

THEJUDAGROUP

A DIVISION OF CONCEPT CAPITAL MARKETS, LLC

THEJUDAGROUP INVESTMENT RESEARCH

ONUG 2014 TAKEAWAYS

SLOW PROGRESS IN DC SDN; FOCUS ON WAN USE CASES

- **COMMITMENT TO SDN AND OPENNESS BUT STILL EARLY ON THIS PATH**

We attended Open Networking User Group (ONUG), a network operator only conference; participants included financial services, retail and healthcare firms, as well as public cloud operators. While operators expressed commitment to implementing open and programmable networking solutions that drive both agility and cost savings (especially opex), we believe progress has been somewhat slower than expected a year ago, and real deployments are very limited with enterprise early movers still in the trial/evaluation stage. We continue to believe that i) enterprise move to SDN will be gradual; ii) overlay controller vendors lead by VMware and Nuage will likely experience success but market size is likely to be relatively small in the int-term; iii) Cisco has the opportunity to be a leading SDN supplier to large enterprises with ACI and drive DC switching growth through upgrade to 10/40G with N9K offsetting price/port decline though concerns on APIC timing and controller/switch lock in have to be addressed

The following are our key takeaways from ONUG

1. Users that have been enthusiastic about deploying overlays for network virtualization, are still in early stages of working through use cases and ROI with trials just commencing. We believe few final decisions have been made and meaningful production deployments earliest by 2015
2. VMware NSX appears to have leading mind share though we have found limited evidence of scale deployments of NSX/NVP, and users expressed concerns on scaling, visibility and pricing model. Nuage was mentioned often as an alternative to NSX, especially in OpenStack environments.
3. Most operators indicated they would evaluate Cisco's ACI solution with the integrated end to end offering being a key differentiator and lock in for controller and switches being a concern. Some operators were concerned that APIC with all features would likely be available only by early C'15 making it somewhat late since they plan to make decisions in 2H C'14.
4. SDN in the WAN was a key new theme with a couple of healthcare firms indicating they are in POCs and in some cases even deployments with solutions that have strong ROI. Focus was on using a unified WAN control plane to replace MPLS connections with IP/VPNs and thereby enabling rapid service provisioning, unified security policy and lower costs by orchestrating capacity, leveraging the public internet and multiple carriers, and in some cases replacing expensive CPE. Viptela, CloudGenix and Glue Networks were identified as having early traction in these segments.
5. Discussion on bare metal switching and network OS offerings was limited. Cumulus has leading mind share on this front and some enterprise customers are evaluating integrating bare metal switches and network OS but meaningful deployments outside of the cloud operator segment appear limited especially given aggressive pricing from incumbent vendors
6. Operators placed emphasis on virtualizing and chaining network functions, especially L4-7 to flexibly deploy services and believe these need to be integrated with their network controllers. Embrane, Avi, Versa and vArmour were identified as having early traction in these segments

COMMUNICATIONS
TECHNOLOGY

DATA NETWORKING

SDN UPDATE

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