

OpenSwitch OPX

2.2.0 Release Notes

This information describes the new features and known issues for the OpenSwitch OPX, release 2.2.0. For detailed information about how to install, use, and develop applications for OpenSwitch OPX, see the *OpenSwitch OPX* documentation set for your specific switch at <https://www.force10networks.com/CSPortal20/Software/Downloads.aspx>.

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

Revision history

Revision	Date	Description
A01	2017-7	Initial release
A02	2018-2	Release 2.2.0

New in this release

The following lists new features for OpenSwitch OPX release 2.2.0.

- Added support for Dell EMC Networking Z9100-ON, S4128F-ON, S4128T-ON, S4148F-ON, S4148FE-ON, and S4148T-ON switches
- Introduced support for 25G, 50G, and 100G interfaces and fanout modes
- Forward error correction (FEC) support
- Switch port profiles for the S4148F-ON, S4148FE-ON, and S4148T-ON switches: Determines the set of front panel ports to be enabled, and the supported breakout modes on those enabled ports; change the port profile on a switch to customize uplink and the availability of front panel data ports.
- IGMP snooping: Internet group management protocol (IGMP) snooping uses information in IGMP packets to generate a forwarding table that associates ports with multicast groups. Incoming multicast frames are then forwarded only to interested receivers. To optimize bandwidth use, multicast packets are addressed with multicast MAC addresses that represent a group of devices instead of one unique device.
- IPv6 enhancements:
 - Enable the generation of error messages for IPv6 packets with unreachable destinations
 - Enable IPv6 duplicate address discovery (DAD) to determine if an auto-configured IPv6 local link address is unique before assigning it to an interface
- Management virtual routing and forwarding (VRF): To segregate management protocol instances from the data plane, assign a front panel port to the management VRF and configure the port to act as a host interface.
- Explicit congestion notification (ECN) with weighted random early detection (WRED): Use WRED ECN to log network congestion, rather than dropping packets to prevent buffering resources from being consumed. Marking per-class profiles and ECN interface counters are also supported.
- Encapsulated remote port monitoring (ERPM): Copies traffic from source ports/port-channels or source VLANs, and forwards traffic using routable GRE-encapsulated packets to the destination IP address specified in the session.
- ACLs now support TCP and UDP port ranges

Hardware support

The following lists the supported hardware for OpenSwitch OPX, release 2.2.0:

- S3048-ON
- S4048-ON / S4048T-ON
- S4128F-ON / S4128T-ON
- S4148F-ON / S4148FE-ON / S4148T-ON
- S6000-ON / S6010-ON
- Z9100-ON

Restrictions

- OpenSwitch OPX is supported only on an ONIE-enabled switch. See [hardware support](#) for a list of supported Dell EMC 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 2.2.0:

- 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 2.2.0:

- IPv4 routing
 - When you change the preference values for static routes dynamically, they are not honored.
 - Workaround: Remove the old preferred route entry and add the new preferred route entry.
- IPv6 routing
 - Disabling IPv6 on an interface may result in loss of static IPv6 routes configured in that interface as next-hop.
 - Workaround: After disabling IPv6 on an interface, remove and reapply static IPv6 routes that are pointing to the interface as next-hop.

Installation

See the OpenSwitch OPX Installation Guide release 2.2.0 for complete information.