

Dell EMC Networking OS10 Open Edition Powered by OpenSwitch OPX

Your Way To Build Composable Networks...

OS10 Open Edition

- Linux Foundation open source project
- Diverse growing community led by Dell EMC
- 100/40/25/10/1G platform support
- Open source NOS for hardware switches
- Commercial-grade turnkey solution
- Open and premium application ecosystem
- Rapid onboarding of new platforms, protocols, and applications on top of unmodified Linux kernel

What is OS10 Open Edition?

Dell EMC Networking runs network operating system OS10 on its data center switches, and contributes part of the OS10 (base) code to the OpenSwitch OPX project. To enable OPX in a production environment, Dell EMC offers OPX support for Dell EMC switches.

This combination of OPX code, along with Dell EMC support is known as OS10 Open Edition. Customers can get OPX software from openswitch.net or Dell EMC eSupport, or purchase Enhancement Package SKUs (POS and APOS) from Dell EMC.

Why OS10 Open Edition?

Operational efficiency benefits

- Software and hardware disaggregation
- Free NOS base brings capex savings
- Open/premium applications save opex

Network agility and features velocity

- Custom modifiable open source code
- Extensible to support new platforms
- Provides framework to integrate new applications

Features

Linux feature integration

- Linux Debian Stretch 9
- LLDP, STP, PVST, ICMP, DNS client, NTPv4, DHCP client
- Linux utilities and tools delivering full-featured networking capabilities

Management

- RADIUS, TACACS+, SSHv2, syslog, PAM
- SNMPv2/v3

Layer 2

- LACP, LAG, VLAN, CoS, ICMP snooping, static VxLAN

Layer 3

- IPv4 and IPv6 support
- ECMP, inter-VRF routing, ARP, IGMPv2

Ecosystem

- BGP, OSPF, L3 routing, telemetry
- Intent-based networking, BGP unnumbered

Security and instrumentation

- ACL: 5-tuples, L2/L3, UDF
- Monitor: (R)SPAN, sFlow

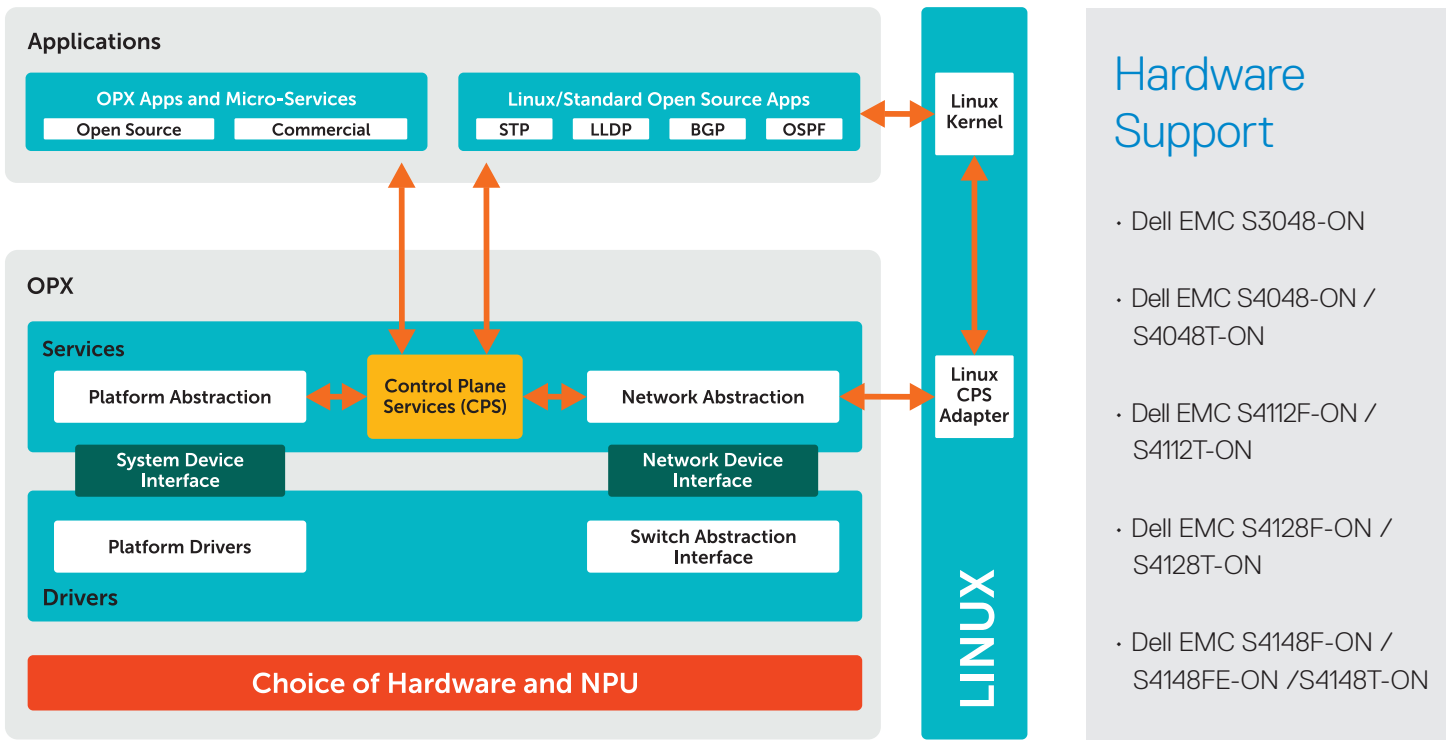
QoS

- DiffServ, PFC, CoPP, 802.1p, DSCP
- Ingress policing, egress shaping, scheduling

DevOps

- Control plane services APIs
- Automation/provisioning: Ansible, Chef, Puppet, Salt+Napalm
- Programmability via Python, C/C++, YANG interfaces

Learn more at Dell.com/Networking



Hardware Support

- Dell EMC S3048-ON
- Dell EMC S4048-ON / S4048T-ON
- Dell EMC S4112F-ON / S4112T-ON
- Dell EMC S4128F-ON / S4128T-ON
- Dell EMC S4148F-ON / S4148FE-ON / S4148T-ON
- Dell EMC S4248FB-ON / S4248FBL-ON
- Dell EMC S5148F-ON
- Dell EMC S5232F-ON
- Dell EMC S5248F-ON
- Dell EMC S5296F-ON
- Dell EMC S6010-ON
- Dell EMC Z9100-ON
- Dell EMC Z9264F-ON

Open Source Disaggregated Network OS

- Rich open source and premium network applications
- Modular, scalable, extensible, performance-optimized architecture
- New applications are easily ported, using control plane services (CPS) abstraction
- ASIC/NPU extensions are easily integrable, using switch abstraction interface (SAI)
- Deploy native Linux applications, supplemented by OpenSwitch OPX networking stack
- Linux Foundation neutrality – growing and vivid community

Enhancement Package SKUs

SKU	Mfr Part	Short Description
528-BBTW	APOS	Dell EMC OpenSwitch OPX Enhancement Package 1G Switches Customer Kit
528-BBTY	APOS	Dell EMC OpenSwitch OPX Enhancement Package Customer Kit
528-BBTX	POS	Dell EMC OpenSwitch OPX Enhancement Package 1G Switches
528-BBTZ	POS	Dell EMC OpenSwitch OPX Enhancement Package