September 2023

Extreme SLX-OS 20.5.2

Release Notes

Supporting ExtremeRouting and ExtremeSwitching SLX 9740, SLX 9640, SLX 9540, SLX 9250, SLX 9150, Extreme 8720, Extreme 8520, and Extreme 8820

Part Number 9037855-00 Rev AB

Contents

Document History

Version	Summary of changes	Publication date
1.0	Initial version for 20.5.2	September 2023

Preface

Getting Help

If you require assistance, contact Extreme Networks using one of the following methods:

- Extreme Portal: Search the GTAC (Global Technical Assistance Center) knowledge base; manage support cases and service contracts; download software; and obtain product licensing, training and certifications.
- The Hub: A forum for Extreme Networks customers to connect with one another, answer questions, and share ideas and feedback. This community is monitored by Extreme Networks employees but is not intended to replace specific guidance from GTAC.
- Call GTAC: For immediate support, call (800) 998 2408 (toll-free in U.S. and Canada) or 1 (408) 579 2826. For the support phone number in your country, visit www.extremenetworks.com/support/contact.

Before contacting Extreme Networks for technical support, have the following information ready:

- Your Extreme Networks service contract number or serial numbers for all involved Extreme Networks products
- A description of the failure
- A description of any actions already taken to resolve the problem
- A description of your network environment (such as layout, cable type, other relevant environmental information)
- Network load at the time of trouble (if known)
- The device history (for example, if you have returned the device before, or if this is a recurring problem)
- Any related RMA (Return Material Authorization) numbers

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1. Go to www.extremenetworks.com/support/service-notification-form.
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3. Select the products for which you want to receive notifications.
   Note: You can change your product selections or unsubscribe at any time.
4. Select **Submit**.

Extreme Resources

Visit the Extreme website to locate related documentation for your product and additional Extreme resources.

White papers, data sheets, and the most recent versions of Extreme software and hardware manuals are available at https://www.extremenetworks.com/. Product documentation for all supported releases is available to registered users at https://www.extremenetworks.com/support/documentation/.

Document Feedback

The Information Development team at Extreme Networks has made every effort to ensure the accuracy and completeness of this document. We are always striving to improve our documentation and help you work better, so we want to hear from you. We welcome all feedback, but we especially want to know about:

- Content errors, or confusing or conflicting information
- Improvements that would help you find relevant information in the document
- Broken links or usability issues

You can provide feedback in the following ways:

- In a web browser, select the feedback icon and complete the online feedback form.
- Access the feedback form at http://www.extremenetworks.com/documentation-feedback-pdf/.
- Email us at documentation@extremenetworks.com.

Provide the publication title, part number, and as much detail as possible, including the topic heading and page number if applicable, as well as your suggestions for improvement.

Release Overview

Release SLX-OS 20.5.2 provides the following features:

- MP-BGP (Transporting IPv6 prefixes over BGP IPv4 peers)
- Fabric QoS – User-config QoS maps on J2-based platforms
- OpenSSL and Open SSH upgrades
- DHCPv6 Prefix Delegation
- IPv4 ACL over VE processing to differentiate between routed and switched traffic
- Transporting IPv6 traffic over GRE IPv4 tunnel
- MCT Improvements – HSLAgt crash scenario
- SNMP MIB based Notifications and get/getnext operation for TLS certificates installed on SLX-OS
- Flow-based mirroring (SPAN) improvements
- RAS feature - Gear box diagnostics on SLX 9740 and Extreme 8820
- RAS feature – SFF 8636 to support Tx power display for Extreme 40G optics
- RAS feature – Correcting output for “show bgp evpn detail”
- Y.1731 delay measurements on SLX 9740 and Extreme 8820
- Optics qualification

Behavior Changes

The following are the behavioral changes for SLX-OS 20.5.2

- From SLX-OS 20.5.2 and onwards, SLX-OS will not allow an user to configure both IPv4 and IPv6 neighbors for the same BGP peer group. User can attach the configured peer group either to an IPv4 neighbor or an IPv6 neighbor.
  Note:
  Before upgrade to SLX-OS 20.5.2, if the behavior change condition is not met for a BGP peer group configuration, SLX-OS upgrade will fail. User will be prompted to modify the peer group configuration as per above mentioned condition for a successful upgrade.

Software Features

The following key software features are added in the SLX-OS 20.5.2 release

Feature Name	Supported SLX Platforms	Description
Multi-protocol BGP	All	Support transporting IPv6 prefixes over IPv4 BGP connections.
Fabric QoS – User-config QoS maps	SLX 9740, Extreme 8820	Implemented ingress user-configured QoS maps

Feature Name	Supported SLX Platforms	Description
OpenSSL and OpenSSH upgrades	All	• Upgrade to OpenSSL v1.02zg • Upgrade to OpenSSH v9.1
DHCPv6 Prefix Delegation	All	SLX-OS can learn DHCPv6 prefixes from the DHCPv6 relay traffic and delegate it to the DHCPv6 clients.
IPv4 ACL over VE processing to differentiate between routed and switched traffic	All	With the new 'routed' option for an IPv4 ACL configured over VE interface, IPv4 ACL rule is applied only on the routed traffic. IPv4 ACL rule is not applied over a switched traffic even it carries an IP header.
Transporting IPv6 traffic over GRE IPv4 Tunnel	SLX 9540, SLX 9640, SLX 9740, Extreme 8820	Support transporting IPv6 packets using GRE over IPv4 networks.
MCT Improvements – HSLAgt crash scenario	Extreme 8520, 8720, 8820, SLX 9150, 9250, 9740	Improves MCT HA resiliency, in cases, when HSLAgt (primary daemon) crashes.
Flow-based mirroring (SPAN) improvements	All	Enhanced flow-based mirroring (SPAN) support on SLX-OS for device reload cases.
RAS - Gear box diagnostics	SLX 9740, Extreme 8820	Added debuggability support in software for the Gearbox component on SLX 9740 and Extreme 8820.
RAS – SFF 8636 to support Tx power display for Extreme 40G optics	All	Support Tx power display for the Extreme qualified 40G optics based on SFF 8636.
RAS – Correcting output for "show bgp evpn detail"	All	Improved the Extended Community section w.r.t to Route Target (RT) string and VxLAN encapsulation for the show command.
Y.1731 delay measurements	SLX 9740, Extreme 8820	Added support for Delay measurement (DM) and Synthetic Loss measurement (SLM) based on ITU Y.1731.

Feature Name	Supported SLX Platforms	Description
Optics qualification	Extreme 8520, 8720, 8820, SLX 9150, 9250, 9740 All All	• Qualified 10338 from Methode • Qualified 10/25 G SR – Finisar • Qualified 10/25 G SR – Hisense

CLI Commands

The following commands were added, modified, or deprecated for the 20.5.2 program

New commands for 20.5.2

- clear ipv6 dhcp relay delegated-prefixes
- debug ipv6 dhcp pd
- ipv6 dhcp relay distance
- ipv6 dhcp relay maximum-delegated-prefixes
- show ipv6 dhcp relay
- show ipv6 dhcp relay delegated-prefixes

Modified commands for 20.5.2

- address family ipv4 flowspec
- crypto cert expiry-level
- ip access-group
- profile tcam
- qos dscp-traffic-class
- qos map dscp-traffic-class
- qos trust dscp
- show qos interface ethernet
- clear ipv6 bgp flap-statistics
- neighbor activate
- neighbor additional-paths
- neighbor additional-paths advertise
- neighbor additional-paths disable
- neighbor allowas-in
- neighbor capability orf prefixlist
- neighbor default-originate
- neighbor enable-peer-as-check
- neighbor filter-list

- neighbor maximum-prefix
- neighbor prefix-list
- neighbor route-map
- neighbor route-reflector-client
- neighbor send-community
- neighbor unsuppress-map
- neighbor weight
- show bgp evpn routes type
- show ipv6 dhcp relay statistics
- show ipv6 route
- show media
- show media interface
- show ipv6 bgp neighbors
- show ipv6 bgp neighbors advertised-routes
- show ipv6 bgp neighbors flap-statistics
- show ipv6 bgp neighbors last-packet-with-error
- show ipv6 bgp neighbors received
- show ipv6 bgp neighbors received-routes
- show ipv6 bgp neighbors rib-out-routes
- show ipv6 bgp neighbors routes
- show ipv6 bgp neighbors routes-summary

Deprecated commands for 20.5.2

No commands were deprecated in this release

Hardware Support

Supported devices and software licenses

Supported devices	Description
SLX9740-40C	Extreme SLX 9740-40C Router. Base unit with 40x100GE/40GE capable QSFP28 ports, 2 unpopulated power supply slots, 6 unpopulated fan slots
SLX9740-40C-AC-F	Extreme SLX 9740-40C-AC-F Router. Base unit with 40x100GE/40GE capable QSFP28 ports, 2 AC power supplies, 6 fan modules
SLX9740-80C	Extreme SLX 9740-80C Router. Base unit with 80x100GE/40GE capable QSFP28 ports, 4 unpopulated power supply slots, 4 unpopulated fan slots
SLX9740-80C-AC-F	Extreme SLX 9740-80C-AC-F Router. Base unit with 80x100GE/40GE capable QSFP28 ports, 4AC power supplies, 4 fan modules
SLX9740-ADV-LIC-P	Advanced Feature License for MPLS, BGP-EVPN and Integrated Application Hosting for Extreme SLX 9740
SLX9150-48Y-8C	Extreme SLX 9150-48Y Switch with two empty power supply slots, six empty fan slots. Supports 48x25GE/10GE/1GE + 8x100GE/40GE.
SLX9150-48Y-8C-AC-F	Extreme SLX 9150-48Y Switch AC with Front to Back Airflow. Supports 48x25GE/10GE/1GE + 8x100GE/40GE with dual power supplies, six fans.
SLX9150-48Y-8C-AC-R	Extreme SLX 9150-48Y Switch AC with Back to Front Airflow. Supports 48x25GE/10GE/1GE + 8x100GE/40GE with dual power supplies, six fans.
SLX9150-48XT-6C	Extreme SLX 9150-48XT 10GBaseT Switch with two empty power supply slots, six empty fan slots, Supports 48x10GE/1GE + 6x100GE/40GE.
SLX9150-48XT-6C-AC-F	Extreme SLX 9150-48XT 10GBaseT Switch AC with Front to Back Airflow, Supports 48x10GE/1GE + 6x100GE/40GE with dual power supplies, six fans.
SLX9150-48XT-6C-AC-R	Extreme SLX 9150-48XT 10GBaseT Switch AC with Back to Front Airflow, Supports 48x10GE/1GE + 6x100GE/40GE with dual power supplies, six fans.
SLX9150-ADV-LIC-P	SLX 9150 Advanced Feature License for GuestVM, Analytics Path, PTP, BGP-EVPN.
SLX9250-32C	SLX 9250-32C Switch with two empty power supply slots, six empty fan slots. Supports 32x100/40GE.
SLX9250-32C-AC-F	SLX 9250-32C Switch AC with Front to Back Airflow. Supports 32x100GE/40GE with dual power supplies, six fans.
SLX9250-32C-AC-R	SLX 9250-32C Switch AC with Back to Front Airflow. Supports 32x100GE/40GE with dual power supplies, six fans.
SLX9250-ADV-LIC-P	SLX 9250 Advanced Feature License for GuestVM, Analytics Path, BGP-EVPN.
BR-SLX-9540-48S-AC-R	SLX 9540-48S Switch AC with Back to Front airflow (Non-port Side to port side airflow). Supports 48x10GE/1GE + 6x100GE/40GE. (1+1) redundant power supplies and (4+1) redundant fans included.
BR-SLX-9540-48S-AC-F	SLX 9540-48S Switch AC with Front to Back airflow (Port-side to non-port side airflow). Supports 48x10GE/1GE + 6x100GE/40GE. (1+1) redundant power supplies and (4+1) redundant fans included.
BR-SLX-9540-24S-DC-R	SLX 9540-24S Switch DC with Back to Front airflow (Non-port Side to port side airflow). Supports 24x10GE/1GE + 24x1GE ports.

