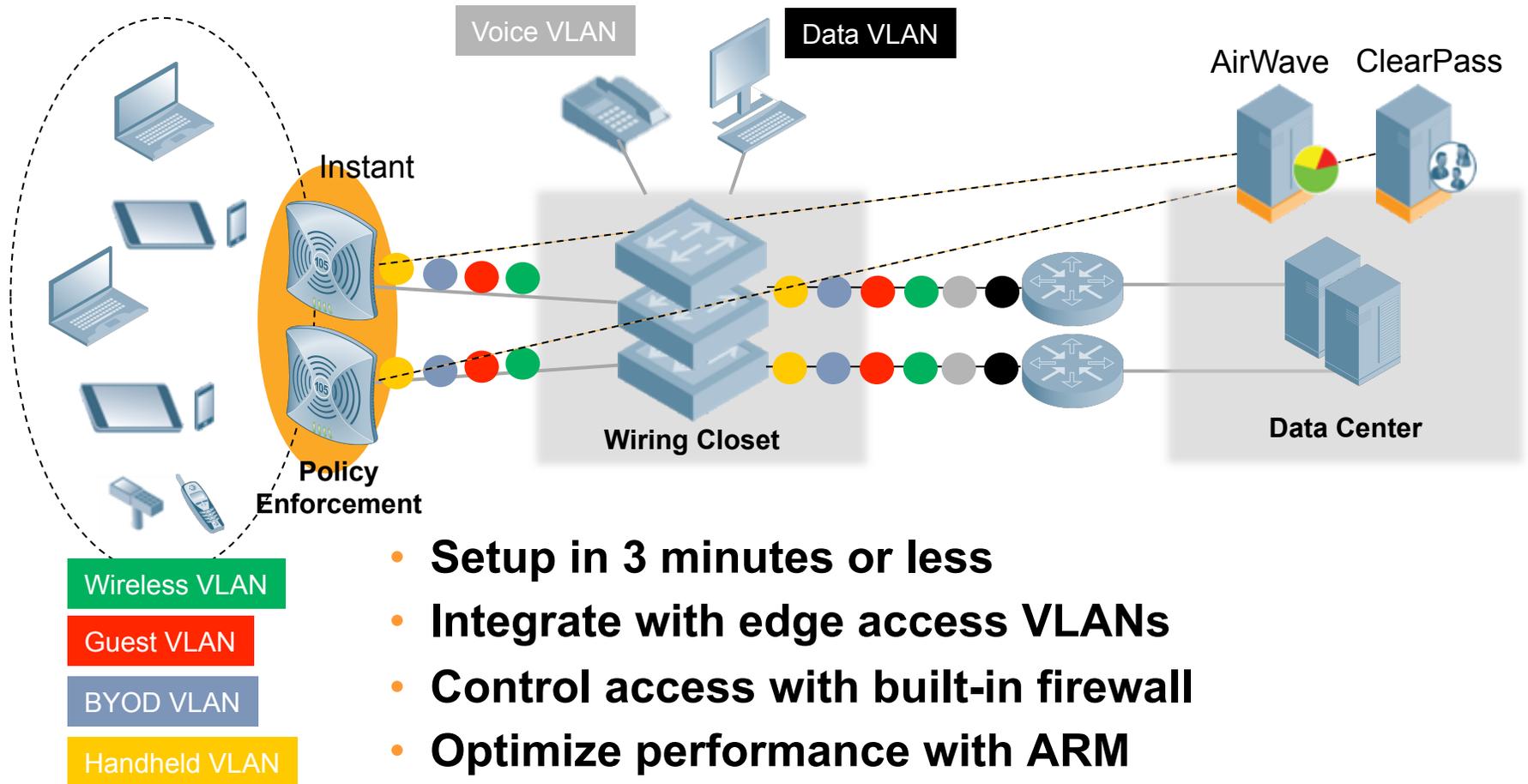


## Follow the User

**Context enabled network services**

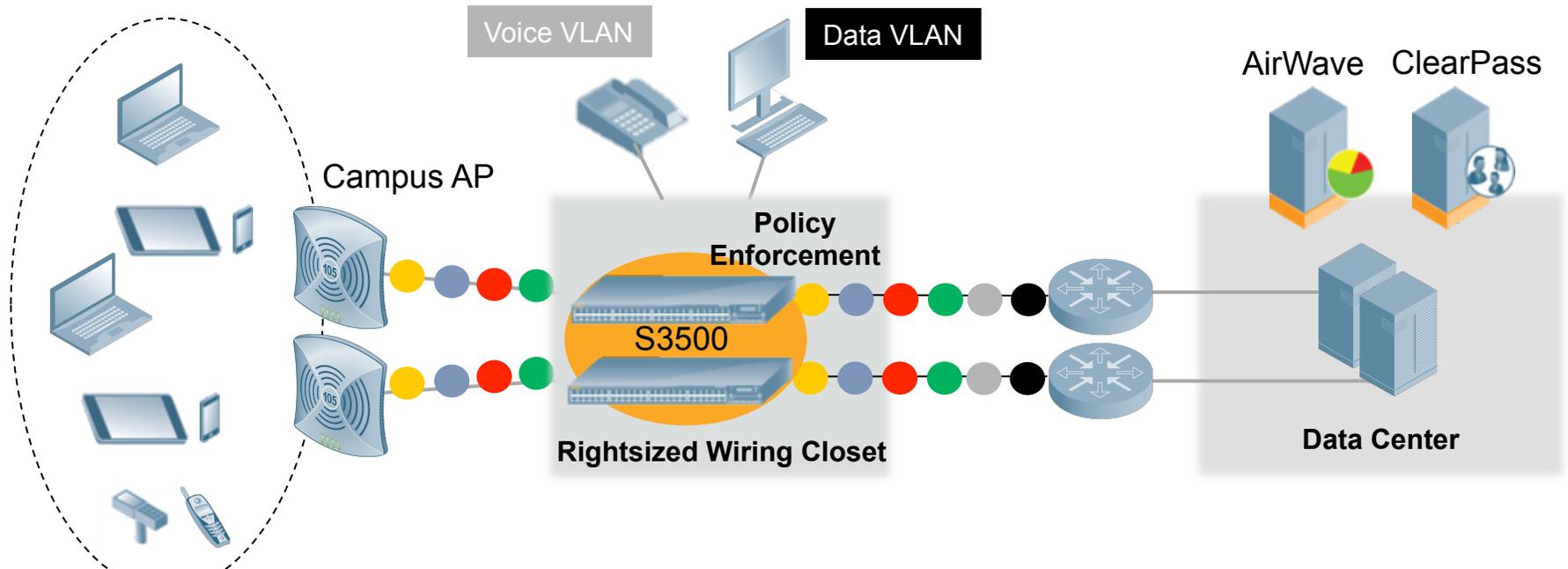
- Autoconnect VPN / 3G
- Locate a lost device
- Nearest printer
- Use in-room projector

# WLAN with Virtual Controller Model



- **Setup in 3 minutes or less**
- **Integrate with edge access VLANs**
- **Control access with built-in firewall**
- **Optimize performance with ARM**
- **Add guest and BYOD services**
- **Manage multi-site deployments**

