

August 2023



Extreme SLX-OS 20.4.2c

Release Notes

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

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Document History

Version	Summary of changes	Publication date
1.0	Initial version for 20.4.2c	August 2023

Preface

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- 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)
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- 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 20.4.2c provides the following features:

- Critical defect fixes

Release SLX-OS 20.4.2b provides the following features:

- Critical defect fixes

Release SLX-OS 20.4.2a provides the following features:

- Critical defect fixes

Release SLX-OS 20.4.2 provides the following features:

- Maintenance Mode Optimizations for IP Fabric Upgrade
- Ability to control service bindings for SNMP listening services
- Ability to disable processing of packets utilizing IP Options
- Support for Password Handling for special characters on SLX-OS
- Increased the allowed anycast-address entries per interface from 64 to 512
- Additional IPv6 protocol support on TPVM
- Additional SNMP Notification Event support from SLX
- Prefix Independent Convergence (PIC) support for static routes
- IP Fabric QoS
- Enhanced Debug/RASLOG messages for FEC support status

Release SLX-OS 20.4.1c provides the following features:

- Critical defect fixes

Release SLX-OS 20.4.1b provides the following features:

- Critical defect fixes
- TPVM security patches till May 09, 2022 are included in TPVM 4.5.1

Release SLX-OS 20.4.1a provides the following features:

- Critical defect fixes

Release SLX-OS 20.4.1 provides the following features:

- SLX based TPVM upgrade optimization
- Additional SNMP notification event support
- SE Linux based IMA policy
- MAC (Mandatory Access Control) policy for user space binaries
- Ability to upgrade ONIE/GRUB
- Force port 1G speed/duplex via constrained advertised capabilities
- Processing ACL rule for Tunneled traffic
- BGP Dynamic Peering Scale Enhancement
- IPV6 configuration support in TPVM

- IPv6 Support for Peer-Address in a Route Map for BGP
- BGP dampening for peer flaps
- TPVM security patches till April 03, 2022 are included in TPVM 4.5.0

Behavior Changes

The following are the behavioral changes for SLX-OS 20.4.2c

- No behavioral changes were introduced in this release.

The following are the behavioral changes for SLX-OS 20.4.2b

- No behavioral changes were introduced in this release.

The following are the behavioral changes for SLX-OS 20.4.2a

- No behavioral changes were introduced in this release.

The following are the behavioral changes for SLX-OS 20.4.2

- Default VRF bindings for SNMP listening services on SLX-OS are Management VRF and Default VRF.
- SNMP SET operation is completely unsupported.
- SNMP server view command does not take effect for the “write view” option
- SNMPv3 user delete operation requires SNMP agent to be stopped to take effect post reload.
- Boot up time for SNMP agent is delayed.
- The variable binding for ‘*InetAddress*’ type variables in Enterprise MIBs related traps – BFD and MCT, is changed from ‘*IpAddress*’ to ‘*InetAddress*’.

The following are the behavioral changes for SLX-OS 20.4.1c

- No behavioral changes were introduced in this release.

The following are the behavioral changes for SLX-OS 20.4.1b

- No behavioral changes were introduced in this release.
- TPVM security patches till May 09, 2022 are included in TPVM 4.5.1

The following are the behavioral changes for SLX-OS 20.4.1a

- No behavioral changes were introduced in this release.

The following are the behavioral changes for SLX-OS 20.4.1

- CLI `threshold-monitor` is modified as follows:
 - o Default action is changed from RASlog to RASlog and SNMP Trap.
 - o `threshold-monitor Memory` has removed parameters – limit and low-limit.
 - o Default values for `threshold-monitor Cpu` and `threshold-monitor Memory` are changed.
- SNMP trap for BFD module contains additional info and is implemented via Enterprise BFD MIB. BFD Enterprise MIB is the default option. This means, `snmp-server trap` needs to be specifically configured for BFD standard MIB via newly added CLI in this release.

- TPVM patch upgrade (incremental upgrade) that helps upgrading only the patches without stopping the running TPVM instance. Use the command `tpvm upgrade incremental`.
- TPVM IPv6 support
- Added security patches till April 03, 2022, in TPVM 4.5.0

Software Features

The following key software features are added in the SLX-OS 20.4.2c release

- No new feature is added in this release.

The following key software features are added in the SLX-OS 20.4.2b release

- No new feature is added in this release.

The following key software features are added in the SLX-OS 20.4.2a release

- No new feature is added in this release.

The following key software features are added in the SLX-OS 20.4.2 release

Feature Name	Supported SLX Platforms	Description
Maintenance Mode Optimizations for IP Fabric Upgrade	All	Maintenance mode, which plays a key role for seamless upgrade via EFA, has been optimized to reduce the waiting time from current 300 sec to a much smaller number, say 60 sec. Also, link utilization on spine uplinks is monitored and based on link utilization drop, SLX device comes out of the Maintenance Mode enable stage instead of waiting for user-configured wait time (default is 300 sec).
Ability to control service bindings for SNMP listening services	All	Allows user to enable SNMP services listening on a specific VRF, incl. default and Management VRFs. User can configure up to 32 VRFs.
Ability to disable processing of packets utilizing IP Options	Extreme 8520, Extreme 8720, SLX 9150, SLX 9250, SLX 9740	Allows to disable CPU processing of the IPv4 datagrams with IP header option fields.
Support for Password Handling for special characters on SLX-OS	All	Adds capability to support all special characters to configure a password on SLX-OS.

