Aruba Instant – The  for Wireless

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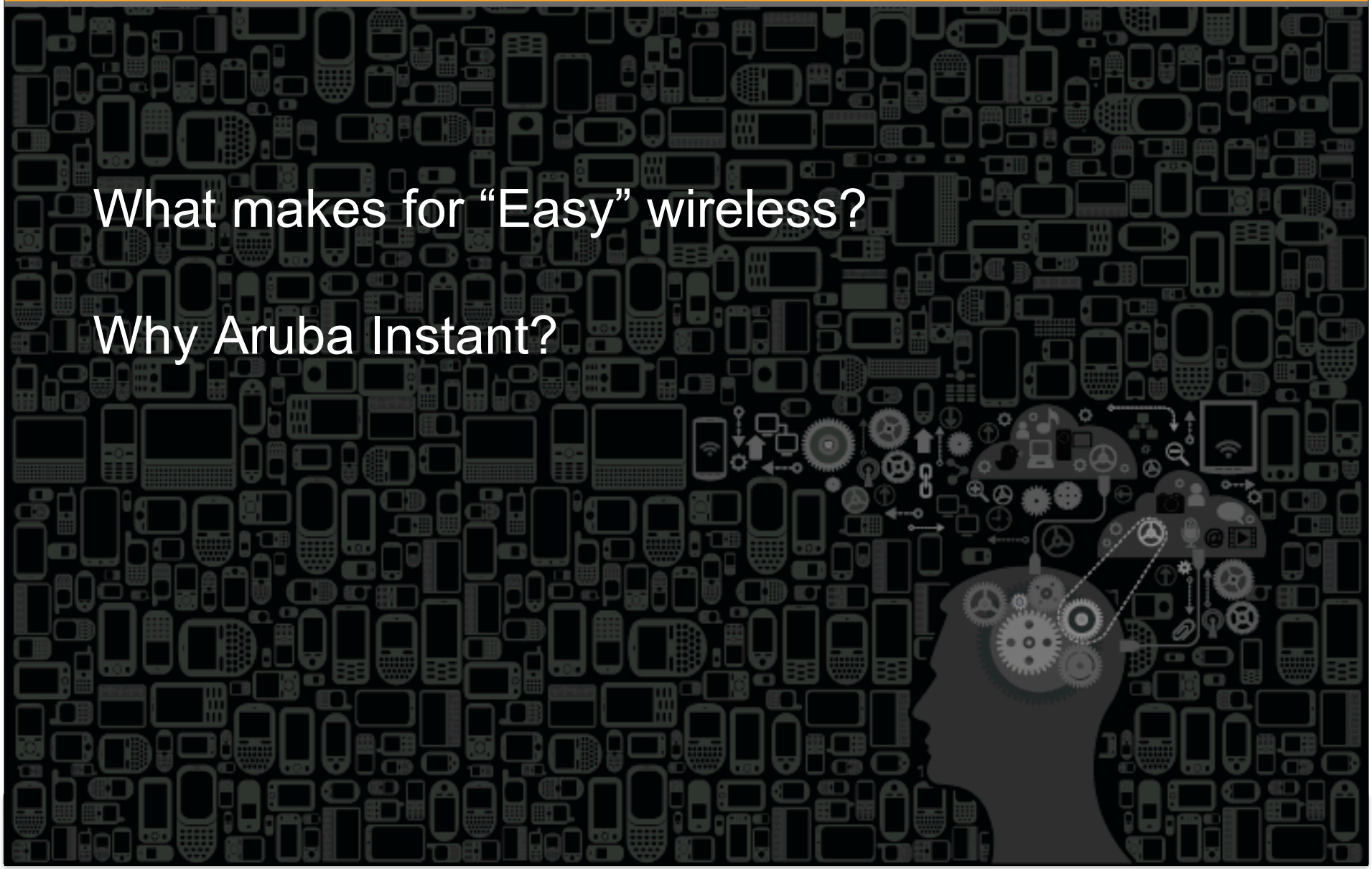
Agenda

