Aruba Wifi rješenja

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14. DAN INTEGRACIJE

UVIJEK POVEZANI



Zašto je bitan Wifi?



Turisti iz pakla: nezadovoljni lošim WiFi-jem bijesni gosti uništili luksuznu vilu, cijeli inventar natopili maslinovim uljem

Muškarac iz SAD-a ubio brata zbog Wi-Fi signala

Piše: K.K. četvrtak, 7.9.2017. 19:01

F Podijeli 5









Što tražimo od WiFi-a?

- Performanse
- Sigurnost
- Visoka dostupnost
- Fleksibinost upravljanja
- VHD (very high density) okruženja
- Pametni dodatni servisi
- Integracija sa "ne-Wifi" komponentama sustava
- •





AP - 802.11ac Wave2

■ 802.11n \rightarrow 802.11ac \rightarrow 802.11ac Wave2

11n Initial APs

- 2 SS
- 40 MHz
- 64 QAM

11ac Wave 1 (Initial)

- 3 SS
- 80 MHz
- 256 QAM

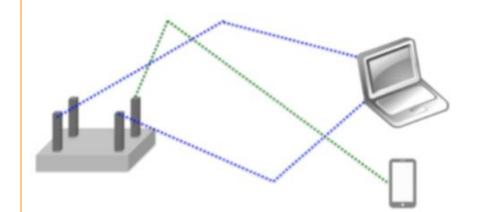


11n Mature

- Up to 3 SS
- 40 MHz
- 64 QAM

11ac Wave 2

- Up to 4 SS
- Up to 160 MHz
- 256 QAM
- MU-MIMO







AP - 802.11ac Wave2

■ 802.11n \rightarrow 802.11ac \rightarrow 802.11ac Wave2

AP, Wave 2

- Adding VHT160 and 2.5Gbps (Smart Rate) Ethernet
- Hitless POE failover, antenna polarization diversity (5GHz radio)

Dual radio, 802.11ac 4x4:4SS VHT160 and integrated BLE

5GHz: 802.11ac 4x4:4SS MU-MIMO

- 1733 Mbps peak datarate, and up to 3 simultaneous MU-MIMO client devices
- 2.4GHz: 802.11n/ac 4x4:4SS
 - 800 Mbps peak datarate (4SS/VHT40), 450Mbps at 3SS/HT40 and 144Mbps at 2SS/HT20





Upravljanje Wifi infrastrukturom

Controller Based

Centralized encryption/switching

Larger mobility domains

Same AP hardware

Controllerless (Instant)

Many individual remote sites
One user interface per cluster

CONTROLLER

INSTANT

AirWave

Large sites, many branches

Multi-vendor controller and switch support

End to end diagnostics and health checks

Same workflows

Central

Cloud-based management
Many independent branches



INSTANT



Upravljanje Wifi okolinom - Instant



VIRTUALIZED CONTROLLER

Enterprise grade and all inclusive

BUILT-IN RF MANAGEMENT

- Adaptive Radio Management
- ClientMatch

BUILT-IN SECURITY

- Firewall/role-based access
- Intrusion prevention and detection
- App visibility and compliance

BUILT-IN RESILIENCY

- Site survivability
- Uplink redundancy





Upravljanje Wifi okolinom – Instant (2)



First Access Point configured

Ready ...

 It becomes the "master" & performs firewall and controller functions

Set ...

New APs automatically connect to the "master"& download configuration

Go!!

- ✓ NO ONSITE IT NEEDED
- **✓ NETWORK SURVIVABILITY**



Kontroleri



- Rapidly deploy to any location with zero touch
- Extend the digital experience to every branch office
- Optimize and secure apps while reducing cost

Features since 6.4.3

Zero touch provisioning
WAN opt. (compression)
WAN survivability
WAN health checks

