Open Platform, Unlocked Performance, and Unleashed Innovation

Best-in-class Network OS to Achieve Web-scale IT Efficiencies

Cumulus Linux is the first full-featured Linux OS for data center networking, running seamlessly over bare metal switches. It delivers high capacity fabrics with unprecedented price performance. It enables a large ecosystem of native Linux applications and automation tools on networking gear while delivering new levels of innovation and flexibility to the data center. Through the new disaggregated model, rich data center networking solutions are augmented to support large-scale Clos fabrics and next generation architectures.

Cumulus Linux is empowering the customer to build a modern, scalable data center while bringing the same paradigms of manageability, clustering, monitoring, and orchestration that are applied at the server and virtual machine layer today to the network, realizing the full promise of the software-defined data center.

Cutting Edge Ethernet Switches

Mellanox is different than other switch vendors in a number of ways. A true hardware innovation company, Mellanox is the only end-to-end technology vendor with its own unique silicon for Ethernet switches, network interface cards, cables, and transceivers. The engine for any Ethernet switch is the switching ASIC, and Mellanox’s Spectrum ASIC provides the predictable performance needed for modern data center infrastructure, with the best-in-class latency, power consumption, and microburst absorption capabilities.

With a complete solution of NICs, cables, transceivers, and switches, Mellanox provides the best gigabit per dollar value in the industry.

Benefits and Value to End Customer

The joint Mellanox Spectrum and Cumulus Linux solution enables an open platform, unlocked performance, and unleashed innovation. Cumulus Linux is based on an open framework enabling customers of all scales to build and operate Web-scale IT networks. Mellanox Spectrum™ delivers the world’s first 25/100G Open Ethernet-based Switch, which provides leading throughput, latency, energy efficiency and scalability, to build the most efficient 25, 50 and 100 Gigabit Ethernet data center fabrics.

- Predictable application performance, low latency and zero packet loss fabric
- Better, faster, and easier networks to support cloud workloads with Web-scale IT efficiencies
- Freedom to choose the best network operating system, and the best switch silicon/hardware
Joint Solution

Mellanox SN2700 & SN2410

The SN2700 switch provides the highest density 100GbE switching solution for the growing demands of today's data center environments. Featuring 32x100GbE ports that can be broken out for 10/25GbE, 40GbE, or 50GbE port modes. It's an ideal spine and top of rack (ToR) solution, allowing maximum flexibility, with port speeds spanning from 10 Gbps to 100 Gbps per port and port density that enables full rack connectivity to any server at any speed.

The SN2410 switch provides the highest performance 25/100GbE top of rack (ToR) switching solution for the growing demands of today's data center environments. It is an ideal 1U ToR solution, with 48x10/25G ports and 8x 40/100GbE ports allowing maximum flexibility. Its optimized port configuration enables high-speed rack connectivity to any server at 10GbE or 25GbE speeds.

Mellanox SN2700-B & SN2410-B: Advanced 40GbE Switches

Bringing the performance, highly scalable tables, and advanced congestion avoidance features of the Spectrum ASIC to 40GbE environments (the SN2700-B) or to 10/40GbE ToR environments (the SN2410-B). The same microburst absorption and predictable buffering capabilities can be deployed for applications that are well served with a 32x40GbE 1U ToR or spine switch (on the SN2700-B) or with a 1U ToR switch with 48x10GbE ports and 8x40GbE uplinks (on the SN2410-B).

- Uplink ports on all models allow a variety of blocking ratios that suit any application requirement.
- All switch models support ONIE for zero-touch installation of alternate network operating systems.

Conclusion

Mellanox is helping to accelerate the adoption of open networking and the transformation of businesses to achieve Web-scale IT efficiencies. The partnership between Mellanox and Cumulus Networks is a realization of the Open Ethernet initiative and furthers both companies' long-standing commitment to Open Networking, as demonstrated by their contributions to the Open Compute Project (OCP), Switch Abstraction Interface (SAI), Linux Switchdev, and Open Network Install Environment (ONIE). In addition, Mellanox has made multiple contributions of 10/25, 40/50, and 100 Gbps Ethernet switch and OCP adapter designs.

These open networking platforms enable customers to choose best of breed components in order to optimize and automate their data centers to meet their business needs. The fully integrated and tested combination of Spectrum switches and Cumulus Linux is the ideal way to achieve this agility, with an Open Networking platform that frees enterprises to extend and improve the pace of innovation, efficiency, and automation of their data center infrastructure.

About Mellanox

Mellanox Technologies (NASDAQ: MLNX) is a leading supplier of end-to-end Ethernet and InfiniBand intelligent interconnect solutions and services for servers, storage, and hyper-converged infrastructure. Mellanox intelligent interconnect solutions increase data center efficiency by providing the highest throughput and lowest latency, delivering data faster to applications and unlocking system performance. Mellanox offers a choice of high performance solutions: network and multicore processors, network adapters, switches, cables, software and silicon, that accelerate application runtime and maximize business results for a wide range of markets including high performance computing, enterprise data centers, Web 2.0, cloud, storage, network security, telecom and financial services. More information is available at www.mellanox.com.

About Cumulus Networks*

Cumulus Networks helps customers realize cost-effective, high capacity networking for modern data centers. Linux transformed the economics and innovation for data center compute, and Cumulus Linux is doing the same for the network. It radically reduces the costs and complexities of operating modern data center networks for businesses of all sizes. Cumulus Networks has received venture funding from Andreessen Horowitz, Battery Ventures, Sequoia Capital, Peter Wagner and four of the original VMware founders. For more information visit cumulusnetworks.com, or follow @cumulusnetworks.