

Aruba Instant – The for Wireless

Controllerless Wi-Fi for SME and DE

Presented by:

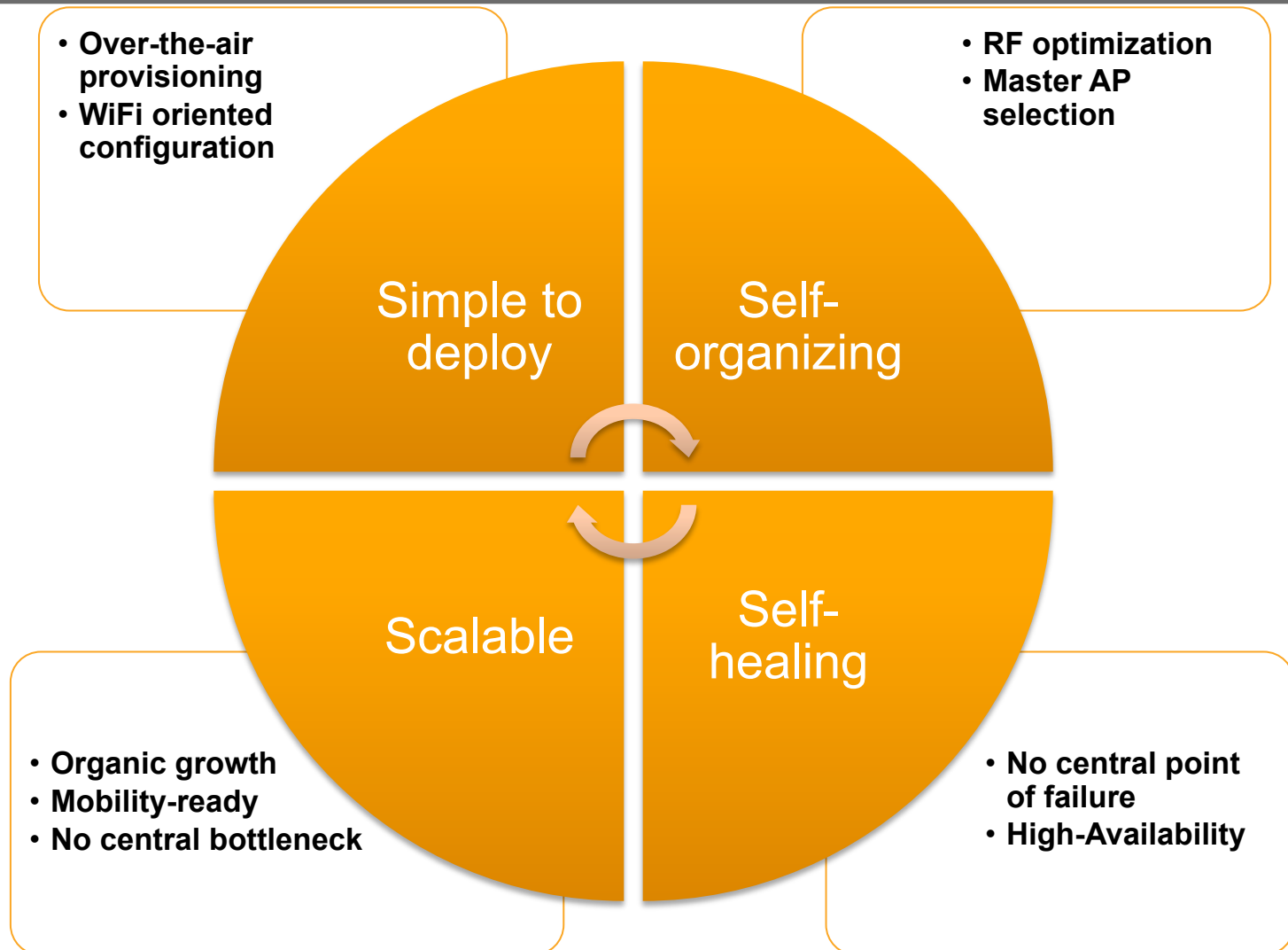
Agenda

What makes for “Easy” wireless?

What is Aruba Instant?



What is “Easy” WiFi?





The Physical APs

Product	IAP	Description
IAP-92/93		802.11abgn, 2x2 MIMO, single radio, dual band, 1 Ethernet port, reset button, IAP-92: external antennas, IAP-93: internal antennas
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, RAP-108: external antennas, RAP-109: internal antennas
RAP-155/155P		802.11abgn, 2.4GHz radio 2x2:2, 5GHz radio: 3x3:3 dual radio, 5 Ethernet ports 5x 10/100/1000BaseT, USB, RAP-155P: 54Vdc supply, POE PSE support on two LAN ports

- **De-centralized self-organizing system**
- **Setup**
 - Automatic master election
 - OTA provisioning
 - UI Localization
 - Virtual Controller Network IP
- **Functionality**
 - On-board auto-RF, IP management, AAA, security
- **Resiliency**
 - Failover



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

- **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**
 - Automatic mesh connectivity and repair

- **Layer 2 mobility**
 - Direct peer to peer AP communication for transferring Client State
- **Layer 3 mobility**
 - Optimized GRE tunnel-ing from connected network to home network

- **Firewall**
 - Per-user firewall
 - Policy-based forwarding and blacklisting
 - Bandwidth contracts
 - OS fingerprinting
- **Wireless Intrusion Detection**
 - Background scanning of all wireless channels
 - Intrusion detection – dedicated or hybrid mode
 - Containment – tarpiting
 - Switch integration to block rogues
- **Guest SSID**
 - Automatic VLAN separation without uplink VLAN support

- **Dynamic Radius Proxy**
 - Single NAS Client configuration in RADIUS server
- **Methods**
 - In-built MAC-auth
 - In-built RADIUS
 - In-built captive portal
 - External AAA integration
 - 802.11U (EAP-SIM)
- **Combinations**
 - Fail-through
 - BYOD

- **Options**

- Ethernet
- Cellular (3G and LTE)
- Mesh
- WiFi
- PPPoE

- **Failover**

- Dual-ethernet,
- Ethernet – Cellular

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

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

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

- **Firmware**
 - InstantUI (Local)
 - Aruba Central
 - AirWave
- **Configuration**
 - InstantUI
 - Aruba Central / AirWave
 - CLI
- **Troubleshooting**
 - InstantUI
 - Remote – SNMP / Syslog / AirWave / Aruba Central



Thank You