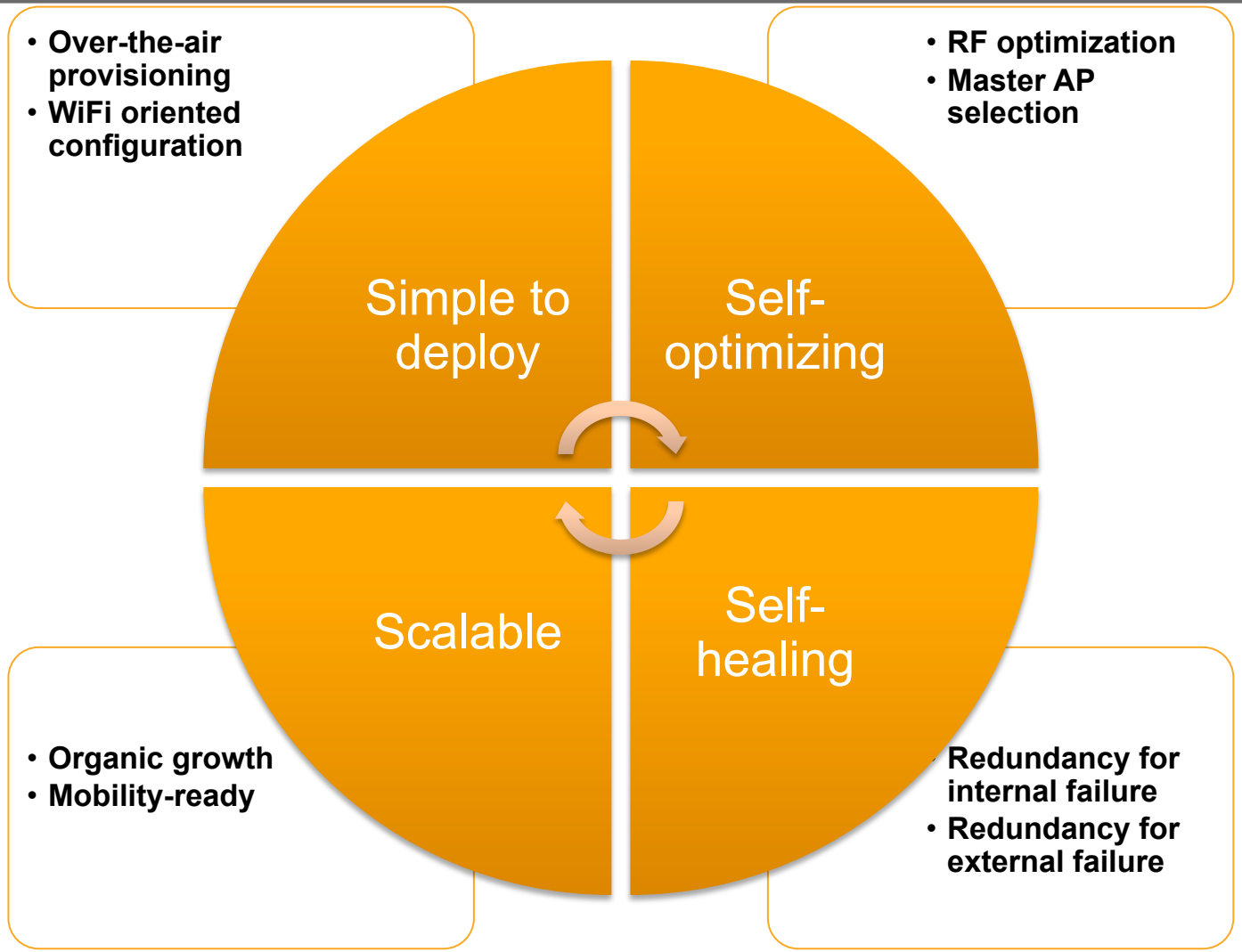
AIRHEADS 2013

What makes for “Easy” wireless?

