Q: Will the webinar be a recorded?

A: Yes, will be recorded and provided at the end of this week

Q: Can we use the VMC as the only wireless controller?

A: Yes VMC can act as a standalone Mobility Controller or be a Managed Device under the Mobility Master, so licenses would either be applied locally or centrally respectively.

Q: Do customers have to buy 2\*MM-VM for redundancy or can they use 2 and pay for 1 MM-VM?

A: For MM redundancy a single Virtual Appliance license can be shared, between the VRRP HA pair up to the limit of the original license, e.g. is an MM-VA-500 then this is shared between MM and you can license other features up to 500 managed devices, where it is AP, PEF, etc.

Q: Did I understand one of the first slides correctly that Instant and mobility switches will be able to be managed by the mobility master instead of airwave?

A: No, not today but those are features being reviewed next year, but will be complimentary to AirWave not as replacement.

Q: How easy is it migrate from a Local Controller topology to MM with Managed Node if there is future growth in the Infrastructure?

A: In 8.0.1 a new conversion tool is being made available to enable a Master/Local Controller configuration to be migrated to a Mobility Master architecture with Managed Devices.

Q: will it be possible to still use master-local architecture while using 8.x version?

A: Yes, as the slides depicted there will be some new features only supported on a Mobility Master not on a 6.x Master Controller that is now to run on 8.x in Master Controller Mode

Q: so at this moment we have only the Mobility Master will be on VM, but for Managed Nodes it will be hardware?

A: As discussed in the presentation the MM is a VM Appliance in 8.0.1 and in 8.1 a hardware server appliance will be available to run the MM. However a Managed Node/Device can be either a 70xx, 72xx, or VMC from 8.0.1

Q: Is there a pricing Information in the Webinar for the Virtual Controllers?

A: No, this is a technical webinar pricing is available from November  $1^{st}$  or under NDA prior to release if requested

Q: for ZTP it is thought about that controllers or switches with lacp uplinks (2 or more) can easily exchanged with ztp?

A: ZTP is responsible for configuring the LACP link so to start you need a single link to avoid loops/spanning tree issues

Q: on new os 8.0 can we add the RF Heat Maps on the controller (Not airwave) like old os 6.1?

A: No, AirWave will compliment this now but drop configuration capability of 8.x

Q: it's interesting for customer exchange their actual switches from another vendor through aruba

A: Can you please explain the question here.

Q: so what is the difference between ARM and airmatch?

A: Centralized & scheduled calculation with a holistic vision of the whole deployment. Will be covered in detail shortly

Q: can I terminate Access Points on Mobility Master (VM)?

A: No, MM supports control plane traffic only not data plane whether a VM appliance or on hardware server appliance come 8.1

Q: Do customers have to buy 2\*MM-VM for redundancy or can they use 2 and pay for 1 MM-VM? A: License will all be centralized. and stored in MM. It can failover to standby MM Q: So you do have to buy just 1\*MM-VM and can use 2 - correct?

A: Just one virtual appliance license. Standby does not require separate license when setup with VRRP.

Q: In the multitenant mode you can share an AP between two different costumers?

A: Yes, MultiZone is used to share one APs resources across multiple independent controllers as per slide caveats.

Q: Without sharing modifing their respective configurations?

A: AP will setup multiple tunnels to multiple controllers but the config is deployed from the Primary Zone controller where the Data Zone controller can modify their VAP profile.

Q: on the new OS 8.0 for guest access can we make self reg captive portal pages and integrate with Billing systems without clearpass?

A: Same portal functionality as in 6.x. Integration with billing systems still needs ClearPass

Q: What are the 3rd party APPs compliant with the API?

A: It is a RESTful API so anything that uses this

Q: what is the Communication now on os 8.0 between MM and MN is it IPSEC?

A: Yes, IPsec

Q: Will you support on Hyper-V?

A: No plans yet, first KVM will join the party

Q: in which version is it possible to use a controller hardware for mobility master? with ap termination?

A: MM will have a hardware server appliance in Q1'17 but there are no plans to terminate AP's directly on a MM.