Supported devices	Description
BR-SLX-9540-24S-DC-F	SLX 9540-24S Switch DC with Front to Back airflow (Port-side to non-port side airflow). Supports 24x10GE/1GE + 24x1GE ports.
BR-SLX-9540-24S-AC-R	SLX 9540-24S Switch AC with Back to Front airflow (Non-port Side to port side airflow). Supports 24x10GE/1GE + 24x1GE ports.
BR-SLX-9540-24S-AC-F	SLX 9540-24S Switch AC with Front to Back airflow (Port-side to non-port side airflow). Supports 24x10GE/1GE + 24x1GE ports.
BR-SLX-9540-48S-DC-R	SLX 9540-48S Switch DC with Back to Front airflow (Non-port Side to port side airflow). Supports 48x10GE/1GE + 6x100GE/40GE. (1+1) redundant power supplies and (4+1) redundant fans included.
BR-SLX-9540-48S-DC-F	SLX 9540-48S Switch DC with Front to Back airflow (Port-side to non-port side airflow). Supports 48x10GE/1GE + 6x100GE/40GE. (1+1) redundant power supplies and (4+1) redundant fans included.
BR-SLX-9540-24S-COD-P	Upgrade 24x1GE to 24x10GE/1GE for SLX 9540
BR-SLX-9540-ADV-LIC-P	Advanced Feature License for SLX 9540
EN-SLX-9640-24S	Extreme SLX 9640-24S Router. Supports 24x10GE/1GE + 4x100GE/40GE. (24S+4C sku no Power supplies or Fans)
EN-SLX-9640-24S-12C	Extreme SLX 9640-24S Router. Supports 24x10GE/1GE + 12x100GE/40GE. (All ports 24S+12C sku with no Power supplies or Fans)
EN-SLX-9640-24S-AC-F	Extreme SLX 9640-24S Router AC with Front to Back airflow. Supports 24x10GE/1GE + 4x100GE/40GE.(1 Power supply 6 Fans)
EN-SLX-9640-24S-12C-AC-F	Extreme SLX 9640-24S Router AC with Front to Back airflow. Supports 24x10GE/1GE + 12x100GE/40GE.(1 Power supply 6 Fans)
EN-SLX-9640-4C-POD-P	Extreme SLX 9640 Ports on Demand License for 4 ports of 100GE/40GE Uplinks
EN-SLX-9640-ADV-LIC-P	Extreme SLX 9640 Advanced Feature License
8720-32C	Extreme 8720-32C Switch with two empty power supply slots, six empty fan slots and a 4-post rack mount kit, Supports 32x100/40GE
8720-32C-AC-F	Extreme 8720-32C Switch with front to back airflow, Supports 32x100/40G with two AC power supplies, six fans and a 4-post rack mount kit
8720-32C-AC-R	Extreme 8720-32C Switch with back to front airflow, Supports 32x100/40G with dual AC power supplies, six fans and a 4-post rack mount kit
8720-32C-DC-F	Extreme 8720-32C Switch with front to back airflow, Supports 32x100/40G with dual DC power supplies, six fans and a 4-post rack mount kit
8720-32C-DC-R	Extreme 8720-32C Switch with back to front airflow, Supports 32x100/40G with dual DC power supplies, six fans and a 4-post rack mount kit
8520-48Y-8C	Extreme 8520-48Y Switch with two empty power supply slots, six empty fan slots; Ships with one 4-post rack mount kit; Supports 48x25/10/1G and 8x100/40G ports
8520-48Y-8C-AC-F	Extreme 8520-48Y Switch with front-back airflow; Ships with two AC power supplies, six fans, one 4-post rack mount kit; Supports 48x25/10/1G and 8x100/40G ports
8520-48Y-8C-AC-R	Extreme 8520-48Y Switch with back-front airflow; Ships with two AC power supplies, six fans, one 4-post rack mount kit; Supports 48x25/10/1G and 8x100/40G ports

Supported devices	Description
8520-48Y-8C-DC-F	Extreme 8520-48Y Switch with front-back airflow; Ships with two DC power supplies, six fans, one 4-post rack mount kit; Supports 48x25/10/1G and 8x100/40G ports
8520-48Y-8C-DC-R	Extreme 8520-48Y Switch with back-front airflow; Ships with two DC power supplies, six fans, one 4-post rack mount kit; Supports 48x25/10/1G and 8x100/40G ports
8520-48XT-6C	Extreme 8520-48XT Switch with two empty power supply slots, six empty fan slots; Ships with one 4-post rack mount kit; Supports 48x10/1G copper ports and 6x100/40G fiber ports
8520-48XT-6C-AC-F	Extreme 8520-48XT Switch with front-back airflow; Ships with two AC power supplies, six fans, one 4-post rack mount kit; Supports 48x10/1G copper ports and 6x100/40G fiber ports
8520-48XT-6C-AC-R	Extreme 8520-48XT Switch with back-front airflow; Ships with two AC power supplies, six fans, one 4-post rack mount kit; Supports 48x10/1G copper ports and 6x100/40G fiber ports
8520-48XT-6C-DC-F	Extreme 8520-48XT Switch with front-back airflow; Ships with two DC power supplies, six fans, one 4-post rack mount kit; Supports 48x10/1G copper ports and 6x100/40G fiber ports
8520-48XT-6C-DC-R	Extreme 8520-48XT Switch with back-front airflow; Ships with two DC power supplies, six fans, one 4-post rack mount kit; Supports 48x10/1G copper ports and 6x100/40G fiber ports
8000-PRMR-LIC-P	Extreme 8000 Premier Feature License (includes Integrated Application Hosting)
8820-40C	Extreme 8820-40C base unit with 40x100GE/40GE QSFP28 ports with 2 unpopulated power supply slots, 6 unpopulated fan slots and a 4-post rack mount kit
8820-40C-AC-F	Extreme 8820-40C with Front-Back airflow. Base unit with 40x100GE/40GE QSFP28 ports with 2 AC power supplies, 6 fan modules and a 4-post rack mount kit
8820-40C-AC-R	Extreme 8820-40C with Back-Front airflow. Base unit with 40x100GE/40GE QSFP28 ports with 2 AC power supplies, 6 fan modules and a 4-post rack mount kit
8820-40C-DC-F	Extreme 8820-40C with Front-Back airflow. Base unit with 40x100GE/40GE QSFP28 ports with 2 DC power supplies, 6 fan modules and a 4-post rack mount kit
8820-40C-DC-R	Extreme 8820-40C with Back-Front airflow. Base unit with 40x100GE/40GE QSFP28 ports with 2 DC power supplies, 6 fan modules and a 4-post rack mount kit
8820-80C	Extreme 8820-80C. Base unit with 80x100GE/40GE QSFP28 ports with 4 unpopulated power supply slots, 4 unpopulated fan slots and a 4-post rack mount kit
8820-80C-AC-F	Extreme 8820-80C with Front-Back airflow. Base unit with 80x100GE/40GE QSFP28 ports with 4 AC power supplies, 4 fan modules and a 4-post rack mount kit

Supported devices	Description
8820-80C-AC-R	Extreme 8820-80C with Back-Front airflow. Base unit with 80x100GE/40GE QSFP28 ports with 4 AC power supplies, 4 fan modules and a 4-post rack mount kit
8820-80C-DC-F	Extreme 8820-80C with Front-Back airflow. Base unit with 80x100GE/40GE QSFP28 ports with 4 DC power supplies, 4 fan modules and a 4-post rack mount kit
8820-80C-DC-R	Extreme 8820-80C with Back-Front airflow. Base unit with 80x100GE/40GE QSFP28 ports with 4 DC power supplies, 4 fan modules and a 4-post rack mount kit