Feature Name	Supported SLX Platforms	Description
Increased the allowed anycast-address entries per interface from 64 to 512	All	Allows to configure anycast addresses per Virtual Ethernet (VE) interface scale up to 512. The overall system scale remains at 8000.
Additional IPv6 protocol support on TPVM	All	Extends IPv6 Manageability support on TPVM. Network services such as DNS and NTP can be configured with IPv6 address. Dynamic support for Default Gateway (DGW) is also added.
Additional SNMP Notification Event support from SLX	All	SNMP Notifications for events related to hardware tables such as MAC Table, LIF, VxLAN and BFD session tables have been added
PIC support for static routes	Extreme 8520, Extreme 8720, SLX 9150, SLX 9250 and SLX 9740	PIC (Prefix Independent Convergence) support for static routes feature is added In an IP Fabric deployment, enabling this feature on a Border Leaf device will help reduce the BFD convergence time b/w Border leaf and Border/Edge gateway
IP Fabric QoS	Extreme 8520, Extreme 8720, SLX 9150, SLX 9250 and SLX 9740	Default class maps support is added for L2 and L3 VxLAN gateways.
Enhanced Debug/RASLOG messages for FEC support status	All	Display RASlog message for the FEC support on various SLX platforms

The following key software features are added in the SLX-OS 20.4.1c release

- No new feature is added in this release.

The following key software features are added in the SLX-OS 20.4.1b release

- No new feature is added in this release.

The following key software features are added in the SLX-OS 20.4.1a release

- No new feature is added in this release.

The following key software features are added in the SLX-OS 20.4.1 release

Feature Name	Supported SLX Platforms	Description
SLX based TPVM upgrade optimization	All	<p><code>tpvm upgrade incremental</code> command is introduced.</p> <ul style="list-style-type: none"> • avoids reinstallation of TPVM and EFA during upgrade • 2 Debian files for each installation type <ul style="list-style-type: none"> ○ One for full installation ○ One for upgrade installation
Additional SNMP Notification Event support	All	<p>New and enhanced SNMP notifications are added:</p> <ul style="list-style-type: none"> • BFD enterprise notifications with BFD session specific information • Cluster up and down notifications for MCT cluster • Maintenance mode traps for entry and exit transitions • CPU and memory threshold monitoring traps. • NTP status change trap • Enhanced BGP IPv6 notifications - Established & BackwardTransition traps • Enhanced Fan failure / recovery traps • Enhanced Power Supply failure / recovery traps
SE Linux based IMA policy	All	<p>Security Enhanced Linux is added as an additional layer of system security for access controls for the applications, processes, and files on the SLXOS system.</p>
MAC policy for user space binaries	All	<p>Security Enhanced Linux (SE Linux) implements Mandatory Access Control (MAC). Every process and system resource is issued a special security label called an SE Linux context.</p>
Ability to upgrade ONIE/GRUB	SLX 9150, SLX 9250, Extreme 8720 and Extreme 8520	<p>Provides the ability to install <i>onie</i>, <i>diag</i> and <i>onie-grub</i> images from SLXOS</p>
Force port 1G speed/duplex via constrained advertised capabilities	SLX 9150, Extreme 8520	<p>Adds the support of 10G port in 1G forced mode in full duplex with clock parameter to auto negotiate based on peer capabilities</p>
Processing ACL rule for Tunneled traffic	SLX 9740	<p>Supports ingress ACL on tunnels to match the inner headers for VxLAN, GRE and MPLS tunnels</p>
BGP Dynamic Peering Scale Enhancement	All	<p>Increases the number of BGP peers for Dynamic BGP Peers</p>
IPV6 protocol support on TPVM	All	<p>Introduces the initial support of IPV6 protocol for TPVM</p>

Feature Name	Supported SLX Platforms	Description
IPv6 Support for Peer-Address in a Route Map for BGP	All	Supports of <code>set ipv6 next-hop peer-address</code> in route-map for BGP
BGP dampening for peer flaps	All	Adds the BGP peer dampening capability for unusable BGP peers

CLI Commands

The following commands were added, modified, or deprecated for the 20.4.2c program

New commands for 20.4.2c

No commands were added in this release

Modified commands for 20.4.2c

No commands were modified in this release

Deprecated commands for 20.4.2c

No commands were deprecated in this release

The following commands were added, modified, or deprecated for the 20.4.2b program

New commands for 20.4.2b

No commands were added in this release

Modified commands for 20.4.2b

No commands were modified in this release

Deprecated commands for 20.4.2b

No commands were deprecated in this release

The following commands were added, modified, or deprecated for the 20.4.2a program

New commands for 20.4.2a

No commands were added in this release

Modified commands for 20.4.2a

No commands were modified in this release

Deprecated commands for 20.4.2a

No commands were deprecated in this release

The following commands were added, modified, or deprecated for the 20.4.2 program

New commands for 20.4.2

- convergence-time (maintenance mode)
- efa deploy
- enable-on-reboot (maintenance mode)
- maintenance-mode
- prefix-independent-convergence-static
- qos-dscp-mode
- rate-monitoring (maintenance mode)
- snmp-server use-vrf
- threshold-monitor bfd-session
- threshold-monitor lif
- threshold-monitor mac-table
- threshold-monitor vxlan-tunnel
- shutdown-time (maintenance mode)

Modified commands for 20.4.2

- dns (TPVM)
- enable (maintenance mode)
- ip option
- ntp (TPVM)
- system maintenance
- system maintenance turn-off
- trusted-peer (tpvm mode)
- tpvm download
- interface management (tpvm mode)
- snmp-server group
- snmp-server user
- show overlay-gateway
- show tunnel
- show system maintenance
- show system maintenance rate-monitoring

Deprecated commands for 20.4.2

- qos-ttl-mode

The following commands were added, modified, or deprecated for the 20.4.1c program

New commands for 20.4.1c

No commands were added in this release.