Why Aruba Instant?



What is “Easy” WiFi?



What comprises Instant

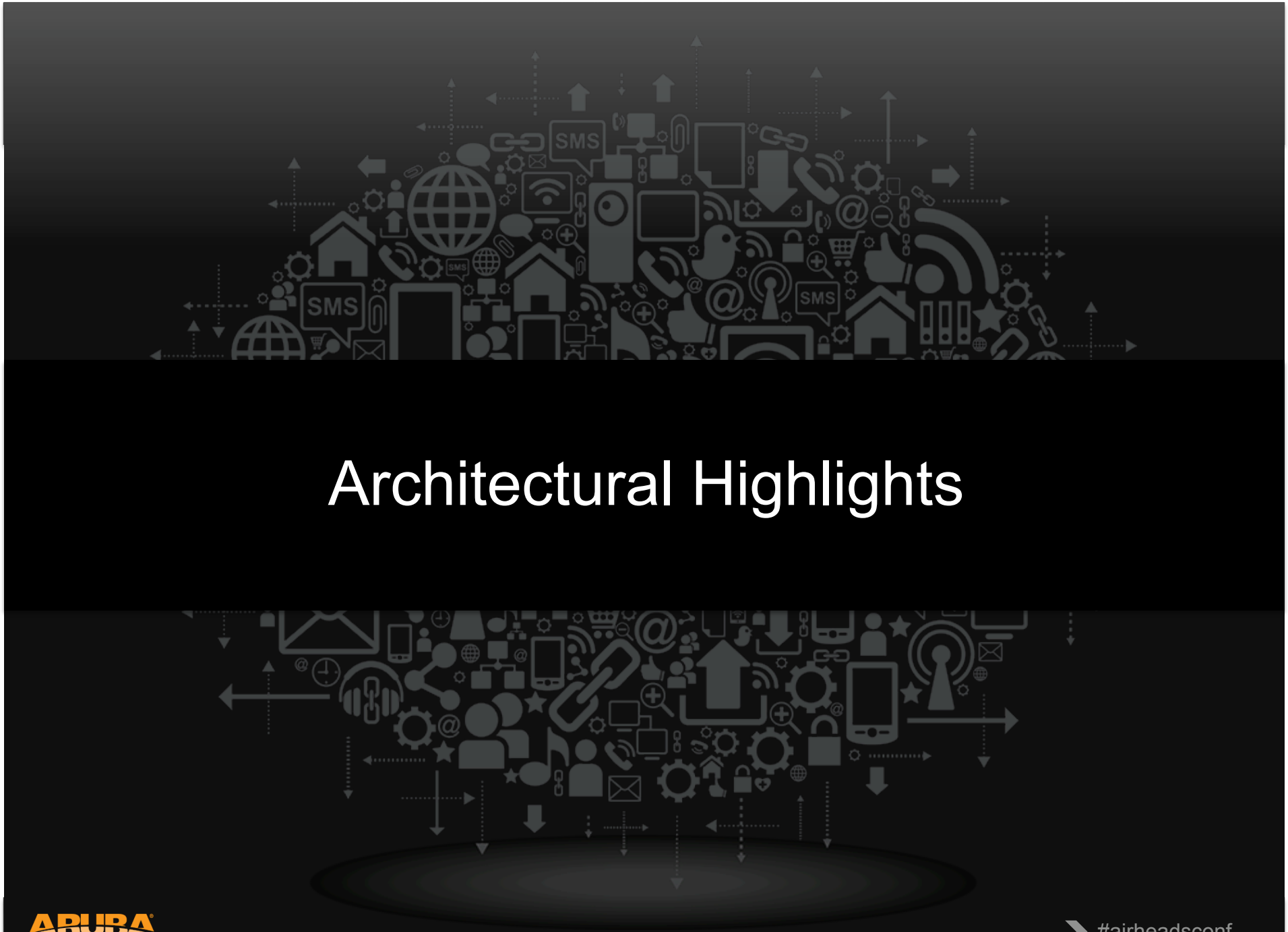
The Virtual Controller

Demo

- **Setup**
  - Automatic master election
  - OTA provisioning
  - UI Localization
- **Functionality**
  - On-board auto-RF, IP management, AAA, security.
- **Resiliency**
  - Failover

