Where Open Source Meets Enterprise

Pure SONiC through NVIDIA removes distribution limitations and lets enterprises take full advantage of the benefits of open networking—as well as the NVIDIA expertise, experience, training, documentation, professional services, and support that best guarantee success.

Why Choose SONiC from NVIDIA?

100% Open Source

Unlike a distribution, SONiC doesn't require reliance upon a single vendor for roadmap additions, bug fixes, or security patches.

ASIC to Protocol Support

NVIDIA provides support for Free Range Routing (FRR), SONiC, Switch Abstraction Interface (SAI), systems, and application-specific integrated circuits (ASIC)—all in one place.

Partner with Thought Leaders

NVIDIA is the leading contributor to Free Range Routing (FRR), the primary routing stack in SONIC.

Choice of Network Operating System

It's possible to mix and match your leaf spine architecture with SONiC, NVIDIA® Cumulus Linux™, NVIDIA Onyx™, or others. The choice is yours.

World-Class Switch ASIC

By pairing a switch ASIC with SONiC, you can experience unmatched performance, in-service software upgrades (ISSU), and telemetry with NVIDIA What Just Happened® (WJH).

Unified Management

With SONiC, you can achieve unified management with existing management tools across the data center.

Get started running SONiC on a bare-metal switch

Key Features

Reduced risk and complexity: Code changes are validated by the community, meaning you have the strength of thousands behind your code.

Part of an ecosystem: With community-based SONiC, bug fixes and security patches benefit the entire ecosystem.

Collective wisdom: SONiC leverages the collective wisdom and expertise of the community, including lessons learned from past networking OS design.

Actionable telemetry: NVIDIA NetQ™ lets you incorporate NetDevOps into your SONiC fabric.

Code transparency: SONiC is open source, so you know what you're getting.

Ready for prime time: SONiC has been hardened in the data centers of some of the largest cloud service providers.

Scalability for hybrid and multi-cloud networks: SONiC's modular, extensible, container-based design accelerates innovation.

Digital twins: NVIDIA Air makes physical deployments seamless by validating and simplifying deployments and upgrades in a virtual network.

Pair with Industry-Leading Performance

By combining SONiC with NVIDIA Spectrum™, you get support for speeds of 1/10/25/40/50/100 and up to 400 GB GbE; full wire speed (FWS) at all packet sizes; telemetry, including WJH; control for all layers, including ASIC, firewall (FW), software development kit (SDK), SAI, and SONiC; ISSU; and full support for RDMA over Converged Ethernet (RoCE).