Modified commands for 20.4.1c

No commands were modified in this release.

Deprecated commands for 20.4.1c

No commands were deprecated in this release.

The following commands were added, modified, or deprecated for the 20.4.1b program

New commands for 20.4.1b

No commands were added in this release.

Modified commands for 20.4.1b

No commands were modified in this release.

Deprecated commands for 20.4.1b

No commands were deprecated in this release.

The following commands were added, modified, or deprecated for the 20.4.1a program

New commands for 20.4.1a

No commands were added in this release.

Modified commands for 20.4.1a

No commands were modified in this release.

Deprecated commands for 20.4.1a

No commands were deprecated in this release.

The following commands were added, modified, or deprecated for the 20.4.1 program

New commands for 20.4.1

- neighbor peer-dampening
- neighbor peer-dampening (peer-group)
- peer-dampening
- show grubversion
- show [ip|ipv6] bgp peer-dampened
- show onieversion
- show selinux status
- snmp-server trap
- update onie

Modified commands for 20.4.1

- dns (tpvm mode)

- interface management (tpvm mode)
- ntp (tpvm mode)
- set ip next-hop
- set ipv6 next-hop
- speed
- threshold-monitor Cpu
- threshold-monitor Memory
- tpvm download
- tpvm upgrade (tpvm mode)
- vrf-lite-capability

The following show commands were enhanced to show additional information.

- show interface ethernet
- show interface status
- show ipv6 bgp routes

Deprecated commands for 20.4.1

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
8000-PRMR-LIC-P	Extreme 8000 Premier Feature License (includes Integrated Application Hosting)
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

Supported devices	Description
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
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)

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.
XN-ACPWR-1600W-R	SLX 9740 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.
XN-ACPWR-1600W-F	SLX 9740 Fixed AC 1600W Power Supply Front to Back. Power cords not included.
XN-FAN-003-F	SLX 9740 FAN Front to Back airflow for SLX9740-40C
XN-FAN-003-R	SLX 9740 FAN Back to Front airflow for SLX9740-40C
XN-FAN-004-F	SLX 9740 FAN Front to Back airflow for SLX9740-80C
XN-FAN-004-R	SLX 9740 FAN Back to Front airflow for SLX9740-80C
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

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

SLX 9740

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

SLX 9150 and Extreme 8520

Port Type	Media Type	Default FEC Mode	Supported FEC Modes
100G	Passive DAC	RS-FEC	RS-FEC Disabled

Port Type	Media Type	Default FEC Mode	Supported FEC Modes
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

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

Software Download and Upgrade

For more information about the various methods of upgrading to SLX-OS 20.4.2c see the *Extreme SLX-OS Software Upgrade Guide*.

Image files

Download the following images from www.extremenetworks.com.

Image file name	Description
SLX-OS_20.4.2c.tar.gz	SLX-OS 20.4.2c software
SLX-OS_20.4.2c_mibs.tar.gz	SLX-OS 20.4.2c MIBS
SLX-OS_20.4.2c.md5	SLX-OS 20.4.2c md5 checksum
SLX-OS_20.4.2c-digests.tar.gz	SLX-OS 20.4.2c sha checksum
SLX-OS_20.4.2c-releasenotes.pdf	Release Notes

Notes:

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

To / From	20.2.3x	20.3.2/a/b/c /d	20.3.3	20.3.4	20.3.4a/ac	20.4.1/a/b/c	20.4.2/a/b	20.4.2c
20.2.3 (MFG)	Use the normal Firmware Download / coldboot	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall
20.2.3ab	Use the normal Firmware Download / coldboot	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall
20.2.3x	NA	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall
20.3.2/a/b/c /d	Use fullinstall	Use the normal Firmware Download / coldboot. For downgrade use fullinstall.	Use the normal Firmware Download / coldboot. For downgrade use fullinstall.	Use the normal Firmware Download / coldboot. For downgrade use fullinstall.	Use the normal Firmware Download / coldboot. For downgrade use fullinstall.	Use the normal Firmware Download / coldboot. For downgrade use fullinstall.	Use the normal Firmware Download / coldboot. For downgrade use fullinstall.	Use the normal Firmware Download / coldboot. For downgrade use fullinstall.
20.3.3	Use fullinstall	Use the normal Firmware Download / coldboot	NA	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot

To / From	20.2.3x	20.3.2/a/b/c /d	20.3.3	20.3.4	20.3.4a/ac	20.4.1/a/b/c	20.4.2/a/b	20.4.2c
20.3.4	Use fullinstall	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	NA	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot
20.3.4a/ac	Use fullinstall	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot
20.4.1/a/b/c	Use fullinstall	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot
20.4.2/a/b	Use fullinstall	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot
20.4.2c	Use fullinstall	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	NA

To From	20.2.2x	20.2.3x	20.3.1	20.3.2/a /b	20.3.2c/ d	20.3.3	20.3.4	20.3.4a/ ac	20.4.1/a /b/c	20.4.2/a /b	20.4.2c
20.2.1a	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall
20.2.2x	Use the normal Firmware Download / coldboot *	Use the normal Firmware Download / coldboot	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall
20.2.3x	Use the normal Firmware Download / coldboot	NA	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall

To From	20.2.2x	20.2.3x	20.3.1	20.3.2/a /b	20.3.2c/ d	20.3.3	20.3.4	20.3.4a/ ac	20.4.1/a /b/c	20.4.2/a /b	20.4.2c
20.3.1	Use fullinstall	Use fullinstall	NA	Use the normal Firmware Download / coldboot . For downgrade use fullinstall .	Use the normal Firmware Download / coldboot . For downgrade use fullinstall .	Use the normal Firmware Download / coldboot . For downgrade use fullinstall .	Use the normal Firmware Download / coldboot . For downgrade use fullinstall .	Use the normal Firmware Download / coldboot . For downgrade use fullinstall .	Use the normal Firmware Download / coldboot . For downgrade use fullinstall .	Use the normal Firmware Download / coldboot . For downgrade use fullinstall .	Use the normal Firmware Download / coldboot . For downgrade use fullinstall .
20.3.2/a /b	Use fullinstall	Use fullinstall	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot . For downgrade use fullinstall .	Use the normal Firmware Download / coldboot . For downgrade use fullinstall .	Use the normal Firmware Download / coldboot . For downgrade use fullinstall .	Use the normal Firmware Download / coldboot . For downgrade use fullinstall .	Use the normal Firmware Download / coldboot . For downgrade use fullinstall .	Use the normal Firmware Download / coldboot . For downgrade use fullinstall .	Use the normal Firmware Download / coldboot . For downgrade use fullinstall .	Use the normal Firmware Download / coldboot . For downgrade use fullinstall .

To From	20.2.2x	20.2.3x	20.3.1	20.3.2/a /b	20.3.2c/ d	20.3.3	20.3.4	20.3.4a/ ac	20.4.1/a /b/c	20.4.2/a /b	20.4.2c
20.3.2c/ d	Use fullinstall	Use fullinstall	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot . For downgrade use fullinstall .	Use the normal Firmware Download / coldboot . For downgrade use fullinstall .	Use the normal Firmware Download / coldboot . For downgrade use fullinstall .	Use the normal Firmware Download / coldboot . For downgrade use fullinstall .	Use the normal Firmware Download / coldboot . For downgrade use fullinstall .	Use the normal Firmware Download / coldboot . For downgrade use fullinstall .
20.3.3	Use fullinstall	Use fullinstall	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	NA	Use the normal Firmware Download / coldboot .	Use the normal Firmware Download / coldboot .	Use the normal Firmware Download / coldboot .	Use the normal Firmware Download / coldboot .	Use the normal Firmware Download / coldboot .
20.3.4	Use fullinstall	Use fullinstall	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	NA	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot .

To From	20.2.2x	20.2.3x	20.3.1	20.3.2/a /b	20.3.2c/ d	20.3.3	20.3.4	20.3.4a/ ac	20.4.1/a /b/c	20.4.2/a /b	20.4.2c
20.3.4a/ ac	Use fullinstall	Use fullinstall	Use the normal Firmwar e Downloa d / coldboot	Use the normal Firmwar e Downloa d / coldboot	Use the normal Firmwar e Downloa d / coldboot	Use the normal Firmwar e Downloa d / coldboot	Use the normal Firmwar e Downloa d / coldboot	Use the normal Firmwar e Downloa d / coldboot	Use the normal Firmwar e Downloa d / coldboot	Use the normal Firmwar e Downloa d / coldboot	Use the normal Firmwar e Downloa d / coldboot
20.4.1/a /b/c	Use fullinstall	Use fullinstall	Use the normal Firmwar e Downloa d / coldboot	Use the normal Firmwar e Downloa d / coldboot	Use the normal Firmwar e Downloa d / coldboot	Use the normal Firmwar e Downloa d / coldboot	Use the normal Firmwar e Downloa d / coldboot	Use the normal Firmwar e Downloa d / coldboot	Use the normal Firmwar e Downloa d / coldboot	Use the normal Firmwar e Downloa d / coldboot	Use the normal Firmwar e Downloa d / coldboot
20.4.2/a /b	Use fullinstall	Use fullinstall	Use the normal Firmwar e Downloa d / coldboot	Use the normal Firmwar e Downloa d / coldboot	Use the normal Firmwar e Downloa d / coldboot	Use the normal Firmwar e Downloa d / coldboot	Use the normal Firmwar e Downloa d / coldboot	Use the normal Firmwar e Downloa d / coldboot	Use the normal Firmwar e Downloa d / coldboot	Use the normal Firmwar e Downloa d / coldboot	Use the normal Firmwar e Downloa d / coldboot
20.4.2c	Use fullinstall	Use fullinstall	Use the normal Firmwar e Downloa d / coldboot	Use the normal Firmwar e Downloa d / coldboot	Use the normal Firmwar e Downloa d / coldboot	Use the normal Firmwar e Downloa d / coldboot	Use the normal Firmwar e Downloa d / coldboot	Use the normal Firmwar e Downloa d / coldboot	Use the normal Firmwar e Downloa d / coldboot	Use the normal Firmwar e Downloa d / coldboot	NA