Supported power supplies, fans, and rack mount kits

XN-ACPWR-1600W-F	SLX 9740 Fixed AC 1600W Power Supply Front to Back. Power cords not included Extreme 8820 Fixed AC 1600W Power Supply Front to Back. Power cords not included
XN-ACPWR-1600W-R	SLX 9740 Fixed AC 1600W Power Supply Back to Front. Power cords not included. Extreme 8820 Fixed AC 1600W Power Supply Back to Front. Power cords not included
XN-DCPWR-1600W-F	SLX 9740 Fixed DC 1600W Power Supply Front to Back. Power cords not included Extreme 8820 Fixed DC 1600W Power Supply Front to Back. Power cords not included
XN-DCPWR-1600W-R	Extreme 8820 Fixed DC 1600W Power Supply Back to Front. Power cords not included.
XN-FAN-003-F	SLX 9740 FAN Front to Back airflow for SLX9740-40C Extreme 8820 FAN Front to Back airflow for 8820-40C
XN-FAN-003-R	SLX 9740 FAN Back to Front airflow for SLX9740-40C Extreme 8820 FAN Back to Front airflow for 8820-40C
XN-FAN-004-F	SLX 9740 FAN Front to Back airflow for SLX9740-80C Extreme 8820 FAN Front to Back airflow for 8820-80C
XN-FAN-004-R	SLX 9740 FAN Back to Front airflow for SLX9740-80C Extreme 8820 FAN Back to Front airflow for 8820-80C
XN-4P-RKMT299	2-Post Rail Kit for SLX 9740-40C
XN-2P-RKMT300	2-Post Rail Kit for SLX 9740-80C
XN-4P-RKMT301	4-Post Rail Kit for SLX 9740-80C
XN-4P-RKMT302	4-Post Rail Kit for SLX 9740-40C
XN-ACPWR-750W-F	AC 750W PSU, Front to Back Airflow supported on VSP 7400, SLX 9150, SLX 9250, X695, Extreme 8720, Extreme 8520
XN-ACPWR-750W-R	AC 750W PSU, Back to Front Airflow supported on VSP 7400, SLX 9150, SLX 9250, X695, Extreme 8720, Extreme 8520
XN-DCPWR-750W-F	DC 750W PSU, Front to Back Airflow supported on VSP 7400, SLX 9150, SLX 9250, X695, Extreme 8720, Extreme 8520
XN-DCPWR-750W-R	DC 750W PSU, Back to Front Airflow supported on VSP 7400, SLX 9150, SLX 9250, X695, Extreme 8720, Extreme 8520
XN-FAN-001-F	Front to back Fan for use in VSP 7400, SLX 9150, SLX 9250, X695, Extreme 8720, Extreme 8520
XN-FAN-001-R	Back to Front Fan for use in VSP 7400, SLX 9150, SLX 9250, X695, Extreme 8720, Extreme 8520
XN-4P-RKMT298	Four post rack mount rail kit supported on VSP 7400, SLX 9150, SLX 9250, X695, Extreme 8720, Extreme 8520
XN-2P-RKMT299	Two post rack mount rail kit supported on VSP 7400, SLX 9150, SLX 9250, X695, Extreme 8720, Extreme 8520, Extreme 8820
XN-2P-RKMT300	2-Post Rail Kit for Extreme 8820-80C

XN-4P-RKMT301	4-Post Rail Kit for Extreme 8820-80C
XN-4P-RKMT302	4-Post Rail Kit for Extreme 8820-40C

Supported Optics and Cables

For a complete list of all supported optics, see **Extreme Optics** at https://optics.extremenetworks.com/.

Supported FEC modes

SLX 9250 and Extreme 8720

Port Type	Media Type	Default FEC Mode	Supported FEC Modes
100G	Passive DAC	RS-FEC	RS-FEC Disabled
100G	SR4	RS-FEC	RS-FEC Disabled
100G	LR4	Disabled	RS-FEC Disabled
25G	Breakout DAC SR	Auto-Neg	RS-FEC FC-FEC Auto-Neg Disabled
25G	Breakout SR4	FC-FEC	RS-FEC FC-FEC Disabled
25G	Breakout LR	RS-FEC	RS-FEC FC-FEC Disabled

SLX 9740 and Extreme 8820

Port Type	Media Type	Default FEC Mode	Supported FEC Modes
100G	Passive DAC	RS-FEC	RS-FEC Disabled
100G	SR4	RS-FEC	RS-FEC Disabled
100G	LR4	Disabled	RS-FEC Disabled
25G	Breakout DAC SR	FC-FEC	FC-FEC RS-FEC Disabled
25G	Breakout SR4	FC-FEC	FC-FEC RS-FEC Disabled
25G	Breakout LR	RS-FEC	RS-FEC FC-FEC Disabled

SLX 9150 and Extreme 8520

Port Type	Media Type	Default FEC Mode	Supported FEC Modes
100G	Passive DAC	RS-FEC	RS-FEC Disabled
100G	SR4	RS-FEC	RS-FEC Disabled
100G	LR4	Disabled	RS-FEC Disabled
25G(Native)	DAC	Auto-Neg	RS-FEC FC-FEC Auto-Neg Disabled
25G(Native)	SFP	FC-FEC	RS-FEC FC-FEC Disabled
25G(Native)	LR	RS-FEC	RS-FEC FC-FEC Disabled

SLX 9540 and SLX 9640

Port Type	Media Type	Default FEC Mode	Supported FEC Modes
100G	Passive DAC	RS-FEC	RS-FEC Disabled
100G	SR4	RS-FEC	RS-FEC Disabled
100G	LR4	Disabled	RS-FEC Disabled
25G	Breakout LR	RS-FEC	RS-FEC FC-FEC Disabled

Software Download and Upgrade

For more information about the various methods of upgrading to SLX-OS 20.5.2 see the *Extreme SLX-OS Software Upgrade Guide.*

Image files

Download the following images from www.extremenetworks.com.

Image file name	Description
SLX-OS_20.5.2.tar.gz	SLX-OS 20.5.2 software
SLX-OS_20.5.2_mibs.tar.gz	SLX-OS 20.5.2 MIBS
SLX-OS_20.5.2.md5	SLX-OS 20.5.2 md5 checksum
SLX-OS_20.5.2-digests.tar.gz	SLX-OS 20.5.2 sha checksum
SLX-OS_20.5.2-releasenotes.pdf	Release Notes

Notes:

Upgrade to 20.3.x from earlier releases requires “fullinstall” due to change in glibc for all platforms.

Extreme 8820

To / From	20.4.3/a/b	20.5.1/a	20.5.2
20.4.3 (Factory Image)	For upgrade: normal firmware download / coldboot		
20.5.1/a			
20.5.2			

Extreme 8720

To / From	20.3.2/a-h	20.3.4/a-c	20.4.1x, 20.4.2x	20.4.3/a/b	20.5.1/a	20.5.2
20.3.2/a-h	For upgrade: normal firmware download / coldboot For downgrade: full install					
20.3.4/a-c	For upgrade and downgrade: normal firmware download / coldboot					
20.4.1x, 20.4.2x						
20.4.3/a/b						
20.5.1/a						
20.5.2						

Extreme 8520

To / From	20.3.3	20.3.4/a-c	20.4.1x, 20.4.2x	20.4.3/a/b	20.5.1/a	20.5.2
20.3.3	For upgrade and downgrade: normal firmware download / coldboot					
20.3.4/a-c						
20.4.1x, 20.4.2x						
20.4.3/a/b						
20.5.1/a						
20.5.2						

Note:

For upgrade and downgrade procedure on SLX platforms, involving releases earlier to SLX-OS 20.3.2, full install is recommended.

SLX 9740

To / From	20.3.1 20.3.2/a-h	20.3.4/a-c	20.4.1x, 20.4.2x	20.4.3/a/b	20.5.1/a	20.5.2
20.3.1 20.3.2/a-h	For upgrade: normal firmware download / coldboot For downgrade: full install					
20.3.4/a-c	For upgrade and downgrade: normal firmware download / coldboot					
20.4.1x, 20.4.2x						
20.4.3/a/b						
20.5.1/a						
20.5.2						

Note:

For SLX 9740, downgrade to any 20.2.2x version needs to be done in two steps, with an intermediate step for downgrading to 20.2.2c and then to 20.2.x from 20.2.3x or higher.
This restriction is not applicable for upgrade/downgrade between 20.2.3x and 20.3.x releases.

SLX 9540 and SLX 9640

To / From	20.3.1 20.3.2/a-h	20.3.4/a-c	20.4.1x, 20.4.2x	20.4.3/a/b	20.5.1/a	20.5.2
20.3.1 20.3.2/a-h	For upgrade: normal firmware download / coldboot For downgrade: full install					
20.3.4/a-c 20.4.1x, 20.4.2x 20.4.3/a/b 20.5.1/a 20.5.2	For upgrade and downgrade: normal firmware download / coldboot					

Notes:

- Upgrade to 20.3.x from earlier releases requires “fullinstall” due to change in glibc.
- Downgrading from 20.3.x/20.2.2x/20.2.3x to 20.1.1 requires ‘fullinstall’ option for all platforms due to a change in glibc
- Downgrading from 20.3.x/20.2.2x/20.2.3x to 20.1.1 may not require a 2-step procedure.

SLX 9150 and SLX 9250

To / From	20.3.2/a-h	20.3.4/a-c	20.4.1x, 20.4.2x	20.4.3/a/b	20.5.1/a	20.5.2
20.3.1 20.3.2/a-h	For upgrade: normal firmware download / coldboot For downgrade: full install					
20.3.4/a-c	For upgrade and downgrade: normal firmware download / coldboot					
20.4.1x, 20.4.2x						
20.4.3/a/b						
20.5.1/a						
20.5.2						

Upgrade and Downgrade considerations for Threshold Monitor configuration:

Downgrade Considerations:

1. If configured value for Cpu "limit" exceeds valid range in older release [0-80] then downgrade will be blocked with error. User can reconfigure Cpu “limit” in the range [0-80] and downgrade.

2. If configured value for Memory "high-limit" exceeds valid range in older release [0-80] or if it is less than the default value of "limit" in older release [60], then downgrade will be blocked with error. User can reconfigure Memory “high-limit” in the range [60-80] and downgrade.

3. If the startup file has “actions” configured as “snmp” or “all”, then config replay process triggered in firmware full-install downgrade, will lead all the corresponding threshold-monitor CLI parameters, such as poll, retry, to reset to respective default values.

Upgrade Considerations:

1. If the startup file has “Memory limit and /or low-limit” configured, then config replay process triggered in firmware full-install downgrade, will lead all the corresponding threshold-monitor CLI parameters, such as poll, retry, to reset to respective default values.

SLX TPVM Support Matrix

SLX Build	SLX 9150/9250	Extreme 8520	Extreme 8720
20.4.2/a-b	TPVM 4.1.1 and later	TPVM 4.4.0 and later	TPVM 4.2.2 and later
20.4.3/a	TPVM 4.2.x and later	TPVM 4.4.0 and later	TPVM 4.2.2 and later
20.5.1/a	TPVM 4.2.5 and later	TPVM 4.4.0 and later	TPVM 4.2.5 and later
20.5.2	TPVM 4.4.0 and later	TPVM 4.4.0 and later	TPVM 4.4.0 and later

Upgrading the TPVM without configuration persistence (Legacy upgrade method)

Upgrading TPVM from 4.0.x or 4.1.x to 4.2.x, 4.3.x, 4.4.x, 4.5.x

Consider the following when upgrading TPVM from 20.1.2x , 20.2.2/x to 20.2.3x, 20.3.1 to 20.3.2x, 20.3.3, 20.3.4x, 20.4.x, 20.5.x

- SLX-OS 20.3.x, 20.2.3/x has TPVM 4.2.x. SLX-OS 20.1.2x variants have TPVM 4.0.x, which is based on Ubuntu18.
- To upgrade from TPVM 4.0 to latest, do the following:
    - Upgrade to SLX-OS 20.3.x, 20.2.3/x, 20.4.x while the existing TPVM installation continues to run
    - Remove the existing TPVM using the **tpvm stop** and **tpvm uninstall** commands.
    - Copy the new *tpvm-4.x.x-0.amd64.deb* to */tftpboot/SWBD2900* on the SLX device.
    - Install TPVM 4.x.x using the **tpvm install** or **tpvm deploy** command.

