

Should you Deploy SDN?

Due Date: May 15, 2013

The question that I hear repeatedly is “Is SDN ready for production networks?” My answer to that question stems from the interaction that I had over the last month with a wide range of IT professionals who represent the mainstream of the enterprise IT market. Part of that interaction occurred a few weeks ago when I participated in an SDN tutorial at the Open Networking Summit (ONS) in Santa Clara and spent a couple of days talking about SDN with the vendors who sponsored the ONS. Last week at Interop I moderated an all day workshop on SDN and spent the rest of the week on the show floor checking out the myriad SDN products that were on display. Earlier this week I moderated Network World’s SDN seminar in Chicago. In total, well over three hundred and fifty enterprise IT professionals attended the tutorial, the workshop and the seminar. In addition, I either spoke with, or listened to over twenty five vendors talk about their SDN products and strategies and I listened to a number of other analysts give their opinions about the state of SDN.

The good news is that the enterprise IT professionals that I spoke with are beginning to converge on the value that they see in SDN. It shouldn’t come as a surprise that as of the moment, they don’t see much value in having an application being able to dynamically signal the network for the services that it wants. That promise is a bit too abstract to get many IT professionals excited. In addition, we have heard that promise before – do you remember Application Oriented Networking (AON)? I believe that over time there is a good chance that the ability to have an application dynamically signal the network for the services it wants will become an important driver of SDN, but that won’t happen in 2013.

One broad use case that does get IT organizations excited about SDN is the promised ability to centralize configuration management and to centralize the provisioning of policy. The IT organizations I have been talking with believe that this will reduce operational expenses, result in fewer errors and reduce the time it takes to implement new services. I have also found that IT organizations are beginning to get excited about some of the network functions that are now running on an SDN. One such function that got a lot of attention from enterprise IT professionals this week at the Network World seminar was the ability to push the enforcement of security policies down to the network access devices.

A lot of the resistance to deploying SDN that I have heard enterprise IT professionals express over the last month stems from the relative newness of the overall SDN approach and of the associated vendor products and enabling technologies such as OpenFlow. While a company such as Goldman Sachs may be willing to put in the time and expertise it takes to make alpha or beta versions of SDN products work, the vast majority of IT organizations aren’t. They want a high level of assurance that they can implement products with minimal systems engineering effort on their part and that the products will perform as advertised. As the recent ONF sponsored plugfests have shown, today SDN products aren’t plug and play.

Based on the very real concerns that IT organizations have relative to the maturity of SDN, I am tempted to blithely state that SDN is not ready for production network. However, one of the SDN end users that I had on one of my recent panels is Igor Gashinsky. Igor works for Yahoo! and his title is distinguished architect. Igor supported the notion that SDN is not ready for production in the typical enterprise network. He did, however, make an additional observation that I agree with one hundred percent. Igor's observation was that if IT organizations aren't familiarizing themselves with and testing SDN today, they are going to be left behind. One way that IT organizations can familiarize themselves with SDN is by doing a proof of concept leveraging products supplied by one or more vendors. Another way is to download and use some of the wide array of open source based SDN products that are available. So, while SDN isn't ready to be broadly implemented in the typical enterprise network, both of these approaches enable both networking professionals and networking organizations to start their journey up the SDN learning curve.