*within the patches

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	20.2.2a/b/c	20.2.3a to 20.2.3h	20.3.1	20.3.2/a/b	20.3.2c/d	20.3.3	20.3.4	20.3.4a/ac	20.4.1/a/b/c	20.4.2/a/b	20.4.2c
18r.2.00, 18r.2.00a/b/c	For SLX 9540 : 1. First upgrade to 20.1.2h using fullinstall. 2. Then upgrade to 20.2.2a/b/c using fullinstall. For SLX 9640: 1. First upgrade to 18r.2.00d	For SLX 9540 : 1. First upgrade to 20.1.2h using fullinstall. 2. Then upgrade to targeted 20.2.3 version using fullinstall. For SLX 9640: 1. First upgrade to	For SLX 9540 : 1. First upgrade to 20.1.2h using fullinstall. 2. Then upgrade to 20.3.1 version using fullinstall. For SLX 9640:	For SLX 9540 : 1. First upgrade to 20.1.2h using fullinstall. 2. Then upgrade to targeted 20.3.2 version using fullinstall. For SLX 9640:	For SLX 9540 : 1. First upgrade to 20.1.2h using fullinstall. 2. Then upgrade to 20.3.2d version using fullinstall. For SLX 9640:	For SLX 9540 : 1. First upgrade to 20.1.2h using fullinstall. 2. Then upgrade to 20.3.3 version using fullinstall. For SLX 9640:	For SLX 9540 : 1. First upgrade to 20.1.2h using fullinstall. 2. Then upgrade to 20.3.4 version using fullinstall. For SLX 9640:	For SLX 9540 : 1. First upgrade to 20.1.2h using fullinstall. 2. Then upgrade to 20.3.4a version using fullinstall. For SLX 9640:	For SLX 9540 : 1. First upgrade to 20.1.2h using fullinstall. 2. Then upgrade to 20.4.1/a/b/c version using fullinstall. For SLX 9640:	For SLX 9540 : 1. First upgrade to 20.1.2h using fullinstall. 2. Then upgrade to 20.4.2/a/b version using fullinstall. For SLX 9640:	For SLX 9540 : 1. First upgrade to 20.1.2h using fullinstall. 2. Then upgrade to 20.4.2c version using fullinstall. For SLX 9640:

To From	20.2.2a/b/c	20.2.3a to 20.2.3h	20.3.1	20.3.2/a/b	20.3.2c/d	20.3.3	20.3.4	20.3.4a/ac	20.4.1/a/b/c	20.4.2/a/b	20.4.2c
	via fullinstall. 2. Then upgrade to 20.1.2h using fullinstall. 3. Then upgrade to 20.2.2a/b/c using fullinstall.	18r.2.00d via fullinstall. 2. Then upgrade to 20.1.2h using fullinstall. 3. Then upgrade to 20.2.3 version using fullinstall.	1. First upgrade to 18r.2.00d via fullinstall. 2. Then upgrade to 20.1.2h using fullinstall. 3. Then upgrade to 20.3.1 version using fullinstall.	1. First upgrade to 18r.2.00d via fullinstall. 2. Then upgrade to 20.1.2h using fullinstall. 3. Then upgrade to 20.3.2 version using fullinstall.	1. First upgrade to 18r.2.00d via fullinstall. 2. Then upgrade to 20.1.2h using fullinstall. 3. Then upgrade to 20.3.2d version using fullinstall.	1. First upgrade to 18r.2.00d via fullinstall. 2. Then upgrade to 20.1.2h using fullinstall. 3. Then upgrade to 20.3.3 version using fullinstall.	1. First upgrade to 18r.2.00d via fullinstall. 2. Then upgrade to 20.1.2h using fullinstall. 3. Then upgrade to 20.3.4 version using fullinstall.	1. First upgrade to 18r.2.00d via fullinstall. 2. Then upgrade to 20.1.2h using fullinstall. 3. Then upgrade to 20.3.4a version using fullinstall.	1. First upgrade to 18r.2.00d via fullinstall. 2. Then upgrade to 20.1.2h using fullinstall. 3. Then upgrade to 20.4.1/a/b/c version using fullinstall.	1. First upgrade to 18r.2.00d via fullinstall. 2. Then upgrade to 20.1.2h using fullinstall. 3. Then upgrade to 20.4.2/a/b version using fullinstall.	1. First upgrade to 18r.2.00d via fullinstall. 2. Then upgrade to 20.1.2h using fullinstall. 3. Then upgrade to 20.4.2c version using fullinstall.
18r.2.00d	For SLX 9540 : 1. First upgrade to 20.1.2h	For SLX 9540 : 1. First upgrade to 20.1.2h	For SLX 9540 : 1. First upgrade to 20.1.2h	For SLX 9540 : 1. First upgrade to 20.1.2h	For SLX 9540 : 1. First upgrade to 20.1.2h	For SLX 9540 : 1. First upgrade to 20.1.2h	For SLX 9540 : 1. First upgrade to 20.1.2h	For SLX 9540 : 1. First upgrade to 20.1.2h	For SLX 9540 : 1. First upgrade to 20.1.2h	For SLX 9540 : 1. First upgrade to 20.1.2h	For SLX 9540 : 1. First upgrade to 20.1.2h