        - Note that any additional TPVM disks, including vdb (implicitly created by TPVM 4.0.x or 4.1.x), are preserved with data during the previous steps.
    - If you need to remove the disks and start clean, then use the **tpvm uninstall force** command in place of **tpvm uninstall** in these steps. Alternatively, you can use **tpvm disk remove name <disk name>** to remove each additional disk manually. For example, `tpvm disk remove name vdb`.
- To perform patch upgrade from TPVM 4.5.x to latest, do the following:
    - Upgrade to SLX-OS 20.5.x while the existing TPVM 4.5.x installation continues to run
    - Copy the new *tpvm_inc_upg-4.5.X-X.amd64.deb* to */tftpboot/SWBD2900* directory on the SLX device.
    - Install latest TPVM 4.5.x using **tpvm upgrade incremental** command

Notes:

- TPVM 4.5.x can be incrementally upgraded from TPVM 4.4.0 and beyond.
- TPVM 4.5.x supports full install upgrade/downgrade from TPVM 4.4.0.

Consider the following when you upgrade TPVM from releases earlier than SLX-OS 20.2.1 to SLX-OS 20.2.x:

- During startup, the latest TPVM creates an additional TPVM disk (named vdb) and creates an ext4 partition inside it (named vdb1).
- This additional disk partition is mounted at `/apps` inside TPVM.
- The disk uses all the free space available and reserved for TPVM (platform specific) TPVM disk quota.
- If you are running an older TPVM and have the additional TPVM disks already created, it is recommended and as a best practice to make a backup and then delete the old disks. Use the **tpvm disk remove name <disk name>** command to remove the disk, which requires TPVM to be started if not already running.
- Uninstall the older TPVM using the **tpvm stop** and **tpvm uninstall** command.
- Install the new TPVM package using the **tpvm install** or **tvpm deploy** command.

Alternatively, after SLX has been upgraded, you can use one command, **tpvm uninstall force**, to uninstall the TPVM and delete all the disks in the TPVM disk pool.

After tpvm uninstall force, it is recommended to perform “no deploy” from tpvm config.

Important: The **tpvm uninstall force** process is destructive and irreversible, causing all TPVM data to be lost. The process works only if the TPVM is installed on the system.

Entire TPVM Data is automatically backed up in SLX while doing “**tpvm stop**” and restored during the next “**tpvm start**”. However, all the TPVM partitions data will be preserved. The data is preserved during “tpvm stop, uninstall” & “tpvm install”. User installed applications in TPVM are not preserved. During TPVM upgrade, it is advised to take EFA data backup from TPVM using “**efa system backup**” and transfer the backup file outside TPVM to be completely safe. EFA release note document has a section for TPVM upgrade scenario and entire steps are mentioned in that document.

"**When EFA is installed on TPVM, "tpvm stop" followed by "uninstall" or "no deploy" tpvm config command, automatically takes only EFA database backup and not a backup of EFA installation."**

Notes:

Security updates are added to the TPVM image and also to the separate Debian file used for incremental TPVM update. Main TPVM image size is ~2.0 GB and the TPVM incremental update Debian file size is ~0.5 GB. You must have at least 1GB of free space on the switch before proceeding with the `tpvm upgrade incremental` command. The latest TPVM 4.5.13 has security updates till June 21st, 2023.

Ubuntu Linux distribution on TPVM is upgraded to 20.04 LTS from TPVM version 4.6.0 onwards.
As Ubuntu Linux distribution on TPVM is upgraded to 20.04 LTS incremental upgrade is not supported, upgrading TPVM from 4.5.x to 4.6.x needs a full upgrade.
Please refer to the respective TPVM 4.6.x Release notes for more information
The latest TPVM 4.6.1 has security updates till 30th June, 2023.
Main TPVM image size of 4.6.1 is ~2.2 GB and the TPVM incremental update Debian file size is ~0.7 GB.

VDB disk size for EFA has changed to 40 GB to accommodate storage for snapshot and the remaining space is considered as reserved space, for the new TPVM installation.

Upgrading the TPVM with configuration persistence – Recommended method

Consider the following when upgrading TPVM from 20.1.2x, 20.2.2/x, 20.3.x to 20.3.2x, 20.3.3, 20.3.4x, 20.4.x

1. SLX-OS old version with tpvm instance installed/deployed and few related config may be set.
2. SLX-OS upgrade done vide `firmware download` CLI command.
3. Across SLX-OS reboots, old TPVM too shall reboot if auto-boot config was there, else shall be there in installed state.
    - **a.** tpvm stop
    - **b.** tpvm uninstall
        - **i.** (or) tpvm uninstall force – if you plan to delete disk vdb (i.e. the TPVM /apps partition).
        - **ii.** Note:
            1. New mode like old mode, create disk vdb (/apps) by default upon first install/deploy or reuse previously existing partition.
            2. Currently the new mode does not support new disk creation. The **tpvm disk add** command can be used.
4. As simple example for new mode of deploying TPVM:
    a. Copy new TPVM debian Image under /tftpboot/SWBD2900. Only one file should be there and no subfolder should be present/created within this folder.
    b. Deploy TPVM in Config Mode:

```
SLX # config terminal

SLX (config)# tpvm TPVM

SLX (config-tpvm-TPVM) # deploy
SLX (config-tpvm-TPVM) # end
```

Above will install and start any TPVM image kept under /tftpboot/SWBD2900.

c. Deploy TPVM with some configuration and later update any runtime configuration:

```
SLX # config terminal

SLX (config)# tpvm TPVM

SLX (config-tpvm-TPVM) # password newpassword
SLX (config-tpvm-TPVM) # interface management ip 10.25.24.21/24
SLX (config-tpvm-TPVM) # auto-boot
SLX (config-tpvm-TPVM) # hostname newhostname
SLX (config-tpvm-TPVM) # timezone Europe/Stockholm
SLX (config-tpvm-TPVM) # deploy
SLX (config-tpvm-TPVM) # end

SLX # config terminal

SLX (config)# tpvm TPVM

SLX (config-tpvm-TPVM) # hostname oldhostname
SLX (config-tpvm-TPVM) # no timezone

SLX (config-tpvm-TPVM) # exit
```

5. Note:
   a. Now, say, if the **tpvm config hostname xyz** command is used. It will still work and apply on TPVM instance. But this configuration shall not be persisted in SLX Database and will become inconsistent. Same is true for any other configuration done in old way.
   b. As in above example, password, management configuration should always be set before deploy. If required later, refer User Guide and use tpvm stop, start for such update/maintenance reason.
   c. If **tpvm unstall force** command is used, then you will need to perform a **no deploy** and **deploy** in the new mode.

For more information on configuring TPVM Configuration Persistence, refer the 'Management Configuration Guide' for this version.

TPVM Migration

Upgrading the SLXOS to 20.3.2x, 20.3.3, 20.3.4x, 20.4.x, 20.5.x results in the creation of TPVM entries in SLX running-config implicitly (This happens when upgrading TPVM from SLXOS 20.1.2x, SLXOS 20.2.2/x, SLXOS 20.3.x to SLXOS 20.3.2x, 20.3.3, 20.3.4x)

Consider the following when upgrading TPVM from SLXOS 20.1.2x, SLXOS 20.2.2/x, SLXOS 20.3.x to SLXOS 20.3.2x, 20.3.3, 20.3.4x, 20.4.x, 20.5.x

a. SLX-OS old version with tpvm instance installed/deployed and few related config may be set in legacy exec CLI method
b. SLX-OS upgrade done with "`firmware download`" CLI command.
c. Across SLX-OS reboot, TPVM entries are created in SLX running-config implicitly as part of the TPVM migration feature

d. Check the configuration are persisted in TPVM using the CLI "`show running configuration tpvm`"
e. For TPVM upgrade to the latest version use command "`tpvm upgrade` … "
f. For TPVM upgrade incremental to the latest patch use command " `tpvm upgrade incremental` …"

Limitations and Restrictions

Copy flash to startup and reload with TPVM

setNTPServer and setLDAPServer statuses are reported as failed in the output of the `show tpvm status-history`. After reload, TPVM is expected to be running when the above configurations are re-applied. When the TPVM is not running and the NTP and LDAP configurations are applied, these errors are seen. This is a limitation as reapplying NTP and LDAP configurations are not supported.

You need to have minimum 1GB free space on TPVM when you try to perform the security patch upgrade using the command `tpvm upgrade incremental …`

TPVM upgrade incremental command and file support is available only from 4.5 if we try to perform the incremental upgrade from 4.4.0 to latest, the upgrade fails and ask to perform the tpvm upgrade.

TPVM upgrade incremental command will not be supported when you try TPVM deploy in config mode and TPVM upgrade incremental command will not support with snapshot option.

Do not use the **tpvm upgrade incremental** command to upgrade the patches with *tpvm-4.X.X-X.amd64.deb*. Use the *tpvm_inc_upg-4.X.X-X.amd64.deb* image file to perform incremental upgrades.

Similarly, do not use the *tpvm_inc_upg-4.X.X-X.amd64.deb* image file to perform full upgrade. Do not use this file to perform **tpvm deploy** in *config mode* and *option*.

TPVM Migration

The following table lists the various TPVM configurations and their migration status.

Configuration	Migration State	Notes
tpvm auto-boot	Migrated	
tpvm disk	Not Migrated	Disk configuration is not supported in the configuration mode, and therefore, not migrated.
tpvm password	Migrated	Only the old password is migrated. This is due to the password being encrypted and stored and it is not possible to know if the password was changed during the migration.
tpvm config ntp	Migrated	
tpvm config dns	Migrated	

Configuration	Migration State	Notes
tpvm config ldap	Migrated	Secure LDAP require certificates. It is assumed that certificates are already downloaded and installed. Certificates are not validated during this migration. A notification will be sent to the user to reconfigure LDAP certificate settings.
tpvm config hostname	Migrated	
tpvm config timezone	Migrated	
tpvm deploy <interface> allow-pwless	Not Migrated	This is the new default configuration and is not migrated.
tpvm deploy mgmt [dhcp | static]	Migrated	
tpvm deploy insight	Not Migrated	Insight interface configuration is not supported when configuring using the Privilege Execution Mode commands.
tpvm config ldap ca-cert	Not Migrated	Configuring the TPVM LDAP ca certificate
tpvm config trusted-peer	Not Migrated	All trusted-peer configurations are not migrated.

