Arista Delivers the Next Phase of Software Defined Networking

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Seamless Network Provisioning for OpenStack and OpenFlow Environments

SANTA CLARA, Calif., March 27, 2013--Arista Networks today announced the next phase of its Software Defined Networking (SDN) offerings by integrating Arista EOS™ (Extensible Operating System) natively with OpenStack, the leading open-source cloud provisioning and orchestration system. Arista EOS is also delivering enhanced OpenFlow extensions via direct flow based configuration interfaces and data-plane programmability. This combined with Arista's programmatic interfaces showcases a broad array of multi-vendor network monitoring and cloud integration with technology partners such as NEC, NetScout Systems, Palo Alto Networks, SolarWinds, Splunk, Big Switch, Cloudera, Cloudscaling, Corvil and ExtraHop Networks.

This innovative suite of SDN capabilities, available in the latest release of Arista EOS, significantly enhances cloud networking workflows for rapid cloud provisioning – taking IT workflows that often take weeks and delivering them in seconds. With Arista EOS, customers now have the programmable network capabilities that are necessary to operate a Software Defined Network.

"Arista continues to lead the way in data center network innovations, this is the first real API integration of a broad-based data center network platform and seeing it connect with OpenStack and solve real customer provisioning issues is exactly what this industry has needed to scale cloud computing," said Paul Rad, vice president, Rackspace.
Key SDN introductions include:

- Arista EOS application programmatic interfaces (eAPIs) for integration with leading orchestration and provisioning tools and customer applications.
- Arista contributed code to the OpenStack Quantum project that enables unified physical and virtual network device configuration.
- A new modular hardware driver architecture in the Quantum OVS plugin, and an open source version of Arista’s driver.
- New EOS native OpenStack provisioning capability that connects the Quantum OVS plugin to EOS via eAPI.
- OpenFlow 1.0 support in Arista EOS for external controllers.
- Enhanced Data Plane Programmability via direct flow-based OpenFlow extensions

"Extending Arista EOS for connection to cloud orchestration platforms provides programmability for building agile, self-service cloud architectures. This has been core to Arista EOS development from its inception," stated Tom Black, vice president, SDN Engineering for Arista. "These software innovations demonstrate Arista’s increasing relevance and agility in addressing SDN for public cloud operators and private clouds."

Unifying IP and SDN:
The introduction of OpenFlow extensions into Arista EOS gives customers the flexibility and freedom of implementing both IP and OpenFlow in a heterogeneous solution. Standard OpenFlow support in EOS can be orchestrated through a SDN Controller and value added extensions to OpenFlow are now possible via direct, data plane manipulation of flow tables in the Arista switches. This brings unprecedented open, application driven and programmatic control of network path selection at wire speed.

Furthermore, through the Arista eAPI remote systems can connect to Arista EOS via JSON based web services API for machine-to-machine communication. Working natively with the OpenStack Quantum plugin, this brings another industry first where the physical network topology is unified with virtual switch configuration and virtual machine placement in an OpenStack cloud.

Availability
Arista EOS support of OpenFlow, Arista Direct Flow mode, eAPIs and OpenStack is available now.

About Arista
The company was founded to deliver software defined cloud networking solutions for large data center and computing environments. Arista’s award-winning 10 GbE switches redefine scalability, robustness, and price–performance, with more than one million cloud networking ports being deployed worldwide. At the core of Arista’s platform is EOS, the world’s most advanced network operating system. Arista Networks products are available
worldwide through distribution partners, systems integrators and resellers.

Additional information and resources on today's announcement can be found at: https://www.arista.com

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