

# VMworld 2013: Arista's Network Applications Demonstrate the Value of Integration

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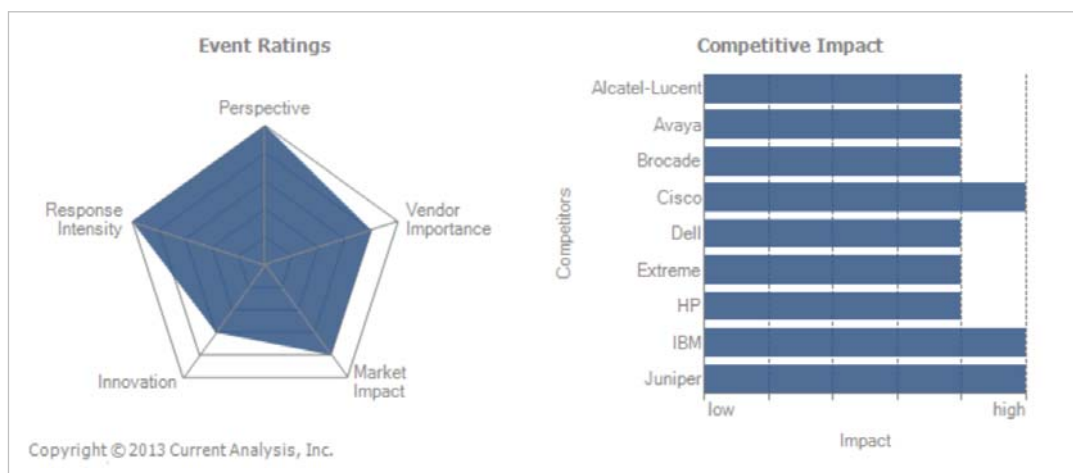
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## ■ Summary

### Event Summary

August 26, 2013 - Arista Networks announced three new network applications that integrate with Arista Extensible Operating System with VMware NSX and Microsoft's Open Management Infrastructure to simplify IT operations: OpenWorkload, Smart System Upgrade, and Network Telemetry. These network applications and associated partner ecosystems bring a new level of awareness to critical applications in the data center.

### Quick Take



### Competitive Positives

- Arista's new messaging shows advanced capabilities in EOS, previously not well articulated.
- Arista continues to advance integration with its extensive list of partners.
- Arista's network applications enhance dynamic network provisioning and monitoring.
- Network telemetry uses the network as a data source for analysis and monitoring.
- Smart System Upgrade automates graceful shutdown and start-up of devices dependent on a switch.

### Competitive Concerns

- VSmart System Upgrade may require integration by Arista or the customer to support all devices.
- OpenWorkload is only supported on the 7150 ToR switch, which has VXLAN support in hardware

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## ■ Analytical Summary

### Perspective: **Very Positive**

Very positive on Arista's new messaging and network applications, because its Extensible Operating System (EOS) has many features that were previously not well highlighted. The new messaging brings those features to the foreground. Arista's focus on applications, and in particular Open Workflow and Smart System Upgrade, advance orchestrated network management capabilities beyond their competitors and are leading the market.

### Vendor Importance: **High**

High to Arista, because as a pure data center, cloud, and high performance computing (HPC) network vendor, the company must innovate ahead of larger and more entrenched competitors to win new business. Arista also has historically not done a good job messaging its value proposition beyond the technical level and the focus on application networking provides an opportunity to discuss practical advantages of Arista's products to a less technical audience.

### Market Impact: **High**

High on the data center, cloud, and HPC networking markets, because the integration and automation requirements necessary for dynamic data centers and private clouds need equally dynamic networks. Arista is leveraging VMware's NSX to provide automated network configuration including dynamic forwarding of network tap traffic per VM, as well as traffic statistics. Support for OpenStack and Hyper-V are coming as well.

## ■ Competitive Strengths and Weaknesses

### Competitive Positives

- Arista's new messaging brings forward advanced capabilities in EOS that were previously not well articulated. Arista has historically spoken to the more technical IT staff which understands the technology but has struggled to take its value proposition to upper management. The change in messaging targets benefits and value which are more important to non-technical upper management.
- Arista continues to advance integration with its extensive list of partners, which improves the integration capabilities Arista's products have with data center offerings. Demonstrated integration is more valuable than protocol support because customers want reliable interoperation first and foremost. Partnering with vendors that also have strong market presence in their respective markets open opportunities for Arista.
- Arista's network applications enhance dynamic network provisioning and monitoring, which will be critical in the coming years as enterprises build out dynamic software defined data centers. By focusing on applications, Arista can focus on adding value with the network versus mere integration and interoperation.
- Network telemetry uses the network as a data source for analysis and monitoring which can be leveraged to make better forwarding decisions in the network. Sending traffic along an alternative path that offers less congestion keeps applications running smoothly while predictive analytics can highlight potential problems before they affect application performance.
- Smart System Upgrade automates graceful shutdown and start-up of devices dependent on a switch and provides a way to take a switch out of service for updates without affecting network traffic. By integrating with devices that are connected to a switch, applications and traffic can be moved to other resources simply and easily. When the switch comes back online, resources can be added back in an ordered manner improving application uptime.



