BROCADE

March 3, 2014

Brocade Advances SDN Leadership With OpenFlow 1.3 Support Across IP Routing and Switching Portfolio

Brocade to Demonstrate End-to-End SDN and Risk Mitigation Using OpenFlow at ONS 2014

SAN JOSE, CA -- (Marketwired) -- 03/03/14 -- Brocade (NASDAQ: BRCD) today announced support for OpenFlow 1.3 across its IP portfolio of routing and switching products, extending the company's leadership and evolutionary approach to Software-Defined Networking (SDN). A key component of the company's comprehensive SDN strategy, the expansion of OpenFlow support from the Brocade® MLXe and CER/CES product families to the Brocade ICX® and VDX® switch families enables customers to achieve new agility and programmability across the network -- from the data center to the campus to the wide area network (WAN).

While earlier versions of OpenFlow are widely deployed among Research and Education Networks (RENs) and other early adopters, OpenFlow 1.3 delivers a richer feature set required for commercial and enterprise networks to address complex network behavior and optimize performance for dynamic SDN applications. These features include Quality of Service (QoS), Q-in-Q, Group Tables, Active-Standby Controller, IPv6 and more.

"OpenFlow 1.3 is a milestone release that delivers some of the core functionality today's networking environments demand," said Brad Casemore, research director of Datacenter Networks at IDC. "Brocade's end-to-end support of OpenFlow 1.3, combined with its Hybrid Port Mode functionality, offers an OpenFlow migration path to organizations that will allow them to embrace SDN without affecting their current production traffic."

An early supporter of the protocol, Brocade has shipped more than one million OpenFlow-enabled ports on the company's flagship router, the Brocade MLXe Core Router and its compact carrier Ethernet routers and switches, the Brocade CER and CES products. By expanding support to the company's campus LAN and data center switching portfolios, the Brocade ICX and VDX product families, Brocade is enabling new SDN use cases, such as Real-Time Threat Mitigation and Service Chaining, in order to deliver services and applications faster and more efficiently, while continuing to reduce costs.

"Brocade's commitment to SDN is clear in the significant contributions to the technical leadership of the Open Networking Foundation and OpenFlow," said Curt Beckmann, chair of Forward Abstraction Working Group (FAWG) at ONF and Principal Architect at Brocade. "The real payoff of Brocade's standards work comes as we provide deployable and compelling SDN solutions. Our latest example is the Flow-Aware Real-Time SDN Analytics OpenFlow application, for which Brocade has been named a finalist as part of the Open Networking Summit's SDN Idol competition."

As service providers and enterprises begin the journey to SDN, they must continue to support their present mode of operation, for both economic and operational reasons. With the industry's only true OpenFlow Hybrid Port Mode offering, Brocade provides customers with a pragmatic and efficient transition, enabling interworking between SDN and non SDN networks. Capable of running OpenFlow forwarding on the same physical infrastructure as traditional networking protocols, Brocade OpenFlow-enabled products allow customers to apply SDN for new capabilities while continuing to support existing network services. The result is an evolutionary rollout of SDN without an expensive "fork-lift" replacement of equipment.

"While the data center has been the logical starting place for the deployment of SDN technologies, customers are realizing increased needs for SDN in campus and WAN environments," said Jason Nolet, vice president, Data Center Networking at Brocade. "With comprehensive OpenFlow support across our IP routing and switching portfolios, Brocade offers its customers a wide range of solutions to fit their network needs."

Extending the programmable architecture of the Brocade MLXe routers are two new hardware modules designed to expand SDN scale. The Brocade MLXe 2-port 100 Gigabit Ethernet (GbE) CFP2 and the Brocade MLXe 20-port 10 GbE modules increase network flexibility and scale to advance service innovation without sacrificing performance. Built on Brocade VersaScale™ Packet Processing technology, these modules provide built-in investment protection with integrated OpenFlow support and upgradeability to future SDN capabilities.

Support for OpenFlow 1.3 on the Brocade MLXe, CER and CES product families will is planned for June 2014. Current customers can upgrade to OpenFlow 1.3 at no additional cost. The Brocade ICX and VDX products are currently OpenFlow-enabled in hardware and are designed to provide software support later this year.

OPEN NETWORKING SUMMIT

At ONS (March 3-5, 2014), Brocade will demonstrate a number of OpenFlow-enabled solutions in booth 505, including the Brocade MLXe, ICX and VDX products.

- OpenFlow 1.3 Campus Demo: Brocade showcases how OpenFlow 1.3 can enable the open, software-defined campus network and how it supports new requirements such as BYOD. This demo includes Brocade MLXe Core Routers and Brocade ICX Switches in an optimized campus use case for integrated, secure networks using SDN for dynamic traffic isolation, load balancing and QoS.

- Flow-aware Real-Time SDN Analytics: Brocade demonstrates an SDN application that maximizes network bandwidth utilization and that can be used for real-time detection and mitigation of behavioral security threats such as DDoS attacks. This demo leverages Brocade MLXe Core Routers in an OpenDaylight Project framework and exhibits automatic detection and rate-limiting of aggregate large flows such as SYN Flood Attacks.

- On-Demand Data Center with OpenFlow: This demonstration shows The On-Demand Data Center™ Network provisioning based on real-time network utilization and application needs, using OpenFlow on Brocade VDX Switches.

To register for ONS, visit: http://www.opennetsummit.org/.

About Brocade
Brocade (NASDAQ: BRCD) networking solutions help the world's leading organizations transition smoothly to a world where applications and information reside anywhere. (www.brocade.com)

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