Secure, wired access
Policy-based WAN routing
Context based firewall

3rd party integration



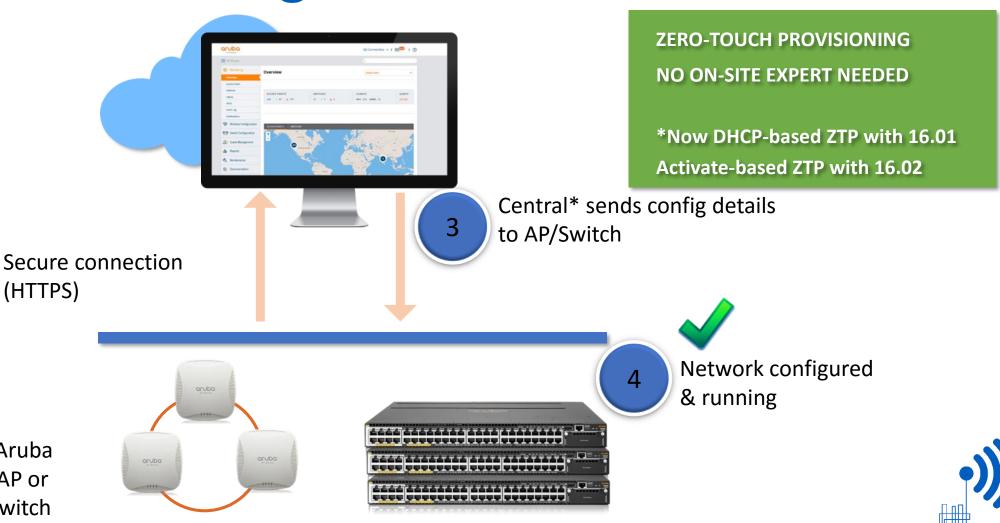


Cloud based management - Central

Plug in Aruba

Instant AP or

Aruba Switch



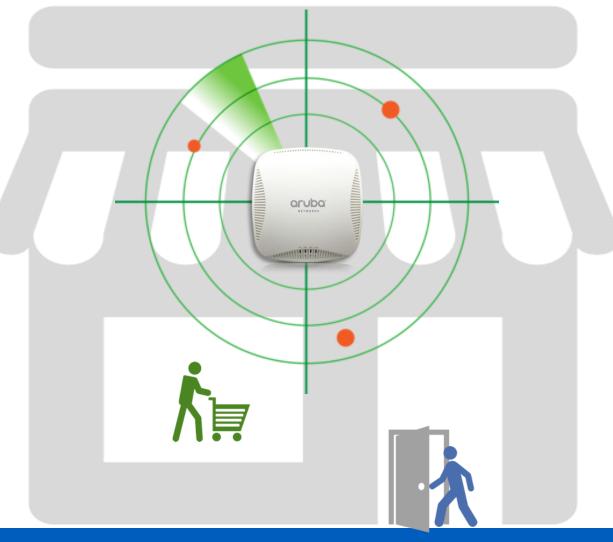


Retail analytics - Central





Retail analytics - Central



HOW IT WORKS

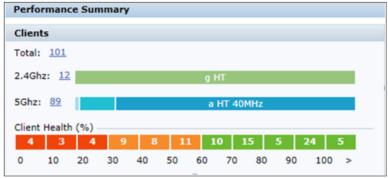
- Wi-Fi access points detect mobile device presence, count as user
 - No additional hardware required!
 - No device connection required!
- Based on signal strength, determine if user is outside or inside the store
 - Customize RSSI threshold to measure conversion
- Based on dwell time inside the store, measure customer engagement level
 - Customize minimum time to measure engagement

