aruba

a Hewlett Packard Enterprise company

NL Airheads AOS 8.2 Introduction

Utrecht, 27th October 2017 john.schaap@hpe.com

AIRHEADS

AOS 8.2 New Features



AOS 8.2 New Features

- Hardware
 - AP-303H, AP-203H, AP-203R, AP-365/367
- Redundancy
 - •L3 redundancy for MM
- Controller Clustering
 - Mesh AP support
 - Cluster view in Navigation Tree





AOS 8.2 New Features IPv6

- SNMP and v6 MIBs
- DNS
- DHCP helper address
- Ping support in UI
- ULA for Auth server host
- Firewall support
- AP Bridge user
- ACL support
- Remote show
- Controller Clustering
- External Captive Portal





AOS 8.2 Security Enhancements

- EAP-TLS Supplicant for AP using EST
- Increase ACE entries
- SCP server functionality
- IP Reputation and Geo-Location Filtering





AOS 8.2 Enhancements

- Multiple Version support
- Move and Rename folders
- AirGroup hierarchy support
- Pending Configuration enhancements phase 1
- Configuration override support phase 1
- Centralized Licensing across multiple MM's
- Hyper-V support for MM
- AP search
- Wi-Fi calling visibility enhancements
- Mesh provisioning Wizard
- Net destination optimization for ACE entries
- Blacklist Wired RAP Users





AOS 8.2 VMC Enhancements

- Multizone Support
- Scale: 6k APs, 64k Users
- Tunnel Node support on VMC
- AirMatch
- DFS channel enhancements
- VIA Licenses LIC-VIA
- Per user VIA license
- Supported on HW and VM controllers



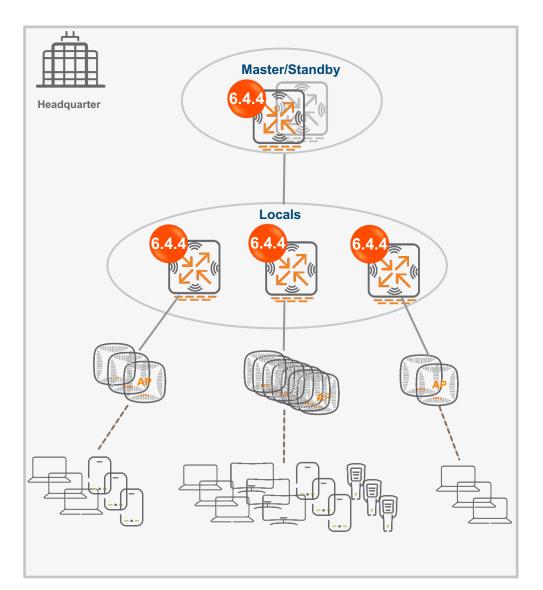


Deployments Migration



Master/Local Deployment in 6.x

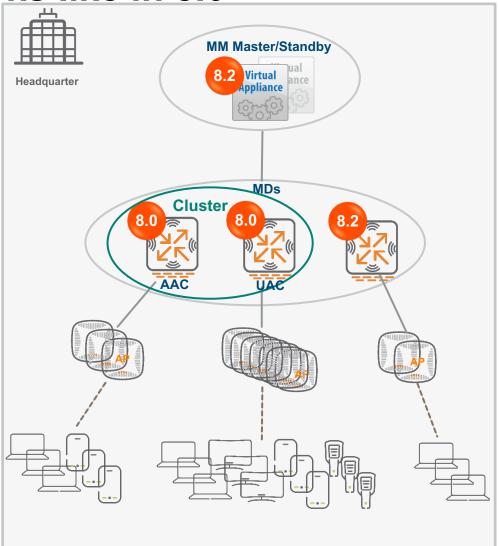
- Management point for global configuration, AP statistics, licensing and local controllers.
- WMS runs in master and its load may spike the CPU
- Local configuration ie interfaces, VLANs, IP pool, VRRP etc has to be configured manually in each local.
- Run Airgroup, WebCC, appRF etc individually
- Have to run same code and upgrade at the same time
- Each AP runs ARM and calculates channel & power by its own
- AP has maximum 2 failover points for any redundant method ie HA, VRRP, LMS/Backup LMS
- Users always terminate on the same controller with Aps
- No user load balancing
- Users traffic may get impacted when AP failover happens
- All users are treated alike with one set of Client Match setting