Additional information on TPVM Commands

Following list of TPVM commands under exec mode may not be supported (Not recommended to use from 4.2.x and later) in the future releases. The equivalent commands will continue to be available under config mode. Please refer to latest CLI documentation.

- tpvm config dns
- tpvm config hostname
- tpvm config ldap
- tpvm config ntp
- tpvm config timezone
- tpvm config trusted-peer
- tpvm auto-boot
- tpvm deploy
- tpvm password

Port macro restrictions on breakout port configuration on SLX 9740

A port macro (PM) is a port group. Each PM has 4 ports, which are contiguous. PM0 has ports 0/1-0/4, PM1 has ports 0/5-0/8, PM2 has ports 0/9-0/12, and so on.

There are 9 PMs in the SLX 9740-40C and 18 PMs in the SLX 9740-80C. Only the odd ports can be split to 4x10G or 4x25G using the breakout cables: 0/1, 0/3, 0/9, 0/11, 0/13, 0/15, 0/17, 0/19, 0/21, 0/23, 0/25, 0/27, 0/29, 0/31, 0/33, 0/35, 0/37, 0/39, 0/41, 0/43, 0/49, 0/51, 0/53, 0/55, 0/57, 0/59, 0/61, 0/63, 0/65, 0/67, 0/69, 0/71, 0/73, 0/75, 0/77, and 0/79. Breaking out these ports using the breakout cables results in 72 interfaces for the SLX 9740-40 and 144 interfaces for the SLX 9740-80C.

- Ports 5-8 and 45-48 cannot be broken up and are supported only in 100G.
- For any PM, 40G and 10G ports cannot coexist with 25G ports. The following configurations are not supported:

PM Configuration	Examples
If any port is configured as 40G or 4x10G breakout, no 4x25G breakout is allowed unless the 40G ports will be removed as part of the breakout operation.	• If 0/3 or 0/4 is 40G, you cannot configure 0/1 as 4x25G breakout. • If 0/1 is 4x10G breakout, you cannot configure 0/3 as 4x25G breakout. • If 0/3 is 4x10G breakout, you cannot configure 0/1 as 4x25G breakout. • If 0/1 or 0/2 is 40G, you can configure 0/1 as 4x25G breakout because 0/1 and 0/2 will be removed. • If 0/3 or 0/4 is 40G, you can configure 0/3 as 4x25G breakout because 0/3 and 0/4 will be removed.
If 4x25G breakout is configured, no 40G or 4x10G.	• If 0/1 is configured as 4x25G breakout, you cannot configure 0/3 or 0/4 as 40G. • If 0/1 is configured as 4x25G breakout, you cannot configure 0/3 as 4x10G breakout. • If 0/3 is configured as 4x25G breakout, you cannot configure 0/1 or 0/2 as 40G. • If 0/3 is configured as 4x25G breakout, you cannot configure 0/1 as 4x10G breakout.

QoS

- PCP remarking is not supported for SLX 9740 and Extreme 8820.
- Egress rate limiting in a Bridge Domain configuration is not supported for SLX 9740 and Extreme 8820.
- DSCP-COS map is not supported for SLX 9740 and Extreme 8820.

Others

- sflow sampling does not work for VLL when BUM rate limiting is applied on interface in SLX 9740
- sflow sample traffic to CPU is rate limited. You can use the **qos cpu slot** command to change the rate.
- When Resilient Hashing CLI is enabled or disabled, or the *max-path* value is changed, it may cause **BFD sessions** in **related VRFs** to go down. However, **BFD sessions in unrelated VRFs will not be affected.**
- Resilient Hashing feature is supported only on SLX 9150, SLX 9250, SLX 9740, Extreme 8720 and Extreme 8520. Other platforms are not supported.
- Resilient Hashing supports 32K flowset entries for Extreme 8720 and Extreme 8520.

Open Config Telemetry Support

- User authentication not supported.
- gNMI calls through inband interfaces not supported.
- Usage of wild cards is not supported.
- gNMI SET is not supported.
- gNMI ON CHANGE subscription is not supported.

SNMP

- Not all counters related to UDP, and TCP MIBs are supported.
- Configuring an in-band port into a Management VRF requires SNMP agent reload.

Maximum Logical Interfaces or LIFs scale

Maximum Logical Interface (LIF) (Port-VLAN/Port-Bridge Domain (BD)) associations supported on SLX 9150, SLX 9250, Extreme 8520, Extreme 8720 is 14200. Since VLAN and BD resources share the same hardware table memory space, the max scale of one has a trade-off with the scale of the other. That is, for example, the maximum Port-BD associations cannot be scaled to 14200 when the combined scale of VLAN and BDs exceeds 8096.

IPv6 Manageability support on TPVM

- The TPVM management interface can be configured with a single IPv6 address. You can configure an IPv4 address in addition to the IPv6 address. Configuring IPv4 address is optional.
- tpvm stop and tpvm start commands must be issued to configure the TPVM management interface's IPv4 and IPv6 address.

Removal of DF towards IP Fabric (Local Bias support for LVTEP)

- Single-homed LVTEP client (spine uplink DOWN in one of the MCT nodes) is not supported
- Need to have backup routing over ICL to reach the spines in case of uplink failure

ICMP and ICMPv6 redirect

Enable/disable ICMP and ICMPv6 redirect are only available on SLX 9540 and SLX 9640. On these platforms, these are only supported on physical ports.

Transporting IPv6 traffic over GRE IPv4 Tunnel

- If GRE feature is enabled, IPv6 ACL filters to drop OSPFv3 packets will not work for SLX 9740 and Extreme 8820 platforms.
- Multicast traffic is not supported over IPv6 GRE overlay. Multicast packets will be dropped.
- IPv6 ACL is not supported on GRE tunnel.
- IPv4 and IPv6 control packets over the GRE Tunnel are not accounted in the GRE tunnel statistics.
- DSCP value from the inner IPv6 packet is not copied to outer GRE header on SLX 9540 and SLX 9640 platforms.

Flow Based Mirroring

(Applicable to SLX 9150, SLX 9250, Extreme 8720 and Extreme 8520 platforms)

- Flow based ingress mirroring does not support port-channel port as a mirroring source port.

- Flow based ingress mirroring supports VLAN as a mirroring source port, but VLAN range is not supported.

Y.1731

- Up MEP CFM does not work on breakout ports (:2, :3, :4) of the ports 41-80 on SLX 9740-80C and Extreme 8820-80C devices.
- Up MEP Delay Measurement (DM) does not work on ports 41-80 of SLX 9740-80C and Extreme 8820-80C devices.

Open Defects

The following software defects are open in SLX-OS 20.5.2 as of September 2023:

Parent Defect ID:	SLXOS-52746	**Issue ID:**	SLXOS-53722
Severity:	S3 - Moderate		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.1a
Technology Group:	Monitoring	**Technology:**	sFlow
Symptom:	S-flow will not work for Virtual leased lines interface		
Condition:	When Storm control is applied on Virtual leased lines interface		

Parent Defect ID:	SLXOS-55266	**Issue ID:**	SLXOS-55266
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2
Technology Group:	-	**Technology:**	-
Symptom:	On SLX 9740, ARP is not resolved and Source mac is not learned when the incoming IP packets are Priority Tagged (Vlan-0 with PCP bit set).		
Condition:	The connected device to the switch is configured to send Priority tagged packets on an untagged port. The source MACs are not learnt from IP packets on the switch.		
Workaround:	Use DSCP instead of using Priority tagging for QoS.		

Parent Defect ID:	SLXOS-56740	**Issue ID:**	SLXOS-57454
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol
Symptom:	Convergence times > 500 msec are seen for South - North traffic when a port from Border Leaf to L3 gateway is shut		
Condition:	This is a test for convergence numbers. The port between a Border Leaf and an L3 gateway is shut which forces the BL to reprogram the next hop for the South - North traffic to go over the ICL. The convergence times vary and there are occasional spikes between 800 to 1000 msec.		

Parent Defect ID:	SLXOS-58198	**Issue ID:**	SLXOS-58198
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3c
Technology Group:	Other	**Technology:**	Other
Symptom:	ICL interface is not coming up.		
Condition:	After the BGP process is killed.		

Parent Defect ID:	SLXOS-60302	**Issue ID:**	SLXOS-60754
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2a

Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	Static Routing (IPv4)
Symptom:	Shutting down the uplink port channel from the border leaf to the L3 gateway leads to traffic convergence of nearly 1 second		
Condition:	SLX-8720 is used as the border leaf pair and SLX-9640 as L3 gateway. There are 32 VRFs configured and there are IPv4 and IPv6 routes. There is a port-channel between the BL nodes and the gateway. The port-channel is shut at a border leaf node and the traffic is redirected from the border leaf node to its peer along the ICL. The convergence times for this are found to be more than expected. With static routes, the convergence times are in the order of 1 second. With only BGP routes and PIC enabled, it was upto around 730 msec.		

Parent Defect ID:	SLXOS-61347	**Issue ID:**	SLXOS-61598
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2c
Technology Group:	Layer 2 Switching	**Technology:**	MCT - Multi-Chassis Trunking
Symptom:	In Multi-homed environment, shutdown of an LACP ES Port-channel may cause traffic flooding to other ES interfaces if the client/host device is not able to detect link flap and continue to send the traffic. Whenever LACP port-channel is shut, member ports will be disaggregated and laser will be down for few msec(around 100ms) to allow peer device to detect link event. After that link comes up and member port will be transitioned to disaggregated individual port. Some old devices may not be able to detect link flap and continue to send traffic for some more time till LACP timeout.		
Condition:	Some old hosts may not be able to detect link flap when the link goes down for short period of time. SLX 9150/9250 keep the link down for 100msec before bring up the link as lacp individual. If the dual homed host is not able to detect the link flap on LACP ESI shut, the host continues to send the traffic till LACP timeout. SLX device may flood the traffic (in vlan) during that period.		
Workaround:	Shutting the individual member ports along with ES port-channel avoids flooding in this scenario.		
Recovery:	This situation will be recovered automatically after LACP timeout. Client device detects LACP timeout after 3sec (in case of short lacp interval), and stops traffic.		