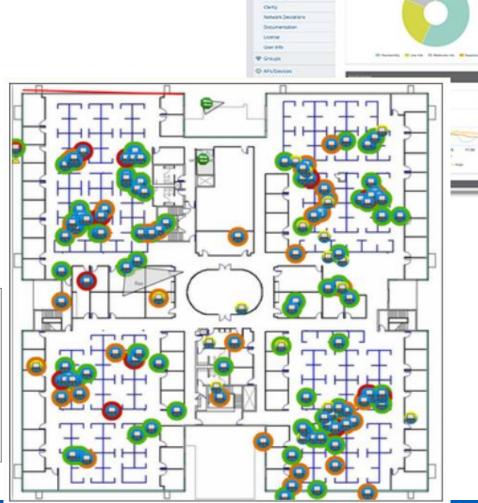




AirWave

- Multi Vendor management
- On premise
- Nadzor
- Upravljanje





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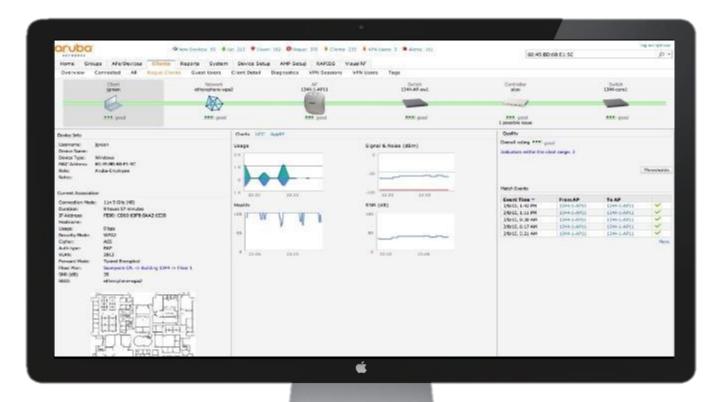


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AirWave



- PCI and Intrusion
- Monitoring
- RF Visualization
- Historical Reporting
- Configuration Management
- In-line Monitoring: RADIUS,
 DHCP, DNS critical services





Odabir načina upravljanja







Depl	oyment
------	--------

n/a

Cloud

Management as a Service no hardware, no software On-site

Management

Decentralized

Instant Clusters

Centralized Management

Instant APs, multiple sites, multiple clusters

Centralized Management

Instant & ArubaOS APs, Third-Party Wired & WLAN

Advanced **Capabilities**

Simple Guest Wi-Fi

Guest/Visitor management with custom captive portal √isualRF, advanced reporting alerts & customizations

Pricing

Free

No upfront costs

Subscription per AP - 1/3/5yr Tech Support included

Lower recurring costs

Perpetual SW license per AP/Switch + r urring annual maintenance HW (optional)



ClientMatch

Navođenje klijenta na najbolji AP/radio

Spectrum Load Balancing

Band Steering

Station Handoff Assist Client Match

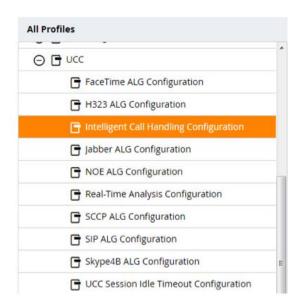






Awareness for Wi-Fi apps

- Custom AppRF definitions beyond the 2500 that's automatically identified by AOS
- Update signatures without an AOS upgrade
- Automatic classification, health metrics for Wi-Fi calling, Skype for Business, Apple
 Facetime, Cisco Jabber/Spark, and more







Intelligent traffic control



On-Board DPI

- Depth common apps
- Enterprise traffic





Enforcement

- Breadth less common apps
- Web traffic

GRANULAR VISIBILITY & CONTROL

- App category
- Individual app
- Web category
- Web reputation

- Allow/deny
- QoS
- Throttle
- Log
- Blacklist











- ☑ Block inappropriate content
- ☑ Enforce per user/device/location



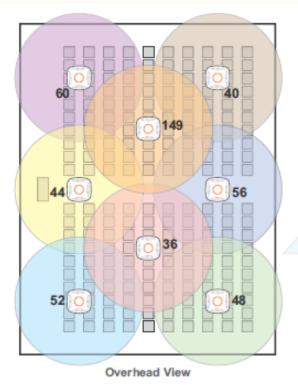


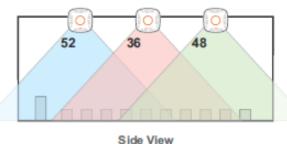


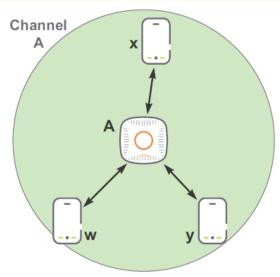




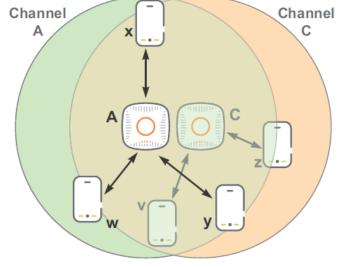
Scenarij velike gustoće klijenata







If one channel provides x Mbps capacity...