How Master/Local Deployment Looks like in 8.0

- Mobility Master (MM) as central point for configuration, image management and whitelist
- Loadable Service Module (LSM) ie Airgroup, Airmatch, WMS, WebCC run at MM and can be upgraded individually
- All controllers configured as managed devices (MD) under MM
- Zero Touch Provision (ZTP) supported via Activate server
- Clustering supported for high availability and redundancy
- Multi-version supported
- APs terminate on AAC and can have maximum 12 (max MDs in one cluster) x 2 = 24 failure points
- Multi-zone supported
- Users terminate on UAC different from AAC for AP's
- termination
- User load load balancing automatically done by cluster manager
- Users won't get much impact when APs failover happens





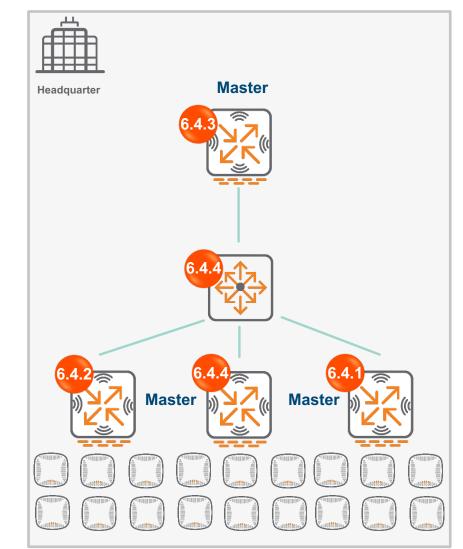
Standalone Masters Deployment in 6.x

All controllers are configured individually

Each controller is upgraded separately

Any experimenting can be easily implemented while not affecting others

Hard to keep consistency of configuration and hard to manage





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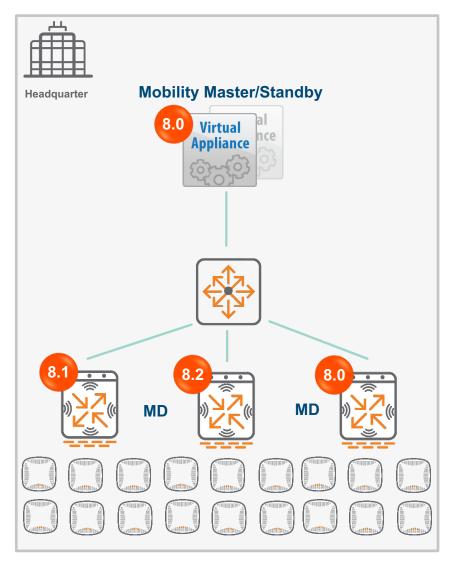


Standalone Masters Deployment in 8.0

Centralized configuration & management at MM

All are under different folders if needed for flexibility of configuration/upgrading

Multi-version of code supported







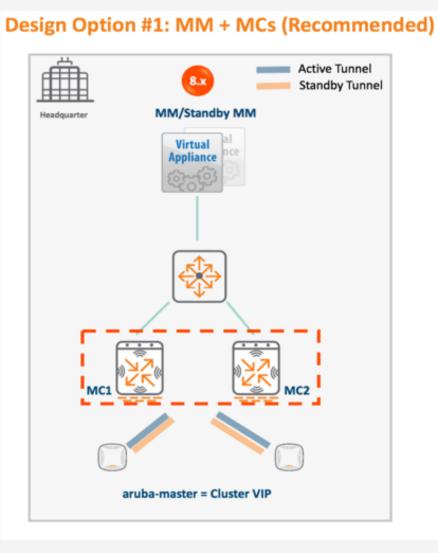
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Master/Backup Master upgrade to 8.x