To From	20.2.2a/b/c	20.2.3a to 20.2.3h	20.3.1	20.3.2/a/b	20.3.2c/d	20.3.3	20.3.4	20.3.4a/ac	20.4.1/a/b/c	20.4.2/a/b	20.4.2c
	<p>using fullinstall. 2. Then upgrade to 20.2.2a/b/c using fullinstall.</p> <p>For SLX 9640: 1. First upgrade to 20.1.2h using fullinstall. 2. Then upgrade to 20.2.2a/b/c using fullinstall.</p>	<p>using fullinstall. 2. Then upgrade to targeted 20.2.3 version using fullinstall.</p> <p>For SLX 9640: 1. First upgrade to 20.1.2h using fullinstall. 2. Then upgrade to targeted 20.2.3 version using fullinstall.</p>	<p>using fullinstall. 2. Then upgrade to 20.3.1 version using fullinstall.</p> <p>For SLX 9640: 1. First upgrade to 20.1.2h using fullinstall. 2. Then upgrade to 20.3.1 version using fullinstall.</p>	<p>using fullinstall. 2. Then upgrade to targeted 20.3.2 version using fullinstall.</p> <p>For SLX 9640: 1. First upgrade to 20.1.2h using fullinstall. 2. Then upgrade to targeted 20.3.2 version using</p>	<p>using fullinstall. 2. Then upgrade to 20.3.2d version using fullinstall.</p> <p>For SLX 9640: 1. First upgrade to 20.1.2h using fullinstall. 2. Then upgrade to 20.3.2d version using fullinstall.</p>	<p>using fullinstall. 2. Then upgrade to 20.3.3 version using fullinstall.</p> <p>For SLX 9640: 1. First upgrade to 20.1.2h using fullinstall. 2. Then upgrade to 20.3.3 version using fullinstall.</p>	<p>using fullinstall. 2. Then upgrade to 20.3.4 version using fullinstall.</p> <p>For SLX 9640: 1. First upgrade to 20.1.2h using fullinstall. 2. Then upgrade to 20.3.4 version using fullinstall.</p>	<p>using fullinstall. 2. Then upgrade to 20.3.4a version using fullinstall.</p> <p>For SLX 9640: 1. First upgrade to 20.1.2h using fullinstall. 2. Then upgrade to 20.3.4a version using fullinstall.</p>	<p>using fullinstall. 2. Then upgrade to 20.4.1/a/b/c version using fullinstall.</p> <p>For SLX 9640: 1. First upgrade to 20.1.2h using fullinstall. 2. Then upgrade to 20.4.1/a/b/c version using fullinstall.</p>	<p>using fullinstall. 2. Then upgrade to 20.4.2/a/b version using fullinstall.</p> <p>For SLX 9640: 1. First upgrade to 20.1.2h using fullinstall. 2. Then upgrade to 20.4.2/a/b version using fullinstall.</p>	<p>using fullinstall. 2. Then upgrade to 20.4.2c version using fullinstall.</p> <p>For SLX 9640: 1. First upgrade to 20.1.2h using fullinstall. 2. Then upgrade to 20.4.2c version using fullinstall.</p>

To From	20.2.2a/b/c	20.2.3a to 20.2.3h	20.3.1	20.3.2/a/b	20.3.2c/d	20.3.3	20.3.4	20.3.4a/ac	20.4.1/a/b/c	20.4.2/a/b	20.4.2c
				fullinstall.						fullinstall.	
20.1.1	For SLX 9540 : 1. First upgrade to 20.1.2h using fullinstall. 2. Then upgrade to 20.2.2a/b/c using fullinstall. For SLX 9640: Use fullinstall.	For SLX 9540 : 1. First upgrade to 20.1.2h using fullinstall. 2. Then upgrade to targeted 20.2.3 version using fullinstall. For SLX 9640: Use fullinstall.	For SLX 9540 : 1. First upgrade to 20.1.2h using fullinstall. 2. Then upgrade to 20.3.1 version using fullinstall. For SLX 9640: Use fullinstall.	For SLX 9540 : 1. First upgrade to 20.1.2h using fullinstall. 2. Then upgrade to targeted 20.3.2 version using fullinstall. For SLX 9640: Use fullinstall.	For SLX 9540 : 1. First upgrade to 20.1.2h using fullinstall. 2. Then upgrade to 20.3.2d version using fullinstall. For SLX 9640: Use fullinstall.	For SLX 9540 : 1. First upgrade to 20.1.2h using fullinstall. 2. Then upgrade to 20.3.3 version using fullinstall. For SLX 9640: Use fullinstall.	For SLX 9540 : 1. First upgrade to 20.1.2h using fullinstall. 2. Then upgrade to 20.3.4 version using fullinstall. For SLX 9640: Use fullinstall.	For SLX 9540 : 1. First upgrade to 20.1.2h using fullinstall. 2. Then upgrade to 20.3.4a version using fullinstall. For SLX 9640: Use fullinstall.	For SLX 9540 : 1. First upgrade to 20.1.2h using fullinstall. 2. Then upgrade to 20.4.1/a/b/c version using fullinstall. For SLX 9640: Use fullinstall.	For SLX 9540 : 1. First upgrade to 20.1.2h using fullinstall. 2. Then upgrade to 20.4.2/a/b version using fullinstall. For SLX 9640: Use fullinstall.	For SLX 9540 : 1. First upgrade to 20.1.2h using fullinstall. 2. Then upgrade to 20.4.2c version using fullinstall. For SLX 9640: Use fullinstall.
20.1.2e, g	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall

To From	20.2.2a/b/c	20.2.3a to 20.2.3h	20.3.1	20.3.2/a/b	20.3.2c/d	20.3.3	20.3.4	20.3.4a/ac	20.4.1/a/b/c	20.4.2/a/b	20.4.2c
20.2.1a	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall
20.2.2x	NA	Use the normal Firmware Download / coldboot	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall
20.2.3x	Use the normal Firmware Download / coldboot	NA	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall
20.3.1	Use fullinstall	Use fullinstall	NA	Use the normal Firmware Download / coldboot. For downgrade use fullinstall.	Use the normal Firmware Download / coldboot. For downgrade use fullinstall.	Use the normal Firmware Download / coldboot. For downgrade use fullinstall.	Use the normal Firmware Download / coldboot. For downgrade use fullinstall.	Use the normal Firmware Download / coldboot. For downgrade use fullinstall.	Use the normal Firmware Download / coldboot. For downgrade use fullinstall.	Use the normal Firmware Download / coldboot. For downgrade use fullinstall.	Use the normal Firmware Download / coldboot. For downgrade use fullinstall.
20.3.2/a/b	Use fullinstall	Use fullinstall	Use the normal	Use the normal	Use the normal	Use the normal	Use the normal	Use the normal	Use the normal	Use the normal	Use the normal