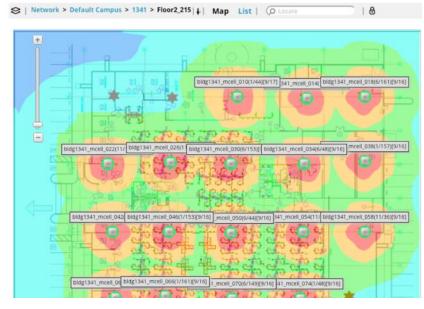
Two APs covering the same area on non-overlapping channels provide 2x Mbps capacity.





Automated high density RF

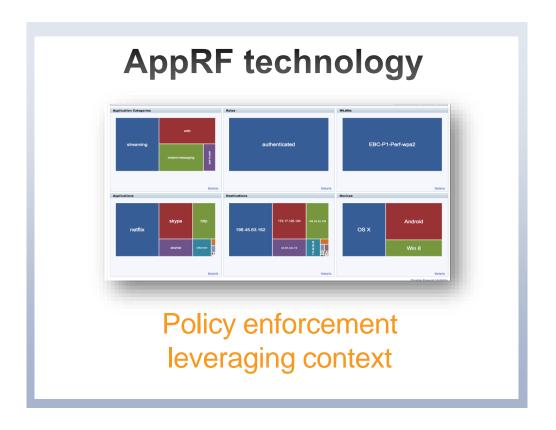
- Requires Mobility Master and AOS8
- Centralized RF automation for power, channel and channel width assignments
- Designed to achieve long term network stability and performance via machine learning
- RF settings are updated every 24 hours by default;
 frequency can be adjusted by IT







Scenarij velike gustoće klijenata







Guest Management



- Open guest network
- Simple Password sign in
- Captive Portal
- Facebook Wifi

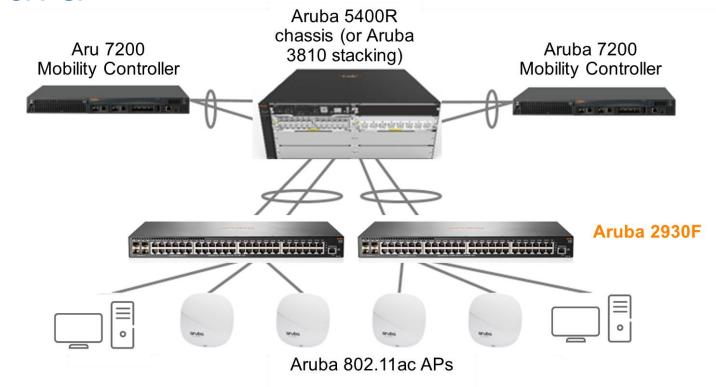


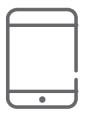




End-to-end arhitektura

- Visoka dostupnost
- Performanse
- Sigurnost

















OfficeConnect OC20

Plug-and-play Wi-Fi for small business



Overview

- Right sized for small business 2x2 dual radio 802.11ac Wave1
- Clustering of up to 8 Access Points ideal for a small business
- Fast ultra-simple set-up via mobile app
- Remote monitoring of network from anywhere

Benefits

- Create secure employee and guest Wi-Fi networks in minutes
- Easy guests access using Facebook Wi-Fi log-in
- Reliable connectivity to support business critical applications
- Keep business and customer traffic separate and secure
- Set guidelines to protect your business from on-line threats
- Engage and encourage customers to stay longer with guest Wi-Fi





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