8.x Topologies

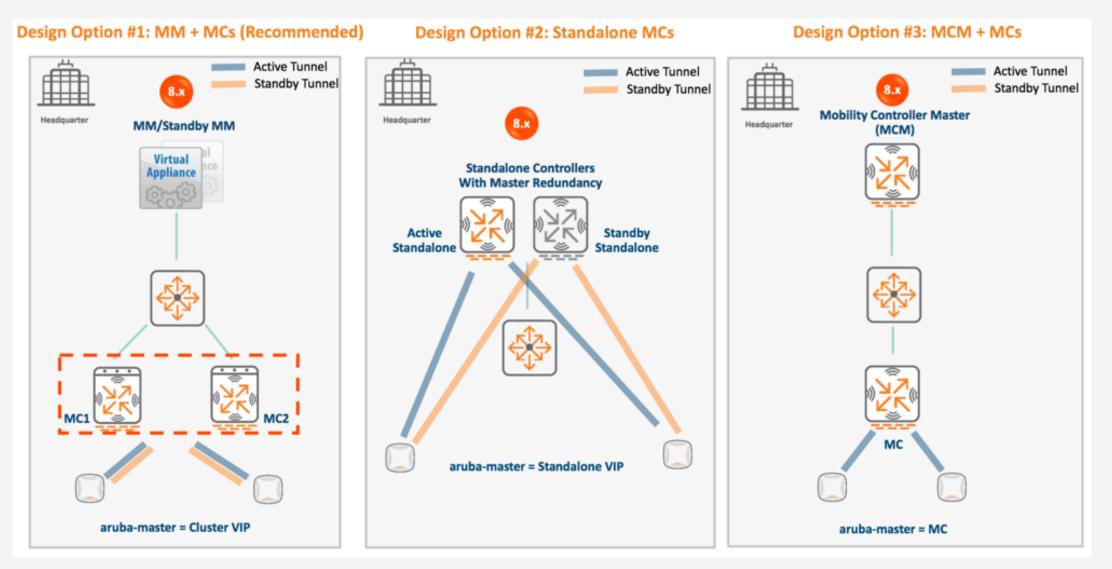


Design Option #2: Standalone MCs . Active Tunnel Standby Tunnel 8.x Headquarter Standalone Controllers With Master Redundancy Standby Active Standalone Standalone aruba-master = Standalone VIP



Master/Local upgrade to 8.x

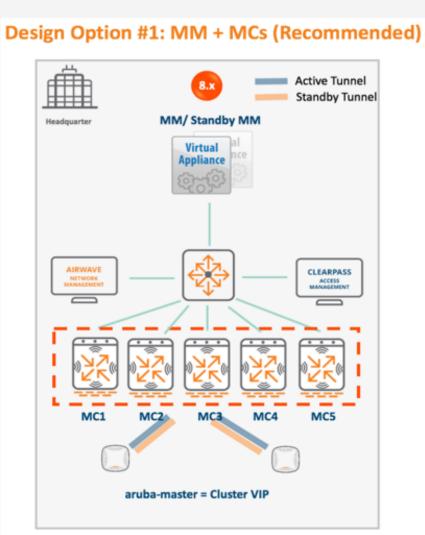
8.x Topologies



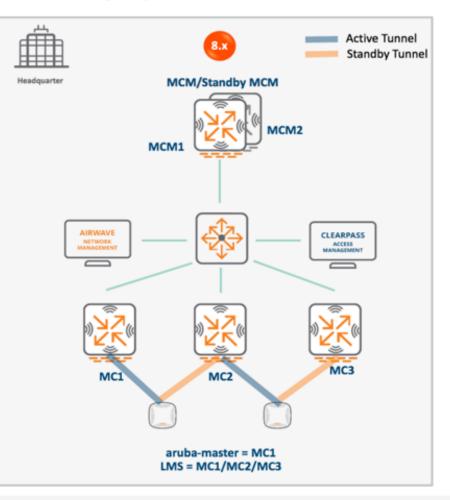
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Master/Multiple Locals upgrade to 8.x

8.x Topologies



Design Option #2: MCM + MCs





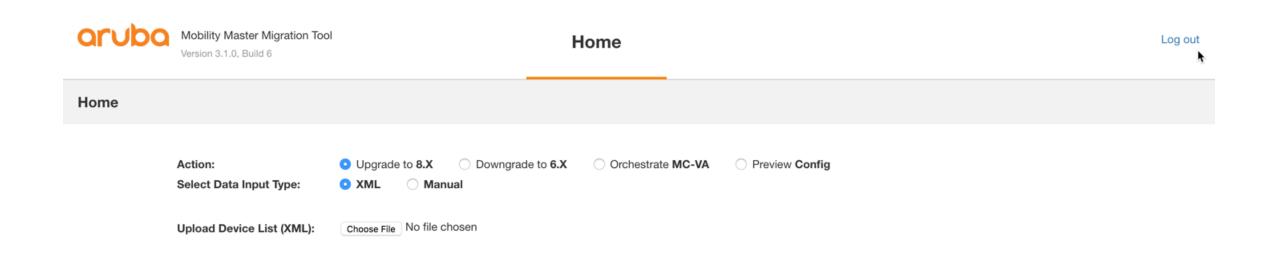
Aruba Solution Exchange

- Lot of information about new AOS 8 features (Multizone, Clustering, Licensing and Configuration Hierarchy
- This includes configuration examples
- The solution below is specifically on upgrading from 6.x to 8.x
- <u>https://ase.arubanetworks.com/solutions/id/179</u>





Mobility Master Migration Tool



Proceed





Demo 8.2 Mobility Master