Parent Defect ID:	SLXOS-62671	**Issue ID:**	SLXOS-62995
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2

Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4+ - IPv6 Border Gateway Protocol
Symptom:	Latency of around 250ms to 1second is observed on SLX device.		
Condition:	SLX node has experienced the CPU congestion		

Parent Defect ID:	SLXOS-64409	**Issue ID:**	SLXOS-64606
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.4a
Technology Group:	Management	**Technology:**	CLI - Command Line Interface
Symptom:	TPVM configuration is lost when the device reloads with default configuration during firmware update.		
Condition:	Issue happens when "default-config" option is provided in "firmware download" command.		
Workaround:	Execute following commands - "copy default-config startup-config" and then "firmware download" command without "default-config" option.		

Parent Defect ID:	SLXOS-65249	**Issue ID:**	SLXOS-65249
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.1
Technology Group:	-	**Technology:**	-
Symptom:	In SLX 9740, Traffic Convergence takes ~3 seconds.		
Condition:	Nexthop change takes place in ECMP prefixes.		

Parent Defect ID:	SLXOS-66144	**Issue ID:**	SLXOS-66144
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.1
Technology Group:	-	**Technology:**	-
Symptom:	Traffic takes more than 900 msec in the N-S direction when a port channel between the Gateway and Border Leaf fails. Minimum link is configured over this port channel and the trigger is the shutdown of one interface belonging to the port channel.		
Condition:	Minimum-link is configured between border leaf and gateway. When a port channel member between them is shutdown in the BL side, the PO is expected to fail. The GW should redirect the traffic to the other border leaf. This was seen to take more than 900 ms. The GW is a SLX 9640.		

Parent Defect ID:	SLXOS-65379	**Issue ID:**	SLXOS-66289
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3j
Technology Group:	MPLS	**Technology:**	MPLS VPLS - Virtual Private LAN Services

Symptom:	MPLS encapsulated 'Unicast ICMP with destination MAC starts on 4' traffic fails to forward from 9740(PHP/P) to 9850(PE).
Condition:	a) Establish VPLS session between 9850 & MLX with adding 9740 as Transit Node. b) Initiate traffic with destination MAC starts with 4 from CE to CE.

Parent Defect ID:	SLXOS-66738	**Issue ID:**	SLXOS-66738
Severity:	S3 - Moderate		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.1
Technology Group:	-	**Technology:**	-
Symptom:	In port mirroring configuration if destination interface is a port-channel and source interface is either a port-channel or member of a port-channel then destination port-channel interface goes down.		
Condition:	Issue is seen if in port mirroring configuration destination interface is configured as a port-channel.		

Parent Defect ID:	SLXOS-66825	**Issue ID:**	SLXOS-67000
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2fa
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BFD - BiDirectional Forwarding Detection
Symptom:	BFD sessions flaps		
Condition:	Reload of Leaf node connected to SRIOV compute servers.		

Parent Defect ID:	SLXOS-54373	**Issue ID:**	SLXOS-67650
Severity:	S3 - Moderate		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.1
Technology Group:	Management	**Technology:**	CLI - Command Line Interface
Symptom:	Interface MTU value not set		
Condition:	Sometimes a reload will not set MTU value		
Workaround:	Re-configure MTU value		

Parent Defect ID:	SLXOS-68095	**Issue ID:**	SLXOS-68095
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.2
Technology Group:	-	**Technology:**	-
Symptom:	Convergence of L3VNI Asymmetric traffic takes 30 seconds.		
Condition:	Reloading one of the Multi-homed peer.		

Parent Defect ID:	SLXOS-68208	**Issue ID:**	SLXOS-68208
Severity:	S3 - Moderate		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2f

Technology Group:	Monitoring	**Technology:**	OAM - Operations, Admin & Maintenance
Symptom:	Failed to fetch the utilization-watermark stats on the "show interface stats utilization-watermark interface ethernet <x/x>".		
Condition:	In SLX 9540 device configured with "system interface utilization-watermark".		

Parent Defect ID:	SLXOS-69621	**Issue ID:**	SLXOS-70060
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2g
Technology Group:	Layer 2 Switching	**Technology:**	LAG - Link Aggregation Group
Symptom:	Fail to add port to Link Aggregation Group		
Condition:	On removing a port from LACP LAG and add it again to same LAG, port fails to be part of LAG and will throw "[LACP-1005]" RAS log		
Workaround:	Remove all member ports of LAG and add them again.		

Parent Defect ID:	SLXOS-70172	**Issue ID:**	SLXOS-70172
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.3
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol
Symptom:	Unexpected reload of device.		
Condition:	Device reloaded unexpectedly on execution of execution of "clear ip route all vrf" with "prefix-independent-convergence-static" already configured.		

Parent Defect ID:	SLXOS-70473	**Issue ID:**	SLXOS-70473
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.3
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol
Symptom:	Traffic redirect to other port after doing clear ip route all on golden eagle.		
Condition:	Issue can be recovered either by removing or reapplying flowspec routemap distribution.		

Parent Defect ID:	SLXOS-70592	**Issue ID:**	SLXOS-70592
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.3
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BFD - BiDirectional Forwarding Detection

Symptom:	BFD sessions flap while rebooting a leaf node
Condition:	In an MCT pair, BFD sessions flap while rebooting a leaf node with SRIOV clients

Parent Defect ID:	SLXOS-71344	**Issue ID:**	SLXOS-71502
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.3
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	OSPF - IPv4 Open Shortest Path First
Symptom:	OSPF routes installed as result of Static route redistribution in NSSA area is getting deleted even though the same static route entry is present in another device and reachable from the former.		
Condition:	The static route entry is being added and deleted immediately within a interval of 5 secs from one of the advertising devices in NSSA area.		

Parent Defect ID:	SLXOS-68264	**Issue ID:**	SLXOS-71647
Severity:	S3 - Moderate		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.1b
Technology Group:	Other	**Technology:**	Other
Symptom:	Link not coming up after reload. And if it comes up, after certain time (in secs) pld algorithm kicks in and link goes down after which it comes up again based on the configured time. This happens in loop.		
Condition:	When port link dampening CLI is configured. link-error-disable 2 120 300		

Parent Defect ID:	SLXOS-71395	**Issue ID:**	SLXOS-71655
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.3
Technology Group:	Management	**Technology:**	SNMP - Simple Network Management Protocol
Symptom:	SNMP MIB(1.3.6.1.4.1.1588.3.1.12.1.1.1.3.1.60 and 1.3.6.1.4.1.1588.3.1.13.1.1.1.4.1) reporting very large value/zero CPU and memory utilization randomly.		
Condition:	While doing the snmpwalk for OID (1.3.6.1.4.1.1588.3.1.12.1.1.1.3.1.60 and 1.3.6.1.4.1.1588.3.1.13.1.1.1.4.1), it is displaying very large value/sometime Zero CPU and memory utilization in SNMP response randomly.		

Parent Defect ID:	SLXOS-71412	**Issue ID:**	SLXOS-71901
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2b_CVR

Technology Group:	MPLS	**Technology:**	MPLS Traffic Engineering
Symptom:	Unexpected reload is seen due to MPLSD module reset.		
Condition:	MPLSD module reset due to the message queue becoming full on MPLS.		

Parent Defect ID:	SLXOS-71509	**Issue ID:**	SLXOS-72084
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.3
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	OSPF - IPv4 Open Shortest Path First
Symptom:	Forwarding address selection was very generic. We would pick any OSPF-INTERFACE that came up at the last during selection. Here there was no particular logic to fetch the loopback IP always when one is present.		
Condition:	When an external route is advertised into NSSA area as Type7 LSA, the forwarding address picked by the same was physical interface address.		

Parent Defect ID:	SLXOS-72212	**Issue ID:**	SLXOS-72696
Severity:	S3 - Moderate		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.1cb
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol
Symptom:	Extra whitespace seen after 80 chars in AS PATH display.		
Condition:	While checking the output for "show ip bgp route detail " for a certain ip prefix whose AS PATH has more than 80 characters, an extra white space appears after that.		

Parent Defect ID:	SLXOS-72294	**Issue ID:**	SLXOS-72749
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.4b
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	ICMP - Internet Control Message Protocol
Symptom:	Duplicate ICMP packet observed		
Condition:	Duplicate ICMP packet is observed when Ping is initiated from Border Leaf		

Parent Defect ID:	SLXOS-71948	**Issue ID:**	SLXOS-72891
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2d
Technology Group:	IP Multicast	**Technology:**	IPv4 Multicast Routing

Symptom:	Multicast traffic drops for 5-6 secs or more.
Condition:	When multiple hosts join and leave a set of groups, in a sequence , such that each group is joined by one host at a time, followed by leave and join the next group in the sequence.
Workaround:	Using static groups.

Parent Defect ID:	SLXOS-72629	**Issue ID:**	SLXOS-73071
Severity:	S3 - Moderate		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.2b
Technology Group:	Monitoring	**Technology:**	Telemetry
Symptom:	System will reload.		
Condition:	After enable/disable of app-telemetry multiple times.		

Parent Defect ID:	SLXOS-72893	**Issue ID:**	SLXOS-73087
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.5.1
Technology Group:	Layer 2 Switching	**Technology:**	Other
Symptom:	In the IP Fabric environment, 2-8 seconds traffic loss was observed during Maintenance Mode disable on one of the L2 MCT nodes.		
Condition:	In a rare timing scenario, 2-8 seconds of traffic loss is noticed in some East-West flows during Maintenance Mode disable operation on one of the MCT nodes.		
Recovery:	Traffic recovers automatically, but there is a transient drop in the traffic during the Maintenance Mode operation.		

Parent Defect ID:	SLXOS-72973	**Issue ID:**	SLXOS-73128
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.3b
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	OSPF - IPv4 Open Shortest Path First
Symptom:	OSPF routing table is advertising the /16 subnet which was removed		
Condition:	Example: Add the following static routes on both Dist01 and Dist02 ip route 10.210.0.0/16 192.168.100.100 ip route 10.210.0.0/24 192.168.100.100 Remove static route 10.210.0.0/16 from both Dist01 and Dist02		
Workaround:	Clear OSPF routes		
Recovery:	clear OSPF routes		

Parent Defect ID:	SLXOS-72267	**Issue ID:**	SLXOS-73137
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.1cb
Technology Group:	Security	**Technology:**	ACLs - Access Control Lists

Symptom:	When ACL is configured with dscp-force value, ACL will not work to redirect configured traffic DSCP value at egress.
Condition:	When there is high priority traffic with congestion and ACL is applied with dscp-force to 0, ACL will not work to redirect DSCP value at 0 egress.

