

# WITH 11AC, THE WLAN INDUSTRY OWES CUSTOMERS A NEW KIND OF NETWORK SWITCH

I realize I'm beating the 11ac thing up pretty good lately, but I think I finally hit on what bugs me about the way the new hot technology is being brought to market.

What I'm about to describe is more of a BAN issue (BAN=BigAss Network, where APs are counted in the hundreds or thousands) and not so much of concern for smaller environments.

802.11ac is being delivered in rather bizarre (for the customer) "waves".

- Wave 1: Data rates to 1.3 Gbps. You'll do fine (for most new first wave APs) with a single Gig uplink, and many new APs will work on 802.3af POE, not yet requiring .3at. Fine, good. No real squawks.
- Wave 2: You get the joy and cost of recabling your environment to add a second Gig uplink, doubling the number of switchports in use for the WLAN and configuring Etherchannels, and depending on what vintage switches you have- upgrading them for latest POE standard, all to help get to *data rates likely to realistically be between 2 and 2.5 Gbps best case.*

And this is where I say “time out”. **I’d like the WLAN makers to bear some of that Wave 2 logistical pain.** And I want them to get creative to take the onus off of the customer. Here’s what I want:

- In simplest terms- **I don’t want to use two cable runs. And I don’t want the complexity and risk of 4000 more Etherchannels for my APs. But I still want the benefits of 11ac Wave 2.**
- I would like the WLAN vendors to put their brilliant minds (and that I do mean sincerely- these guys and gals accomplish amazing, amazing stuff) to work to **come up with a new switch or mid-span injector.** Here’s the requirements:
  - No feature bloat. May not even need to be VLAN aware.
  - Provides lots of PoE
  - Somehow puts 2 Gbps of uplink to an AP on a single UTP run without requiring me to configure a port channel
  - Cost effective (by customer standards), no licensing BS, and ultra-reliable

Spare me the lecture that there is no such thing as 2 Gig Ethernet, and that what I’m asking for would be based in no existing standard. The WLAN industry has long since turned it’s back on standards and interoperability, which is why vendor lock prevails.

Other than PoE and what comes out of the antenna (and even that can be a dubious discussion), the mention of standards is a joke in the WLAN industry as each vendor authors their own technical magic. So be it- I just want new magic and don't care that it's not exactly Ethernet in the middle.

I'm OK feeding this new component a 10 GB uplink that it then divvies up into auto-configured 2 Gbps AP uplinks of some proprietary protocol. Or feeding it 2 single-gig ports on my wireless management VLAN that it then magically muxes into a 2 Gbps, big powered uplink that connects via a single wiring run (of excellent quality, of course) to each AP. At that point, all of MY work was done in the closet, and I didn't run a slew of new wires for my wireless network.

If we don't get something disruptively creative on the wired side to go along with 11ac, pretty much any TCO discussion on new 11ac ownership presented by WLAN vendors will be incomplete at best, and poppycock at worst. I've seen both announced and unannounced 11ac products- and the prices are pretty steep (well, except for Ubiquit-). But we're supposed to believe that 11ac lets us draw down the wired network considerably, and so be willing to buy into a higher premium for wireless. But... adding lots of new switchports and cabling runs (not trivial in many environments, can add hundreds of dollars in cost to real TCO for each AP) has to be considered.

Source: <https://wirednot.wordpress.com/2013/05/17/with-11ac-the-wlan-industry-owes-customers-a-new-kind-of-network-switch/>