# Wired and Wireless Integration



Wireless VLAN

Guest VLAN

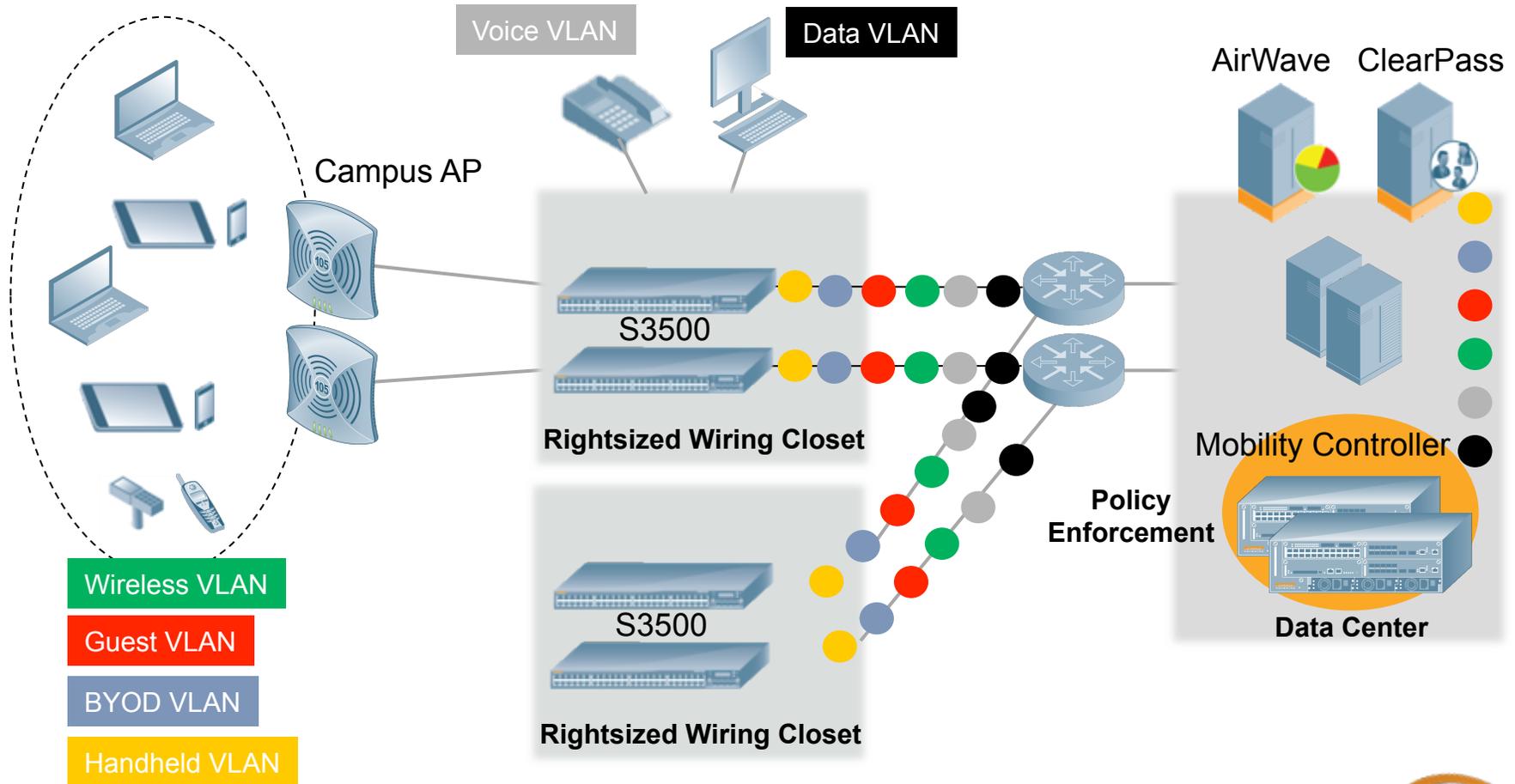
BYOD VLAN

Handheld VLAN

- Edge access VLAN in wiring closet
- Policy enforcement in S3500
- Device to closet encryption
- RF, Client and WIP in AP and S3500
- L2 and L3 mobility



# Expand to Multiple Wiring Closets



- Policy enforcement in core
- Encryption to data center
- Campus L2 and L3 mobility
- Scale to 1000s of APs

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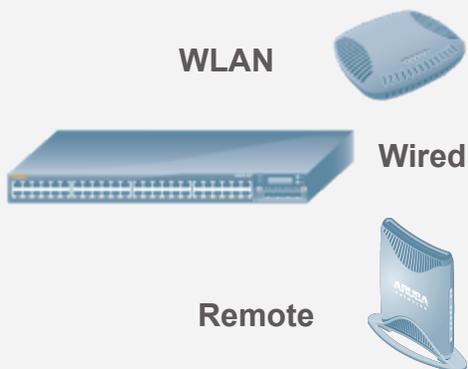


