A Conversation with Steve Mullaney

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In early March I had the opportunity to catch up with an old friend – Steve Mullaney. Steve was the CEO of Nicira before it was acquired by VMware. He is currently SVP and GM of VMware's Networking and Security business unit.

Steve was recently interviewed by John Dix for a must read article in Network World . The title of that article is "SDN will never happen, says VMware exec". I caught up with Steve on March the 6th and when we started our conversation Steve made it clear that he never said that SDN will never happen. What he said was that the version of SDN that is based on controlling physical switches in the data center is a horrible idea and that version of SDN will never happen. Steve also said that on a going forward basis that there will never be a need for networking products to make use of specialized hardware. Like many vendors, Cisco's announced SDN offerings are based on controlling physical switches. Cisco's announced SDN offerings also make use of specialized hardware. So, if there was ever any doubt that VMware and Cisco have diametrically opposed views of SDN, Steve quickly cleared that up.

A year ago at the ONS conference, Martin Casado, CTO of networking at VMware was quite clear that what VMware was doing was network virtualization – not SDN. Steve seems to be backing off of the stance. The Dix interview quoted Steve as saying "I think of it [SDN] in terms of the small "s," small "d," small "n" meaning. Do you believe the future of the data center will be more defined by software than hardware? Yes, I do. Therefore I am an sdn, small letters, advocate. It's a philosophy to me. It's not a thing."

In the Dix article, Steve said that companies were currently making architecture decisions that would result in significant deployments in 2015. I followed up on that by asking Steve to clarify the type of architectural decisions he was referring to. Steve said he was not referring to just the network but to the software defined data center (SDDC) in total. He added that "We sell SDDCs, and network virtualization is a critical enabler to the SDDC."

I have worked on dozens of architecture projects and one of the key components of an effective architecture is identifying the triggers that cause a company to devote the resources to actually implement the architecture. I asked Steve about what he saw as the SDDC triggers. His response was that some companies, such as eBay, get the strategic value of agility and they will "just do it". Steve did acknowledge that 5 to 10 percent of companies fit into that class. Steve said that the trigger that would cause SDDC to cross the chasm and go from being an early adopter market to being an early majority market is micro-segmentation for internal data center security. In Steve's view, on a going forward basis traditional hardware based firewalls will mainly be used to protect north-south traffic and that a range of security functionality that VMware has and will continue to embed into the hypervisor will protect east-west traffic. Steve's reasoning was that the volume of east-west traffic dwarfs the volume of north-south traffic; IT organizations will need to provide security for the east-west traffic; and that using traditional firewalls is prohibitively expensive and operationally cumbersome. For more detail on how VMware sees the "Goldilocks Zone" phenomena applying to security, see Casado's blog .

Putting so much networking and security functionality into the hypervisors in general and into the vSwitches in particular, makes me wonder about who over time will be responsible for that functionality: the network team or the server team. Steve did say that VMware was putting a big effort into creating certification programs and that "We will work with customers to help them make the transformation".

It would not be fair to close this blog and leave you with the impression that somehow VMware is the cause of the ongoing shift in the roles that IT professionals will play. What is fair to say is that a wide range of vendors working on different approaches to assist in the broad adoption of a number of trends (i.e., virtualization, automation, cloud computing, SDN, sdn, SDDC, NFV) are causing that shift. Based on the maxim that "No army can halt an idea whose time has come", many of these trends will become mainstream. Given that, this is a good time for all of us to spend some time assessing our careers and figuring out our next move.

 http://www.networkworld.com/news/2014/011314-sdn-mullaney-277518.html

A good read on the maturity of a SDDC:
http://ashtonmetzler.com/QS%20Paper%202%20V3%200%20(1).pdf