Q: so can I use Virtual Controller in OS 6.5 with Locals now?

A: No, VMC is supported only from 8.0.1

Q: Is there a rough timescale on AOS8.1 becoming available to partners?

A: Roadmap is Q1 2017, but 8.0.1 is available by end of November. AOS 8.0.0 is available for partner testing today.

Q: so when can we have all MM and MN to be VMs for all without any Hardware controllers?

A: 8.0.1 in November as per slide deck. But hardware mobility controllers are her to stay as still have a role to play with capabilities required for VPNControllers and high density encrypted data plane traffic deployments; plus inherently there will be customers who just don't want a VM implantation.

Q: is there is any current APs that does not support OS 8.0?

A: Yes, all the old 802.11abg AP's, plus AP12x

Q: Can we mix VM and 72xx, 70xx in a cluster?

A: No. Today only like controller ranges are recommended and supported.

Q: is there any MC that not supporting the 8.0?

A: the 6000, 3000, and 600 series are not supported

Q: is all MC support the 8.0.1?

A: no the 6000, 3000 and 600 series are not

Q: APs like 93 and 92 will be supported?

## A: Yes

Q: what exaclty is Syncronized between controller?

A: A lot of things. Can't exaclty explain on this chat what that all is

A: It also depends on what you mean with between controllers? between MM and backup-MM or between MD's in a cluster or between MM and MD's

Q: Can you use the MM on top of multiple controllers connected over WAN/MPLS

A: yes

Q: Can you let us know if there is any difference in BandWidth requirements for MM?

A: Between MM and standby MM should be similar as we have with 6.0 with Master controller redundancy. Between MM and MD it could be less as it's primarily the control plane traffic, between MDs & MM.

Q: What's the migration process like from 6.5 to 8.0?

A: Covered in the later part of the session but a migration tool is being released at same time as 8.0.1 for master/local designs wishing to convert to MM/MD architecture. However, the congigbwill not be retained or converted by simply upgrading the code from 6.x to 8.x

Q: so it is for 103 and up?

A: AP-92 and up, except ap-12x same backward device support as 6.5.x

Q: can we have between MM and MM standby on diffrent L3 networks?

A: Yes

Q: how can we obtain this ppt presentation?

A: Cristina will post on Airheads

Q: Will there be an improvement on granularity between administrators of the MM, for example give full access to a certain group but not other groups? A: Not today, but multitenancy has been discussed for future review

Q: is it possible to use VMC as standalone or do we always need MM on top? A: vmc can be standloane

Q: So the multizone almost behaves like a PVLAN?

A: Yes, it separates the traffic completely

A: Its much more. You can consider that VAPs are configured & terminated in different controllers.

Q: please explain all communication types?

A: It all runs over IPsec but can be config related, control plane, UCC, Airmatch etc etc. So need to understand the context to explain in detail

Q: so for the new architecture what is AP provisioned with for example in 6.x it is AP group what is its name in 8.x?

A: the same an apgroup

Q: So with mutlizone the owner of the facility can manage his aps and also connect them to their tenant controllers (if they have the same version of aruba) ?

A: Yes, the Primary Zone controller management (configuration) defines the endpoint ip address of the data zone controller(s)

Q: What APs is multizone supported on?

A: From 8.0.1 all Wave 1 and Wave 2 AP's released before November'16

Q: Are there any plans or provision for a multi-tenancy model at the Mobility Master Level (i.e. allowing an organisation to segregate customer profiles and manage them as individuals?

A: it's being reviewed but not on roadmap today

Q: Can Datazone controllers be managed by the same MM for the primary zone devices?

A: Nom the PZ and DZ controllers cannot be managed by the same MM domain, but could be managed by their own MM or be standalone controllers

Q: can we have VPN users terminated on OS 8.0?

A: Yes, but not on the MM a VPNController is configured and managed by the MM

Q: any plans for RAP to be supported in Multizone environment

A: Not on roadmap today

Q: is it possible to use VMC as standalone or do we always need MM on top?

A: Yes either

Q: how can a customer upgrade from all master 6.x to 8.x?

