



Mellanox Announces Support Solutions for SONiC Open Source Network Operating System

First Switch Vendor to Offer Full-Stack Support for SONiC Alongside Expanded Portfolio of OCP SmartNICs to Simplify Open Networking in Cloud, Telco and Enterprise Data Centers

Mellanox® Technologies, Ltd., a leading supplier of high-performance, end-to-end interconnect solutions for data center servers and storage systems, today announced ASIC-to-Protocol (A2P) customer support solutions for the SONiC Network Operating System (NOS) on Mellanox Spectrum switches.

SONiC Software for Open Networking in the Cloud is a fully open sourced NOS for Ethernet switches, first created by Microsoft to run Microsoft Azure and now a community project under the Open Compute Project (OCP). SONiC is built on the Switch Abstraction Interface API (SAI) and breaks down traditional monolithic switch software into agile, microservices-based containerized components. This model accelerates innovation within the NOS and the data center by breaking vendor lock-in and simplifying switch programmability, allowing network operators to choose the best-of-breed switching platforms. SONiC offers a full suite of network functionality—like BGP, ECMP, VXLAN, IPv6, and RDMA that has been deployed and production-hardened in some of the largest data centers in the world.

Mellanox pioneered the [Open Ethernet](#) approach to network disaggregation with multiple families of Ethernet switches supporting a wide range of open network operating systems, including SONiC. Democratizing web-scale network automation and visibility, Mellanox is making SONiC available and accessible to tier-2 cloud providers, telcos, and large enterprises that want to embrace open source technologies and leverage the R&D investments of hyperscaler cloud titans in a vendor-supported networking environment.

Already a major contributor to SONiC, Mellanox is announcing support offerings for customers running large deployments of the SONiC NOS on Mellanox SN2000 and SN3000 switches. Mellanox is the first switch vendor to offer comprehensive A2P support contracts for both hardware and software to customers deploying SONiC on Mellanox switches. This A2P support covers all aspects of the switch hardware and software, including the ASIC, SAI, switch system hardware, NOS, and networking protocols.

To accelerate initial SONiC deployments, Mellanox is also creating SONiC starter kits that go beyond a simple bundle of parts. The Mellanox SONiC starter kits are built around tested and verified use-cases with sample switch configurations, topology guides, test plans, and Ansible scripts to simplify and speed up deployments. Open source solutions come with great benefits while requiring the best level of support. These SONiC starter kits are designed to accelerate the adoption of open source data center automation across cloud and enterprise customers. Mellanox ASIC-to-Protocol support ensures single-vendor ownership of support and faster time to resolution for any issues.

Mellanox rounds out the networking solution with world-class SONiC training from the Mellanox Academy, a SONiC certification program for network engineers who want to become proficient with cloud scale tools and operations. Customers can sign up for this training today [at Mellanox Academy](#).

"SONiC is an amazingly versatile and scalable NOS for the data center, and Open Ethernet is an incredibly powerful concept," said Amit Katz, Vice President of Ethernet Switches, Mellanox Technologies. "Every week we hear from more customers who want to combine the power of SONiC with the best-in-class switch silicon in Mellanox Spectrum. Our unique support offering and vast SONiC experience make this easy for new and existing SONiC customers."

Yousef Kahlidi, Corporate Vice President, Azure Networking at Microsoft Corp. said, "SONiC delivers scalable and efficient cloud networking that offers one optimized NOS that runs on a variety of best-of-breed switches. Offering support for SONiC on their switches allows Mellanox to bring the benefits of SONiC to a larger customer segment."

"Meituan is deploying SONiC in production because it is a non-proprietary, open NOS that has the features and scale we need for our cloud data centers," said Lei Zheng, Leader of the SONiC team at Meituan. "SONiC works well on Mellanox and it gives us full network visibility features needed to operate a modern data center. We are extremely excited that our upcoming SONiC deployment will be fully supported by a world class networking company like Mellanox."

Expanded Portfolio of OCP-compliant Secure Cloud SmartNICs

In addition, Mellanox is introducing today new OCP SmartNICs powered by the ConnectX-6 Dx ASIC and BlueField-2 I/O Processing Unit (IPU), joining the broad Mellanox OCP adapter portfolio of ConnectX-4 Lx and ConnectX-5 OCP 2.0 and OCP 3.0 adapter cards. Mellanox advanced network adapters enable faster and more efficient cloud, storage, security, AI,

machine learning, video streaming, and big data solutions for cloud, telco and enterprise customers. The Mellanox OCP SmartNIC portfolio delivers unprecedented performance and advanced features including Mellanox multi-host®, Mellanox socket-direct® and host-based management, which complement the Mellanox Open Ethernet switches and expanded support for SONiC.

Mellanox is showcasing SONiC on Spectrum switches with hardware-accelerated telemetry, and its broad portfolio of OCP SmartNICs at the 2019 OCP Summit event in Amsterdam, September 26-27. Visit Mellanox at booth A14 to learn about the benefits of Mellanox high-throughput networking solutions, including programmable OCP-form-factor SmartNICs and Open Ethernet switches with advanced, built-in network telemetry.

Additional Resources:

- Learn more about [SONiC](#)
- Learn more about [Mellanox Spectrum Switches](#)
- Mellanox [support for the Open Compute Project](#)
- Mellanox blog [Introducing SONiC on Mellanox switches](#)
- Mellanox blog on [Open Ethernet and SONiC](#)
- Learn more about [ConnectX-6 Dx SmartNICs](#)
- Learn more about [BlueField-2 IPU](#)s

About Mellanox

Mellanox Technologies is a leading supplier of end-to-end InfiniBand and Ethernet smart interconnect solutions and services for servers and storage. Mellanox interconnect solutions increase data center efficiency by providing the highest throughput and lowest latency, delivering data faster to applications and unlocking system performance capability. Mellanox offers a choice of fast interconnect products: adapters, switches, cables and transceivers, 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 and financial services.

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