# Visibility and Management



## AirWave

### Zero-touch deployments



### Visibility



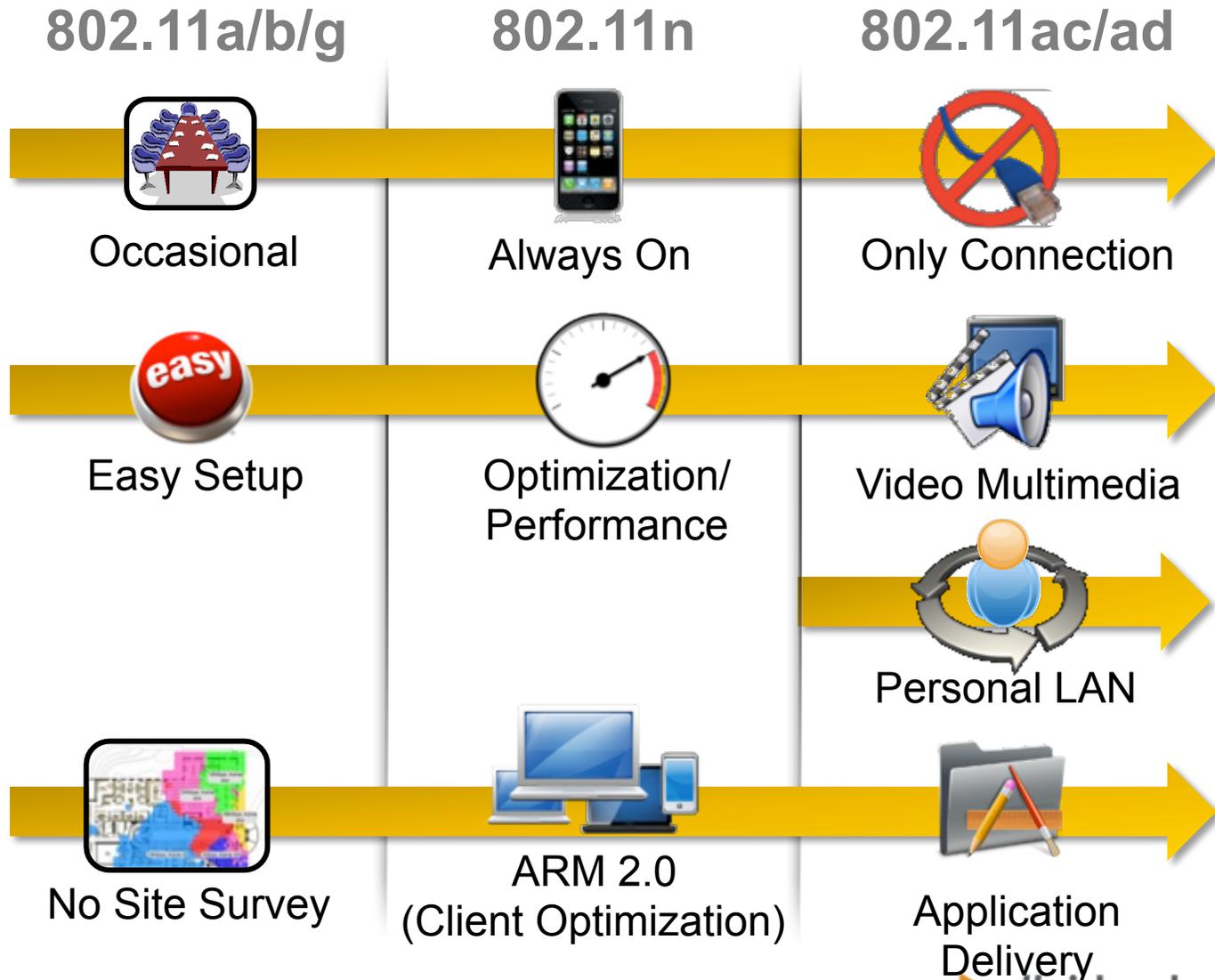
### Compliance



Multi-vendor management



# Addressing Wi-Fi Capacity Challenges





**AIRHEADS**  
BANGKOK 2012

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