

OpenSwitch OPX

3.0.0 Release Notes

This information describes the new features and known issues for the OpenSwitch OPX, release 3.0.0. For detailed information about how to install, use, and develop applications for OpenSwitch OPX, see the *OpenSwitch OPX* documentation set at archive.openswitch.net.

For documentation about supported Dell EMC open network install environment (ONIE)-enabled hardware platforms, see www.dell.com/networking.

New in this release

OpenSwitch OPX release 3.0.0:

- Debian Stretch
- Added support for S4112F-ON, S4112T-ON, and Z9264F-ON switches
- Data VRF (IP services such as DHCP client and relay, DNS, ping, traceroute) ¹
- CoPP ACLs ²
- Ansible enhancements
- NTPv4 now included in installer
- sFlow (new version built on CPS API - see <https://sflow.net/downloads.php> to download the hsflowd package for OpenSwitch)
- Zero-touch deployment
- IP unnumbered support
- TACACS+ and RADIUS (as supported on Linux; OpenSwitch will publish guidance)
- SNMPv3 support
- Introduced `--set` option to the `cps_config_lag` command which allows you to overwrite an existing list (for example, `cps_config_lag --set --lname bnd1 --port e101-001, e101-004, e101-005`)
- Removed FRR from the installer (go to github.com/FRRouting/frr/releases to download the FRR package for installation)

OpenSwitch OPX release 2.3.1

- Introduced `reload/reboot` command to reset the NPU when resetting the switch for all platforms except Dell EMC Networking S5148F-ON (see [Known issues](#))

OpenSwitch OPX release 2.3.0

- Added support for Dell EMC Networking S5148F-ON, S4248FB-ON, and S4248FBL-ON switches
- Persistent ACL configuration
- Support for interfaces table MIB via PySNMP
- Ability to upgrade OPX packages via `apt-get dist-upgrade` (release 2.3.0 and above)
- Fixes for issues found by the OPX community

¹ Not supported on the S5148-ON in this release.

² Not supported on the S5148-ON in this release.

- Dell EMC Networking S6000-ON has reached end of life

Hardware support

The following lists the supported hardware for OpenSwitch OPX, release 3.0.0:

- S3048-ON
- S4048-ON / S4048T-ON
- S4112F-ON / S4112T-ON
- S4128F-ON / S4128T-ON
- S4148F-ON / S4148FE-ON / S4148T-ON
- S4248FB-ON / S4248FBL-ON
- S5148F-ON
- S6010-ON
- Z9100-ON
- Z9264F-ON

Restrictions

- OpenSwitch OPX is supported only on an ONIE-enabled switch (see [hardware support](#) for a list of supported Dell EMC and Edgecore switches)
- Dell EMC does not provide support for third-party software and drivers, community projects, code development, or implementation and development of security rules and policies

Known software behavior

The following lists the known software behavior for OpenSwitch OPX release 3.0.0:

- IPV6
 - Physical port and port-channel (LAG) interfaces are in L2 mode by default. IPv6 capability and forwarding are disabled by default
 - VLAN and loopback interfaces come up in L3 mode with IPv6 capability and forwarding enabled by default
 - IPv6 stateless auto-configuration can be disabled without affecting an interface's IPv6 forwarding setting
 - On the Management interface, IPv6 is enabled by default. IPv6 forwarding is disabled so that the interface operates in host mode without routing traffic
 - IPv6 stateless auto-configuration is disabled by default, except on the Management interface
- VLANs
 - The valid VLAN ID range is 1 to 4094 inclusive; VLAN ID 4095 is reserved for internal use only

Known issues

The following lists the known issues for OpenSwitch OPX release 3.0.0:

- S5148F-ON does not support data VRF and CoPP ACL features
- S5148-ON interface does not come up if 10G optic is plugged into a 25G port
For both copper/fiber modes, use the `opx-ethtool-s e101-017-0 autoneg off speed 10000` command to bring up the port

Fixed issues

The following lists the fixed issues for OpenSwitch OPX release 3.0.0.

- S5148F-ON
 - 100G interface support for the S5148F-ON has been updated in this release
- Z9264F-ON
 - The Z9264F-ON has a different procedure for fanning out interfaces due to its high physical port count. The fanout procedure will be documented at a later time.
- S4248FB-ON/S4248FBL-ON
 - Performance has been improved in scaled environments with thousands of multi-pathed routes (such as 32 BGP sessions with 124,000 routes)

Installation

See the OpenSwitch OPX Installation Guide release 3.0.0 for complete information.

Upgrade

Run the following commands to obtain upgrades for OpenSwitch OPX software packages:

- `sudo apt-get update`
- `sudo apt-get dist-upgrade`
- `sudo reboot`

The list of package repositories from which updates are obtained can be found in `/etc/apt/sources.list`.

NOTE: Any packages (like sFlow or FRRouting) that are not included in Debian or the OpenSwitch OPX package repositories need to be updated manually.