Parent Defect ID:	SLXOS-73047	**Issue ID:**	SLXOS-73047
Severity:	S3 - Moderate		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2ae
Technology Group:	Management	**Technology:**	SNMP - Simple Network Management Protocol
Symptom:	After migrating from Port-channel 20 having Bandwidth of 30G to Port-channel 21 which is having bandwidth of 100G, VE statistics of migrated Vlans shows 30G instead of 100G with SNMP walk.		
Condition:	When port-channels with different Bandwidths are migrated to same VE interface(s), updated Bandwidth is not reflecting in SNMP Walk.		

Parent Defect ID:	SLXOS-72665	**Issue ID:**	SLXOS-73288
Severity:	S3 - Moderate		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.3ac
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BFD - BiDirectional Forwarding Detection
Symptom:	BFD sessions are down on 8720 device		
Condition:	BFD sessions are down on 8720 device		

Parent Defect ID:	SLXOS-73347	**Issue ID:**	SLXOS-73347
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.5.2
Technology Group:	Layer 2 Switching	**Technology:**	Other
Symptom:	In VPLS environments, sometimes MAC is not learned on AC ports resulting in flooding of L2 traffic destined for the missed MAC.		
Condition:	In VPLS environments, MAC is not learned on AC ports because of Ingress Vlan Editing table full which could happen under the following conditions: - More than one tag-type is configured on the system. - Many different types of Vlan editing configured on the system. - Issue is seen on 9740/8820 only		
Workaround:	Changes in the configuration could resolve the issue. Different tag-types need more Vlan editing resources. Reducing the number of different tag-types and reconfiguring the port could resolve the issue.		

Parent Defect ID:	SLXOS-73395	**Issue ID:**	SLXOS-73395
Severity:	S2 - Major		

Product:	SLX-OS	**Reported in Release:**	SLXOS 20.5.2
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol
Symptom:	Default route is not advertised in BGP by using the network command...		
Condition:	When the default route next hop matches with the local BGP peer Address then the BGP is rejecting the route.		
Workaround:	Users can advertise the default route in BGP by using the default originate command.		

Parent Defect ID:	SLXOS-72514	**Issue ID:**	SLXOS-72514
Severity:	S3 - Moderate		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.3a
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	VRRPv2 - Virtual Router Redundancy Protocol Version 2
Symptom:	While transitioning from Backup to Master, the device does not wait for hold-timer in VRRP-E configuration.		
Condition:	When shutdown/no shutdown the VE or boot the router.		

Parent Defect ID:	SLXOS-73468	**Issue ID:**	SLXOS-73586
Severity:	S3 - Moderate		
Product:	SLX-OS	**Reported in Release:**	SLXOS 18r.2.00bf
Technology Group:	Monitoring	**Technology:**	Hardware Monitoring
Symptom:	Unqualified Optic warning message thrown for connected ports during SLX bootup.		
Condition:	While connecting non-Extreme/Brocade Optic.		

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Parent Defect ID:	SLXOS-73061	**Issue ID:**	SLXOS-73061
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.1
Technology Group:	Traffic Management	**Technology:**	QoS - Quality of Service
Symptom:	When TM debug command "show tm non-empty-queues" is executed there is no queue core information available in the command output.		
Condition:	On SLX 9740, SLX 9640, SLX 9540, and Extreme 8820 platforms.		

Parent Defect ID:	SLXOS-73629	**Issue ID:**	SLXOS-73629
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.5.2
Technology Group:	Layer 2 Switching	**Technology:**	Other
Symptom:	Up Mep is not settled on SLX 9740/Extreme 8870 devices with VPLS configurations.		
Condition:	Up Mep is configured on breakout ports (: 2, :3 and :4) on the SLX 9740/Extreme 8870 ports 41-80.		

Workaround:	Reload the device with breakout ports(:2,:3,:4) configurations on ports 41-80.

Parent Defect ID:	SLXOS-73646	**Issue ID:**	SLXOS-73646
Severity:	S3 - Moderate		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.5.2
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	GRE - Generic Routing Encapsulation
Symptom:	GRE Tunnel Termination statistics enabled by default		
Condition:	GRE Tunnel Termination statistics enabled by default in HW due to an ASIC limitation. Even though it is enabled by default, GRE Tunnel statistics will not be accounted until 'statistics' is configured for Tunnel.		

Parent Defect ID:	SLXOS-73263	**Issue ID:**	SLXOS-73263
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.5.1
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4+ - IPv6 Border Gateway Protocol
Symptom:	Some of the valid BGP routes are not selected as best and not installed in routing table.		
Condition:	eBGP routes nexthop is resolved recursively by other eBGP route.		

Parent Defect ID:	SLXOS-73712	**Issue ID:**	SLXOS-73712
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.5.2
Technology Group:	Layer 2 Switching	**Technology:**	Other
Symptom:	Up Mep DM is not working as expected on SLX 9740/Extreme 8870 80C devices.		
Condition:	When Up Mep is configured on ports 41-80 on SLX 9740/Extreme 8870 80C devices.		

Parent Defect ID:	SLXOS-73637	**Issue ID:**	SLXOS-73637
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.5.1
Technology Group:	Other	**Technology:**	Other
Symptom:	Unable to login TPVM with LDAP user credentials		
Condition:	Issue observed when Windows AD LDAP server is configured with TPVM.		

Parent Defect ID:	SLXOS-73769	**Issue ID:**	SLXOS-73769
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.5.2
Technology Group:	Other	**Technology:**	Other

Symptom:	The port LED is off on the port with SP7053-EXT optic in it.
Condition:	When 4x1G breakout is done with SP7053-EXT (via QSA adpater) in QSFP28 ports of SLX-9250 device.

Parent Defect ID:	SLXOS-73781	**Issue ID:**	SLXOS-73781
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.5.2
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	GRE - Generic Routing Encapsulation
Symptom:	Status of the VE interface binded to the GRE Tunnel is set to 'Down'		
Condition:	Tunnel VE interface status is 'Down' when the VE interface is created post the GRE Tunnel		
Workaround:	First create the VE, then the GRE Tunnel and bind the VE to Tunnel		

Defects Closed with Code Changes

The following software defects were closed in 20.5.2 with code changes as of September 2023:

Parent Defect ID:	SLXOS-61208	**Issue ID:**	SLXOS-61283
Reason Code:	Not Reproducible	**Severity:**	S2 -– Major
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2b
Technology Group:	Other	**Technology:**	Other
Symptom:	SLX 9540 device does not respond		
Condition:	Taking suppotsave when the free memory is below 600Mb.		
Recovery:	Power off/on the device		

Parent Defect ID:	SLXOS-67049	**Issue ID:**	SLXOS-67663
Reason Code:	Will Not Fix	**Severity:**	S2 - Major
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.4a
Technology Group:	Monitoring	**Technology:**	Hardware Monitoring
Symptom:	Flow based mirroring stopped working		
Condition:	On SLX-9150/9250 Platform port channel is configured as destination interface in monitor session in flow based mirroring.		
Recovery:	Rebind ACL on the Source interface configured in flow based monitor session		

Parent Defect ID:	SLXOS-66994	**Issue ID:**	SLXOS-67853
Reason Code:	Not Reproducible	**Severity:**	S2 -– Major
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2fa
Technology Group:	Monitoring	**Technology:**	Port Mirroring
Symptom:	For mirrored traffic ICMP reply packets are seen before ICM request packets.		
Condition:	When a PO is used as source interface for mirroring.		

Parent Defect ID:	SLXOS-68416	**Issue ID:**	SLXOS-68416
Reason Code:	Insufficient Information	**Severity:**	S2 -– Major
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.2
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol
Symptom:	Increase in NHID count for the 8K BFD scaled configuration		
Condition:	PIC is enabled/disabled and SLX device is rebooted		

Parent Defect ID:	SLXOS-69448	**Issue ID:**	SLXOS-69448
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.1cb

Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol
Symptom:	Unexpected reload on SLX device.		
Condition:	SLX is trying to process the unexpected flow spec rules sent from the peer device.		

Parent Defect ID:	SLXOS-69962	**Issue ID:**	SLXOS-69962
Severity:	S3 - Moderate		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.1c
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol
Symptom:	Device may reload [with rpsd] when we try to clear the large number[>1024] of BGP flowspec rules/neighbor.		
Condition:	RPSD module and device may reload, once after clearing the BGP neighbor which has populated with large number of flowpsec rules[>1024].		

Parent Defect ID:	SLXOS-70482	**Issue ID:**	SLXOS-70828
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.1
Technology Group:	Security	**Technology:**	SSH - Secure Shell
Symptom:	SSH(sshd) process stops running after node reload.		
Condition:	Noticed in case of making remote side connection of management port DOWN.		

Parent Defect ID:	SLXOS-71312	**Issue ID:**	SLXOS-71373
Severity:	S3 - Moderate		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.2b
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	MBGP - Multiprotocol Border Gateway Protocol
Symptom:	IP- Prefixes learnt via EVPN neighbor is not cleaned up properly.		
Condition:	EVPN Neighbor goes down and IP-Prefixes learned via particular neighbor are imported by multiple VRF's.		

Parent Defect ID:	SLXOS-71127	**Issue ID:**	SLXOS-71556
Reason Code:	Already Implemented	**Severity:**	S3 - Moderate
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.1c
Technology Group:	Management	**Technology:**	SNMP - Simple Network Management Protocol
Symptom:	SNMP MIB(1.3.6.1.4.1.1588.3.1.12.1.1.1.3.1.60) reporting very large value/zero CPU utilization.		

Condition:	While doing the snmpwalk for this OID (1.3.6.1.4.1.1588.3.1.12.1.1.1.3.1.60), it is displaying very large value/sometime Zero CPU utilization in SNMP response randomly.

Parent Defect ID:	SLXOS-72014	**Issue ID:**	SLXOS-72192
Severity:	S3 - Moderate		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.1cb
Technology Group:	Other	**Technology:**	Other
Symptom:	System may reload on executing CMSH DIAG command.		
Condition:	In execution of 'show diag pp-fdt interface' command for non-existing (loopback/port-channel) interface.		

Parent Defect ID:	SLXOS-72268	**Issue ID:**	SLXOS-72268
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.3a
Technology Group:	Management	**Technology:**	SNMP - Simple Network Management Protocol
Symptom:	Device became unresponsive and Nsmd daemon reload was seen after upgrading to 20.4.3a.		
Condition:	SNMP query to fetch VE statistics for scaled VE interfaces may causing this issue.		