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### Competitive Concerns

- Smart System Upgrade may require integration by Arista or the customer to support all devices, which can be a daunting task depending on the number of different devices that are attached, the variety of versions for each device type, and the external device's own integration APIs. The more devices that Arista can add to its catalog the better, but it will have to evolve over time.
- OpenWorkload is currently only supported on the 7150 ToR switch which has VXLAN support in hardware and limits the usefulness of Arista's network applications to specific hardware choices. Existing Arista switches which don't have VXLAN support in hardware won't be able to support OpenWorkload, forcing customers into waiting for a product refresh to run the network application.

### ■ Response & Recommendations

- All data center networking vendors should pay attention to how Arista has honed its messaging to resonate with a broader audience inside an enterprise customer. At a high level, Arista's new messaging is targeting the same executives, but now emphasizes the value a network brings to an organization versus simply being faster and denser.
- Arista needs to continue adding more partners to its ecosystem and continue to demonstrate tight integration and reliable interoperation between Arista switches and partner hardware and software. Showing interoperation demonstrates to enterprises that multi-vendor data centers are not only viable but more beneficial than single vendor solutions because multi-vendor offers more options.
- Competitors, particularly those with broad data center product offerings in house like Cisco and Brocade, should counter Arista's partnership efforts by extolling the benefits of a single vendor data center solution including better integration, unified management, better integrated support, and better pricing plans both from the channel and direct from the vendor.
- Alcatel-Lucent, Avaya, Cisco, and HP should direct energies on addressing Arista's new application focus by contrasting their application focuses against Arista's. Arista's applications are focused on running and automating network operations while other vendors application go to market strategies are focused on delivering applications from the data center to the client. Both are valuable strategies, but the latter has broader appeal than just data center operations.

### ■ Recommended Buyer Actions

- Enterprises that are now or will be upgrading their data center network and also prioritize automation capabilities should put Arista on the short list. Arista has extensive experience in large data centers and has developed a rich set of integration features. The network applications are examples of using the network to automate its operation in a reliable manner.
- Enterprises should carefully evaluate not only the depth of their vendors' partner programs but also the partner programs they participate in. The combined effort is the vendor ecosystem and the more numerous the connections between the vendor and others the greater the likelihood they will integrate with products already in a customer's data center.
- For IT departments hesitant to switch vendors because of perceived difficulties in learning a new product or concerns about interoperability with other products, pursue a pilot program around Arista, or any network vendor, in live trials. Key components to assess are integration with other data center software systems and the impact on operations (in other words, "Do the integration and network applications reduce operational cost and raise reliability?").
- Arista customers should understand the companies' plans to support existing hardware switches in the future with the new



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applications, and if there is a gap, how to bridge it. For example, if the current switches don't support VXLAN, then what is the migration path? In addition, understand Arista's support for other data center protocols like TRILL, SPB, and NVGRE if they are important to the customer's organization.

### ■ Analytical Perspective

Arista's go to market strategy has focused on high speed, high density, and low latency networking targeted at high performance data centers, high frequency trading, cloud platforms, and large data centers. They message through the network admin who tend to have input, if not buying power, on infrastructure purchases. Those customers have well defined needs that Arista's products and marketing directly addressed, but the company has struggled to reach the general enterprise data center market who don't need sub micro-second delay. Arista's new network application focus is a change in overall messaging speaking to non-technical management, via a repackaging of existing capabilities into use cases, and new applications and products.

Network managers readily understand the value of fast and reliable networks, and in many organizations, network managers have input into product purchases. However, high density, fast networking, and low latency aren't important enough to many enterprises to consider switching vendors. Other factors like integration with existing software and hardware, organization knowledge of the existing networking equipment, and a number of other issues make replacing an incumbent vendor difficult. Arista's go to market message now focuses on value as well as speeds and feeds. By positioning the network as an integral part of an enterprise's operational and business processes, Arista can talk to non-technical managers about the value of streamlining network operations to provision new services, automate troubleshooting, and increase uptime by intelligently working with other data center systems to move workloads off switches due for maintenance and then restore the services when done.

Many of the capabilities used to deliver Arista's network applications like telemetry and Smart System Upgrade existed in Arista's Extensible Operating System (EOS), but was underutilized. New integration with partners such as VMware, Microsoft, F5, EMC, Splunk, Extrahop, and Corvil using existing capabilities in EOS allows Arista and its ecosystem to automate network operations in ways that were previously manual and static processes. The network applications also serve as examples of what can be accomplished with EOS.

As a pure play networking vendor, Arista has to partner with vendors in adjacent technologies and deliver integrated solutions in order to provide enough value add to off-set enterprises tendencies to stick with incumbent vendors. Between the new messaging and the new network applications, Arista is clearly broadening its scope and expanding beyond its existing verticals.

