

[vSphere arrives on ARM, but not for the reason most admins are thinking](#)

There is a surprising amount of confusion on what the vSphere on ARM architecture announcement is about. The main reason for this is the pretty heavy focus on people thinking that it's meant to run on a Raspberry Pi or similar device. Ok, I get the cool nerd factor, but seriously, we have to stop for a moment and think about what the real end-game is here. This is my armchair analyst's opinion on what I am seeing play out.

vSphere on RPi is like VDI on the iPad

We all remember the keynotes and sessions from a few years ago featuring Horizon clients running a full windows desktop on an iPad. It was the cool thing to do on a keynote stage both at the Citrix and VMware events. We collectively gave our best nerd squeals in joy as we saw the fact that we could suddenly access these nifty systems on the fastest growing touchscreen ecosystem.

It didn't take until even the end of any of those events to realize that it was really not going to play out like some of the pundits would say. What we were witnessing was the best possible test market:

1. Freshly available consumer equipment that was in the midst of taking the title of future enterprise toy
2. New way to remind us that we weren't done innovating the desktop yet

The real story that ended up coming from that wave of nerd joy was that desktop and application admins suddenly were forced to think about creating a touch experience. We also saw the move towards virtualizing the applications on top of the desktop and streaming them. Citrix solved that problem a decade earlier but the industry wasn't quite ready to broadly move towards streamed applications.

The "app marketplace" mentality suddenly forced our (our being the industry as a whole) hands to rethink how we deliver application services. Enter the cloud, and we are now in the next big wave of actually playing out the original vision of delivering an enterprise-grade remote user experience using a touch interface. It also opened up the doors to a new market for mobile device management (MDM). Hmmmm didn't VMware buy a bunch of technology right around that time and also pour millions of money into R&D, finally aligning the VDI and vApp teams?

You know where the RPi vSphere story is going now, right?

Change the names a bit (Raspberry Pi is now edge devices running on smaller form-factor ARM architectures) and the Horizon on iPad (read vSphere on ARM) is now the lead-in to the real story.

The financials clearly show that vSphere license sales are declining or flattening. That's natural with the 500K-600K customers already on board and at high levels of virtualization.

1. Lots of cloud providers run on ARM
2. Lots of edge devices do, or will run on ARM

Think trends (even early ones) and where they ended up driving the ecosystem. VMware (as noted in their public financials) spent 1.2 Billion in 2017, will spend approximately 1.3 Billion in 2018, and

estimates 1.4 Billion and 1.5 Billion in 2019 and 2020, respectively. Since vSphere licenses are slowing (read: less servers being sold with vSphere and the ones being sold are bigger and have higher workload ratios), the next area of growth is not selling server host licenses.

The five key areas to push into next are:

1. Management tools and suites - sell more stuff to the existing license owners
2. Network and security virtualization - NSX is clearly a targeted growth unit
3. Storage virtualization - vSAN and the hyper-converged Business Unit covers this one
4. Cloud and containerization - the workloads are moving, so they have to adapt and also to slow a potential mass exodus
5. Emerging technologies (containerization/edge/IoT/blockchain) - this is the new battleground for VMware

No need to go into the first four. You probably know that story already because it's been playing out for the past 2 years. VMware spends now on things that won't be live for at least 18-24 months (as does any company of that size), so the fifth area is where this next generation stuff will unfold the real reason to run vSphere on ARM.

Spoiler alert: it won't be full vSphere in all cases. If the edge devices and IoT devices run something with vSphere-like APIs and can be managed like vSphere endpoints, then you now have the first four of those five things above that become very relevant (and profitable). Your vSphere endpoints can be sold endpoint licenses, network and security suites, and you may want to buy bare-metal cloud running ARM. This is where the new pioneering is happening. If you have 1.5 Billion to spend, you can imagine that significant portion is heading into the emerging space to make sure you put your fingerprints all over the future before it runs right by you.

I kind of like the nerd fun factor of running vSphere clusters on Raspberry PI devices. I also have to think about where the puck is going, not where it is now. VMware is playing a long game, as they should. This is just the market test. The real story is VMware making sure to lay the future bet. The only question is when, not whether this is the new battleground. It may seem like untouched powder on a freshly snow-capped ski hill. There are lots of skiers aiming to get first tracks.