

OpenSwitch (OPX) Network Operating System 3.1.0

Your Way To Build Composable Networks...

What is OpenSwitch?

- 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

Why OpenSwitch?

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

Use OPX NOS with confidence

- Commercially deployed today
- Leading open networking hardware
- Field-proven control protocol
- Multiple production deployments

OpenSwitch 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
- IGMP 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

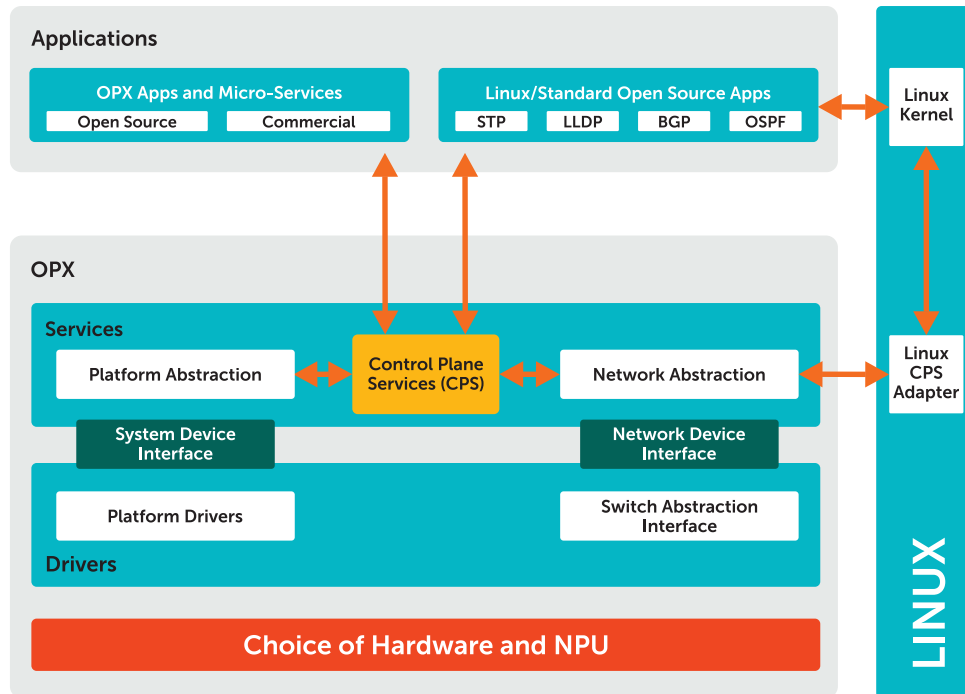
- Control plane services APIs
- Automation/provisioning: Ansible, Chef, Puppet, Salt+Napalm
- Programmability via Python, C/C++, YANG interfaces

Members



Website: www.openswitch.net **Contribute:** github.com/open-switch
Mailing List: ops-dev@lists.openswitch.net **Follow Us:** @openswitchOPX
Chat: chat.openswitch.net **Wiki:** github.com/open-switch/opx-docs/wiki





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 OPX networking stack
- Linux Foundation neutrality - growing and vivid community