The Physical APs

Product	IAP	Description
IAP-104/105		802.11abgn, 2x2 MIMO, dual radio, 1 Ethernet port, reset button, IAP-104: external antennas, IAP-105: internal antennas
IAP-134/135		802.11abgn, 3x3 MIMO, dual radio, 2 Ethernet ports, reset button, IAP-134: external antennas, IAP-135: internal antennas
IAP-175P/175AC		802.11abgn, 2x2 MIMO, dual radio, antenna connectors, 1 Ethernet port, no reset button, IAP-175P: POE, IAP -175AC: AC powered (with PSE),
RAP-3WN/P		802.11bgn, 2x2 MIMO, single radio, integrated antennas, 3 Ethernet ports, USB, reset button, RAP-3WN: AP-AC-UN power, RAP-3WNP: AP-AC-48V36, PSE on Ethernet 2
RAP-108/109		802.11bgn, 2x2 MIMO, dual radio, 2 Ethernet ports (1x 10/100/1000BaseT, 1x 10/100BaseT), USB, reset button, RAP-108: external antennas, RAP-109: internal antennas



Architectural Highlights

Performance & Scalability

- **Distributed data-plane**
  - Wireless encryption / decryption, firewall
- **Distributed control-plane**
  - Authentication, DHCP, ARM, WIPS
- **Centralized (local) management-plane**
  - Configuration, firmware management, GUI, SNMP

Wireless

- **Adaptive Radio Management**
  - Automatic channel & power assignment
  - Band-steering
  - Airtime Fairness and bandwidth contracts
  - Spectrum Load Balancing
- **Spectrum Analysis**
  - Hybrid or dedicated mode spectrum analysis
- **Air Monitor**
  - Rogue detection and containment
- **Wireless mesh**
  - 2 hops and 8 mesh points

Mobility

- **Layer 2 mobility**
- **Layer 3 mobility**

Security

- **Firewall**
  - Role-based access
  - Policy-based forwarding and blacklisting
  - Bandwidth contracts
- **Wireless Intrusion Detection**
  - Intrusion detection – dedicated or hybrid mode
  - Containment – tarpiting
  - Switch integration

AAA

- **Methods**
  - In-built MAC-auth
  - In-built RADIUS
  - In-built captive portal
  - External AAA integration
  - 802.11U
- **Combinations**
  - Fail-through
  - BYOD

Uplink options

- **Options**
  - Ethernet,
  - Cellular,
  - PPPoE,
  - Wireless mesh-uplink,
  - WiFi uplink
- **Failover**
  - Dual-ethernet,
  - Ethernet – LTE

Resiliency

- RF resiliency
- Virtual controller redundancy
- Uplink redundancy
- External RADIUS redundancy & load-balancing
- AirWave redundancy

Voice, Video & Convergence

- Voice-type SSID
- Application-Level Gateways
- Media classification
- Dynamic Multicast Optimization
- AirGroup

Guest Access

- **Authentication**
  - Inbuilt Captive Portal
  - Custom redirect
- **Content Filtering**
  - OpenDNS

Management

- **Firmware**
  - InstantUI
  - Cloud
  - AirWave
- **Configuration**
  - InstantUI
  - AirWave
  - CLI
- **Troubleshooting**
  - InstantUI
  - Remote – SNMP / Syslog / AirWave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Thank You

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