

Q: Would the same approximate distances work for the AP-335 as well?

A: The internal antenna on the 225 as well as the 335 is optimized for horizontal ceiling mount; the downtilt angle for max gain is 30 degrees. The max gain for all of the antenna elements in an AP-335 is 8.6dBi in 2.4Ghz and 8.1dBi (horizontal) in 5Ghz, compared to the 3.5dBi in 2.4Ghz and 4.5dBi in 5Ghz for the AP-225. The distances, which the AP-335 could handle, is therefore much greater than that of AP-225. However, the approximate distances must be calibrated, having the client radio power too in perspective.

Q: Is the number of clients per radio same on indoor and outdoor AP-s? For example 224 and 275

A: The number of clients per radio will quite easily exceed 50+ on either of these AP's. Clients per radio for these AP's depends on the bandwidth utilization on a per client basis as well as the type of client traffic and client radio (in order to provide optimal performance).

Q: With regards to ARM - what differences can be seen when running ARM with RFProtect license enabled vs ARM without RFprotect License

A: When we run ARM without RFP license, the AP would perform client servicing as well as basic IDS functions but does not perform IPS on a full-fledged basis. Once RFP license is installed, AP can be configured to perform IPS as well. Point to note here, it is never advisable to load up an AP that is performing client service as well to perform IDS/IPS functions. The AP will simply not have sufficient resources available to effectively service clients and to perform core IPS functions such as DoS or Tarpit.

Q: How close can we be close to airport to use DFS?

A: This completely depends on the strength of the RADAR devices

installed on the Airport tower, Ship/Vessel/boat, Port, Etc. The AP's would basically detect Radar interference as long as it is able to receive the signals. The aircraft coming in to land at the airport will also trigger RADAR, so there is no accurate method to predict a "safe" distance. The only realistic way to check this would be to place the AP's on DFS channels and monitor the WLAN logs.

Q: Question2 - Also regarding ARM and RFprotect -- if we are seeing a lot of interference and power level changes on APs with ARM enabled, will RFprotect improve/fix the air quality/air health making it more prone to interference/noise - will RFprotect help with improving overall stability of WiFi and RF health?

A: If we are seeing a lot of interference and power level changes on AP's with ARM enabled, it likely points to a very Noisy RF environment, AP's spaced too close, Excessive interference or incorrectly calibrated ARM indices. RFprotect license will have no specific impact over this condition, regardless of if it is present or not.

Q: Why are the defined recommended Values are not the Default Values?

A: The defined recommended values - are not recommended for every WLAN network. There are no "Ideal" numbers for any configuration parameter, rather it must serve as a guideline for what would be the expected effect, if you happen to use the recommended values instead of default.

Each RF environment is unique. Any network, which is aiming for best performance, can neither depend completely on default settings nor on the values recommended in this presentation. Rather, the recommendation and its effects needs to be considered, tested, implemented and fine-tuned in order to achieve optimal performance.

Q: Do you have anything like a minimum distance between the AP's in 802.11ac

A: The lowest 11ac speed achievable is 173Mbps (20Mhz, 2-stream, 256-QAM), what is more relevant to the context is that these AP's are also backward compatible with the slower 802.11 standards. The minimum distance factor typically depends on the antenna type being used on the AP. All else is similar to the current crop of 11n AP's.

Q: Is there any way to optimize networks that use many Apple TVs?

A: AirGroup is the ideal feature to handle Apple TV traffic in Aruba. Please refer the support material below for equipping with the information necessary to implement this in your network!

<https://www.youtube.com/watch?v=wOBpeHoMAdo>

<http://www.slideshare.net/ArubaNetworks/enabling-airprint-airplay-on-your-network>

Q: Will there be a possibility to obtain this presentation by email? It's very valuable.

A: The presentation will be available in the Aruba Airheads community website along with a complete reference guide for all of the config parameters explained within the presentation. Additionally, the recording will be made available as well. You may use this material for future reference.

Q: how does cell size optimization work for 11n and 11ac

A: Cell size optimization for 11n and 11ac are dependent on the MCS indices. Cutting down the lower MCS values will trigger the client NIC to be able to operate with a higher minimal 11ac data rate.

A full list of the data rates (including per spatial stream) is available here - https://en.wikipedia.org/wiki/IEEE_802.11ac

You may refer this and decide to manually optimize the PURE 11ac or Greenfield deployments based on the expected roaming performance.

Q: what is the difference between air match and arm?

A: I believe the question might be, what is the difference between ClientMatch technology and ARM technology.

Adaptive Radio Management is an intelligent radio management technology, which is Aruba proprietary. This basically allows the mobility controller to dynamically manage the channel and power settings of the access point based on the quality of RF network. Whereas, ClientMatch technology is a feature, which brings together and collectively embeds multiple individual features such as Band steering, Dynamic Load balancing, Sticky Client Mitigation, etc.

Q: Is there some kind of license necessary for OKC, like it was with the MSM HP Controller?

A: No, There is no license necessary to enable OKC on the Aruba controller.