A: Right now without the new migration conversion tool it is a manual process and you need to rebuild your complete config in 8.0

Q: So a MC-LC setup in combo with MM is not supported?

A: Yes it is but you don't have all the new 8.0 features in that case, we call it Master Controller Mode. Slide table as comparison table.

Q: can we get the recorded session at the end of Webinar?

A: Yes, posted on Airheads

Q: i mean upgrade from all master 6.x with ap termination with 2 controllers to 8.x without additionally equipment

A: You do need to get a MM to do this with migration tool or manually reconfigure if purely master controller mode with no MM

Q: Is there an ETA on a config conversion tool so we can go from 6.5 to 8.x?

A: 8.0.1

Q: Q: Will there be an improvement on granularity between administrators of the MM, for example give full access to a certain group but not other groups?

A: not today but being reviewed for future roadmap

Q: why is it not possible to combine all functions in one device? It too expensive for any customer with additionally controller

A: A Mobility Master will not terminate AP's because our architecture is based around tunnelling traffic and a VM server has no dedicated cryptographic chipsets dedicated to appropriate forwarding rates, so more simple to manage control plane not dataplane for scalability and ease of deployment. The 8.x architecture with MM is targeting large wireless deployments as minimum Managed Device virtual appliance license is 500.

Q: what is the downtime for in service upgrade?

A: Upgrade can be service specific but each "app" will differ. But other services won't be affected.

Q: why not?

A: That is by design

Q: what about Airwave ?? does it Support the 8.X release right now ?

A: Yes, it does but not for configuration management. That is not there anymore and should be done from the MM.

Q: Hi, with HPE's investment in Microsoft. will the virtual appliances be available on hyper-v

A: Not anytime soon. First KVM is on the roadmap in 8.0.1

Q: please repeat on the RAP Limitations

A: A Mobility Controller will need to be allocated as a MD acting as VPNController managed by MM

Q: so we can deploy 2 MM (Active-Standby) and customer will only buy the LIC?

A: Standby would sync up with virtual appliance license from Active MM when database sync up is enabled on primary MM with VRRP

Q: With the MM unreachable, will the MNs and APs keep functioning uninterrupted?

A: Yes, but any process that runs centrally in the MM will not function like Airmatch, UCC etc. And only for 30days.

Q: it is possible to set up airwave as mobility master?

A: No but if both are licensed as virtual appliances then they could run on the same VM hypervisor.

Q: Will IAP Virtual Controllers be supported as a Mobility Controller/Device to be managed by the Mobility Master?

A: not this year but we will never say never

Q: in new OS 8.x we need to have the LIC-AP and LIC-PEF to be the same number as OS 6.x or we can have different number?

A: AP count always higher than others but license pools allow to distribute other license as required

Q: Can i add licences to APs or only to controller?

A: You need an appliance licence for a MM and/or VMC plus whatever AP, PEF, etc license on top but all managed centrally and distributed into designed and configured groups as license pools

Q: Do you know when the Instant versions of the AP-207 and AP-305 will be available?

A: currently scheduled for end of December

Q: Can we still deploy "AP-specific" configuration?

A: yes, completely hierarchical config with overrides at each group or device level

Q: My question on granular administrator control is pending :)

A: now answered earlier

Q: what happens if the MM crash?

A: hopefully you configured redundancy as it is free, but essentially you will lose control plane access to managed devices so no changes possible

Q: In multizone mode, Should "dataplane ctrl" needs licence?

A: no license other than AP license on primary zone controller or any feature license required on the Data Zone controller

Q: Can an overide be an underide? e.g. I want to deploy an SSID to all nodes except this one.

A: yes but not as an exception only as an override to the one needing removal

Q: I 8.0.x can you still have a master/master standby controller pair which terminate AP's?

A: in master controller mode this could be done but deemed bad practice

Q: does it required EVL lic as of now? or we can run everything from initial setup?

A: From 8.0.1 you will need evaluation license as minimum to see managed devices

Q: Does a failover setup for MM cost an extra license?

A: No extra cost

Q: Link to MM to download

A: on support.arrubanetworks.com for 8.0.0 prior to 8.0.1 which will be posted there too in November