Parent Defect ID:	SLXOS-72298	**Issue ID:**	SLXOS-72298
Severity:	S3 - Moderate		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.3
Technology Group:	Layer 2 Switching	**Technology:**	MCT - Multi-Chassis Trunking
Symptom:	IPv6 dynamic BGP failed to establish.		
Condition:	Flapping of MCT cluster's client interface.		

Parent Defect ID:	SLXOS-72163	**Issue ID:**	SLXOS-72388
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.3ac
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	ARP - Address Resolution Protocol
Symptom:	During an upgrade, loss is seen on some traffic streams		
Condition:	BFD and BGP sessions are not established since ICL drops the traffic passing through		
Recovery:	Flapping the ICL link would help to recover the traffic		

Parent Defect ID:	SLXOS-72010	**Issue ID:**	SLXOS-72483
Severity:	S3 - Moderate		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.2b

Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol
Symptom:	EVPN Multi-homed peer is not updated with correct MAC and Port mapping		
Condition:	Host moves from one port-channel to other port-channel.		

Parent Defect ID:	SLXOS-72076	**Issue ID:**	SLXOS-72624
Severity:	S3 - Moderate		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.3
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4+ - IPv6 Border Gateway Protocol
Symptom:	When the dynamic BGP peer goes down, the relevant SNMP trap is not generated.		
Condition:	The necessary condition for dynamic BGP peer goes down		

Parent Defect ID:	SLXOS-71969	**Issue ID:**	SLXOS-72637
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.2
Technology Group:	Other	**Technology:**	Other
Symptom:	The 100G link does not come up online on platform SLX 9740		
Condition:	When FEC mode is configured as disabled and reload with full install.		

Parent Defect ID:	SLXOS-72639	**Issue ID:**	SLXOS-72639
Severity:	S3 - Moderate		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.1ca
Technology Group:	Other	**Technology:**	Other
Symptom:	The "Unqualified SFP transceiver" message appears on the console during the reload or breakout.		
Condition:	When SPTSBP3PTCXT003 optic is used in the qsfp28 ports on SLX device.		

Parent Defect ID:	SLXOS-71903	**Issue ID:**	SLXOS-72756
Severity:	S3 - Moderate		
Product:	SLX-OS	**Reported in Release:**	SLXOS 18r.1.00a
Technology Group:	Management	**Technology:**	SNMP - Simple Network Management Protocol
Symptom:	SNMP OID IF-MIB::ifType of port-channel returns value Other(1) instead of ieee8023adLag(161).		
Condition:	Configure port-channel.		

Parent Defect ID:	SLXOS-70648	**Issue ID:**	SLXOS-72766
Reason Code:	Will Not Fix	**Severity:**	S3 - Moderate

Product:	SLX-OS	**Reported in Release:**	SLXOS 18r.1.00m
Technology Group:	MPLS	**Technology:**	MPLS VPLS - Virtual Private LAN Services
Symptom:	Pseudowires flaps		
Condition:	After continuous link down event		

Parent Defect ID:	SLXOS-72770	**Issue ID:**	SLXOS-72829
Reason Code:	Working as Designed	**Severity:**	S3 - Moderate
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.3
Technology Group:	Management	**Technology:**	SNMP - Simple Network Management Protocol
Symptom:	SNMPGet output not matches with its (Upper/Lower)case to SNMP trap output.		
Condition:	Validate both SNMP Get and SNMP trap(pcap) output.		

Parent Defect ID:	SLXOS-72611	**Issue ID:**	SLXOS-72837
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.1d
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	ARP - Address Resolution Protocol
Symptom:	Learning ARP from other subnet (non-connected) host.		
Condition:	Made IP with different subnet(host) to learn on SLX ARP table.		

Parent Defect ID:	SLXOS-72195	**Issue ID:**	SLXOS-72853
Severity:	S3 - Moderate		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3g
Technology Group:	Traffic Management	**Technology:**	Traffic Queueing and Scheduling
Symptom:	BFD and OSPF session flaps are observed in SLX 9540.		
Condition:	BFD and OSPF session flaps are observed if there is high latency due to internal CPU packet processing delays in hardware.		

Parent Defect ID:	SLXOS-72504	**Issue ID:**	SLXOS-72858
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2e
Technology Group:	Traffic Management	**Technology:**	Traffic Queueing and Scheduling
Symptom:	BFD and OSPF flaps are observed in SLX 9540.		
Condition:	BFD and OSPF flaps are observed if there is high latency due to internal CPU packet processing delays in hardware.		

Parent Defect ID:	SLXOS-71680	**Issue ID:**	SLXOS-72885
Severity:	S3 - Moderate		

Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.1d
Technology Group:	Monitoring	**Technology:**	Hardware Monitoring
Symptom:	Speed failure trace seen on every SLX bootup.		
Condition:	SLX 9740 to be configured with 40G speed.		

Parent Defect ID:	SLXOS-72779	**Issue ID:**	SLXOS-72899
Severity:	S3 - Moderate		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2d
Technology Group:	IP Multicast	**Technology:**	IGMP - Internet Group Management Protocol
Symptom:	Multicast traffic drop of 1-2 minutes		
Condition:	When sending IGMPv3 report with source as 0.0.0.0, followed by sending IGMPv3 joins, and the configured version on switch is version v3.		
Workaround:	Configuring the switch with IGMP version v2 instead of version v3.		

Parent Defect ID:	SLXOS-72880	**Issue ID:**	SLXOS-72917
Severity:	S3 - Moderate		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.5.1
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	ARP - Address Resolution Protocol
Symptom:	IPv6 traffic loss seen for a few flows after a node reload or power cycle.		
Condition:	IPv6 Neighbor entries associated with wrong VE interface causing the packets to be blackholed.		

Parent Defect ID:	SLXOS-72912	**Issue ID:**	SLXOS-72923
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.5.1
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	ARP - Address Resolution Protocol
Symptom:	IPv6 traffic loss seen for a few flows after a node reload or power cycle.		
Condition:	IPv6 Neighbor entries associated with wrong VE interface causing the packets to be blackholed.		

Parent Defect ID:	SLXOS-72886	**Issue ID:**	SLXOS-72928
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.5.1
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	ARP - Address Resolution Protocol

Symptom:	IPv6 traffic loss seen for a few flows after a node reload or power cycle.
Condition:	IPv6 Neighbor entries associated with wrong VE interface causing the packets to be blackholed.

Parent Defect ID:	SLXOS-72907	**Issue ID:**	SLXOS-72933
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.5.1
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	ARP - Address Resolution Protocol
Symptom:	IPv6 traffic loss seen for a few flows after a node reload or power cycle.		
Condition:	IPv6 Neighbor entries associated with wrong VE interface causing the packets to be blackholed.		

Parent Defect ID:	SLXOS-72945	**Issue ID:**	SLXOS-72952
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.5.1
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	ARP - Address Resolution Protocol
Symptom:	IPv6 traffic loss seen for a few flows after a node reload or power cycle.		
Condition:	IPv6 Neighbor entries associated with wrong VE interface causing the packets to be blackholed.		

Parent Defect ID:	SLXOS-72305	**Issue ID:**	SLXOS-73025
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.4a
Technology Group:	Layer 2 Switching	**Technology:**	VXLAN - Virtual Extensible LAN
Symptom:	VxLAN packets from VMWare VTEP are dropped on the trunk port in MCT/IP fabric environment.		
Condition:	In an MCT environment incoming VxLAN traffic from VMWare hosts is dropped when the ingress port is configured as a trunk port and the incoming traffic is tagged VxLAN. No drops are noticed when the ingress port is configured as an access port or router port and incoming traffic is untagged VxLAN.		
Workaround:	No known workarounds.		
Recovery:	No known recovery methods.		

Parent Defect ID:	SLXOS-72959	**Issue ID:**	SLXOS-73080
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.2b

Technology Group:	Layer 2 Switching	**Technology:**	MCT - Multi-Chassis Trunking
Symptom:	Pseudo-wire clients configured under MCT Cluster is down		
Condition:	Post Maintenance-Mode upgrade, Pseudo-wire clients configured under MCT Cluster does not come up		

Parent Defect ID:	SLXOS-73082	**Issue ID:**	SLXOS-73082
Severity:	S3 - Moderate		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.3
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol
Symptom:	BGP filtered routes are stuck in the routing table (RIB/FIB)		
Condition:	1. Device runs e-BGP neighborship with 2 peers 2. Device learns a route from both these peers and installs both the routes as ECMP routes. 3. A prefix-list filter is applied to the DUT towards the peer from which it learns the non-BEST route to deny the learned routes from this peer.		

Parent Defect ID:	SLXOS-72780	**Issue ID:**	SLXOS-73142
Severity:	S3 - Moderate		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2d
Technology Group:	IP Multicast	**Technology:**	PIM - Protocol-Independent Multicast
Symptom:	Traffic loss seen on a few streams, attached to a prefix list with PIM RP		
Condition:	When more than one PIM RP with prefix list is present on a switch. Upon reload traffic drop for a few prefixes will be seen.		
Workaround:	Reconfigure PIM RPs, followed by PIM RP with prefix list.		

Parent Defect ID:	SLXOS-69469	**Issue ID:**	SLXOS-73282
Severity:	S3 - Moderate		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.2
Technology Group:	Other	**Technology:**	Other
Symptom:	Interface displayed as SFP absent		
Condition:	When the device is reloaded multiple times.		

Parent Defect ID:	SLXOS-73107	**Issue ID:**	SLXOS-73368
Severity:	S3 - Moderate		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.4.3ac
Technology Group:	Layer 2 Switching	**Technology:**	MCT - Multi-Chassis Trunking
Symptom:	ARP is not resolved for few VE IP addresses		

Condition:	ARP is not resolved for few VE IP addresses after a Cluster client interface is toggled a few times
Recovery:	Flap the cluster client interface again

Parent Defect ID:	SLXOS-65710	**Issue ID:**	SLXOS-73374
Severity:	S2 - Major		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2d
Technology Group:	Layer 2 Switching	**Technology:**	MCT - Multi-Chassis Trunking
Symptom:	Cluster client stops forwarding traffic		
Condition:	When LACP state is toggled, Cluster client stops forwarding traffic		
Recovery:	Shutting down the Cluster client and re-enabling it		

Parent Defect ID:	SLXOS-72935	**Issue ID:**	SLXOS-73792
Severity:	S3 - Moderate		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.5.1
Technology Group:	Other	**Technology:**	Other
Symptom:	Extra link flap is observed during reboot.		
Condition:	When reloads the device.		