To From	20.2.2a/b /c	20.2.3a to 20.2.3h	20.3.1	20.3.2/ a/b	20.3.2c /d	20.3.3	20.3.4	20.3.4a /ac	20.4.1/ a/b/c	20.4.2/ a/b	20.4.2c
			Firmwa re Downlo ad / coldb oot	Firmwa re Downlo ad / coldb oot	Firmwar e Downlo ad / coldbo ot. For downgr ade use fullinsta ll.	Firmwar e Downlo ad / coldbo ot. For downgr ade use fullinsta ll.	Firmwar e Downlo ad / coldbo ot. For downgr ade use fullinsta ll.	Firmwar e Downlo ad / coldbo ot. For downgr ade use fullinsta ll.	Firmwar e Downlo ad / coldbo ot. For downgr ade use fullinsta ll.	Firmwar e Downlo ad / coldbo ot. For downgr ade use fullinsta ll.	Firmwar e Downlo ad / coldbo ot. For downgr ade use fullinsta ll.
20.3.2c/d	Use fullin stall	Use fullin stall	Use the normal Firmwa re Downlo ad / coldb oot	Use the normal Firmwa re Downlo ad / coldb oot	Use the normal Firmwar e Downlo ad / coldbo ot	Use the normal Firmwar e Downlo ad / coldbo ot. For downgr ade use fullinsta ll.	Use the normal Firmwar e Downlo ad / coldbo ot. For downgr ade use fullinsta ll.	Use the normal Firmwar e Downlo ad / coldbo ot. For downgr ade use fullinsta ll.	Use the normal Firmwar e Downlo ad / coldbo ot. For downgr ade use fullinsta ll.	Use the normal Firmwar e Downlo ad / coldbo ot. For downgr ade use fullinsta ll.	Use the normal Firmwar e Downlo ad / coldbo ot. For downgr ade use fullinsta ll.
20.3.3	Use fullin stall	Use fullin stall	Use the normal Firmwa re Downlo ad / coldb oot	Use the normal Firmwa re Downlo ad / coldb oot	Use the normal Firmwar e Downlo ad / coldbo ot	NA	Use the normal Firmwar e Downlo ad / coldbo ot	Use the normal Firmwar e Downlo ad / coldbo ot	Use the normal Firmwar e Downlo ad / coldbo ot	Use the normal Firmwar e Downlo ad / coldbo ot	Use the normal Firmwar e Downlo ad / coldbo ot
20.3.4	Use fullinstall	Use fullinstall	Use the normal	Use the normal	Use the normal	Use the normal	NA	Use the normal	Use the normal	Use the normal	Use the normal

To From	20.2.2a/b/c	20.2.3a to 20.2.3h	20.3.1	20.3.2/a/b	20.3.2c/d	20.3.3	20.3.4	20.3.4a/ac	20.4.1/a/b/c	20.4.2/a/b	20.4.2c
			Firmware Download / coldboot	Firmware Download / coldboot	Firmware Download / coldboot	Firmware Download / coldboot		Firmware Download / coldboot	Firmware Download / coldboot	Firmware Download / coldboot	Firmware Download / coldboot
20.3.4a/a/c	Use fullinstall	Use fullinstall	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot
20.4.1/a/b/c	Use fullinstall	Use fullinstall	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot
20.4.2/a/b	Use fullinstall	Use fullinstall	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot
20.4.2c	Use fullinstall	Use fullinstall	Use the normal	Use the normal	Use the normal	Use the normal	Use the normal	Use the normal	Use the normal	Use the normal	NA

To From	20.2.2a/b/c	20.2.3a to 20.2.3h	20.3.1	20.3.2/a/b	20.3.2c/d	20.3.3	20.3.4	20.3.4a/ac	20.4.1/a/b/c	20.4.2/a/b	20.4.2c
			Firmware Download / coldboot	Firmware Download / coldboot	Firmware Download / coldboot	Firmware Download / coldboot	Firmware Download / coldboot	Firmware Download / coldboot	Firmware Download / coldboot	Firmware Download / coldboot	

Notes:

- When upgrading from the 18r.1.00x and 18r.2.00a and earlier patches, upgrade first to 18r.2.00bx and then to 20.2.2x, which is a two-step upgrade procedure.
- The MCT upgrade procedure from 18r.2.00bc to 20.2.x is detailed in the *Extreme SLX-OS Software Upgrade Guide*.
- Because SLX 9540 is a bare metal device, use the "fullinstall" option to migrate between the SLX-OS 20.2.2x and SLX-OS 20.1.x releases.
- Because SLX9540 is moved to the bare metal mode in 20.2.1, use 'fullinstall' when migrating between SLX-OS 20.2.2x and SLX-OS 2.1.x releases.
- 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	20.2.2x	20.2.3x	20.3.1	20.3.2/a/b	20.3.2c/d	20.3.3	20.3.4	20.3.4a/ac	20.4.1/a/b/c	20.4.2/a/b	20.4.2c
20.1.1	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall

To From	20.2.2x	20.2.3x	20.3.1	20.3.2/a/ b	20.3.2c/ d	20.3.3	20.3.4	20.3.4a/ ac	20.4.1/a/ b/c	20.4.2/a/ b	20.4.2c
20.1.2x	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall
20.2.1x	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall
20.2.2x	Use the normal firmware download / coldboot*	Use the normal firmware download / coldboot	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall
20.2.3x	Use the normal firmware download / coldboot	NA	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall

To / From	20.2.2x	20.2.3x	20.3.1	20.3.2/a/b	20.3.2c/d	20.3.3	20.3.4	20.3.4a/ac	20.4.1/a/b/c	20.4.2/a/b	20.4.2c
20.3.1	Use fullinstall	Use fullinstall	NA	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot
20.3.2/a/b	Use fullinstall	Use fullinstall	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot
20.3.2c/d	Use fullinstall	Use fullinstall	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot
20.3.3	Use fullinstall	Use fullinstall	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	NA	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot

To From	20.2.2x	20.2.3x	20.3.1	20.3.2/a/ b	20.3.2c/ d	20.3.3	20.3.4	20.3.4a/ ac	20.4.1/a/ b/c	20.4.2/a/ b	20.4.2c
20.3.4	Use fullinstall	Use fullinstall	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	NA	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot
20.3.4a/ ac	Use fullinstall	Use fullinstall	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot
20.4.1/a/ b/c	Use fullinstall	Use fullinstall	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot
20.4.2/a/ b	Use fullinstall	Use fullinstall	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot

To	20.2.2x	20.2.3x	20.3.1	20.3.2/a/b	20.3.2c/d	20.3.3	20.3.4	20.3.4a/ac	20.4.1/a/b/c	20.4.2/a/b	20.4.2c
From											
20.4.2c	Use fullinstall	Use fullinstall	Use the normal firmware downloaded / coldboot	Use the normal firmware downloaded / coldboot	Use the normal firmware downloaded / coldboot	Use the normal firmware downloaded / coldboot	Use the normal firmware downloaded / coldboot	Use the normal firmware downloaded / coldboot	Use the normal firmware downloaded / coldboot	Use the normal firmware downloaded / coldboot	NA

*within the patches

Extreme 8520

To / From	20.3.3	20.3.4	20.3.4a/ac	20.4.1/a	20.4.1b	20.4.1c	20.4.2/a/b	20.4.2c
20.3.3	NA	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot
20.3.4	Use the normal Firmware Download / coldboot	NA	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot
20.3.4a/ac	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	NA	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot
20.4.1/a	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	NA	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot
20.4.1b	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	NA	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot
20.4.1c	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	NA	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot

20.4.2/a/b	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot
20.4.2c	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	NA

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	SLX 9250	Extreme 8520	Extreme 8720
20.4.2a	TPVM 4.1.1 and later	TPVM 4.1.1 and later	TPVM 4.4.0 and later	TPVM 4.2.2 and later
20.4.2b/c	TPVM 4.1.1 to TPVM 4.5.x	TPVM 4.1.1 to TPVM 4.5.x	TPVM 4.4.0 to TPVM 4.5.x	TPVM 4.2.2 to TPVM 4.5.x

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

- 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 20.4.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 4.5.4 can be incrementally upgraded from TPVM 4.1.1 to TPVM 4.5.x.
- TPVM 4.5.4 supports full install upgrade/downgrade from TPVM 4.2.5.

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 **tpvm 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.

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, only “`/apps`” partition and its data are 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” 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 ~2.6 GB and the TPVM incremental update Debian file size is ~0.5 GB. These TPVM packages contain Ubuntu security patches available up to August 30, 2022 in

TPVM 4.5.4. You must have at least 1GB of free space on the switch before proceeding with the `tpvm upgrade incremental` command

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 unstage 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 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

- 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	
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

Configuration	Migration State	Notes
		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 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.	<ul style="list-style-type: none"> • 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.

PM Configuration	Examples
	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> • 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.
- Conformed and Violated counters are not supported for egress rate limiting for SLX 9740.
- Egress rate limiting in a Bridge Domain configuration is not supported for SLX 9740.
- DSCP-COS map is not work correctly for SLX 9740.

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

- Traps related to RMON (Remote Network Monitoring), HA (High Availability), VACM (view-based Access Control Mode) are partially functional.
- 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 13183. 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 13183 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.

Open Defects

The following software defects are open in SLX-OS 20.4.2c as of August 2023:

Parent Defect ID:	SLXOS-67385	Issue ID:	SLXOS-68878
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 18r.1.00ch
Technology Group:	MPLS	Technology:	MPLS VPLS - Virtual Private LAN Services
Symptom:	Pseudowires flaps		
Condition:	After a link-down event.		

Parent Defect ID:	SLXOS-68208	Issue ID:	SLXOS-69890
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-70203	Issue ID:	SLXOS-70740
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.4b
Technology Group:	Management	Technology:	SNMP - Simple Network Management Protocol
Symptom:	As per standards optional attributes can be added to SNMP notifications at the end of the object list specified in the MIB. But snmpTrapAddress OID is placed in the notification before the notification's object list		

Parent Defect ID:	SLXOS-71230	Issue ID:	SLXOS-71432
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.4a
Technology Group:	IP Multicast	Technology:	IPv4 Multicast Routing
Symptom:	Node reboot while processing a Multicast packet		
Condition:	Multicast daemon reset while processing an IPv6 Multicast packet leading to a node reboot		

Parent Defect ID:	SLXOS-71127	Issue ID:	SLXOS-71552
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-71395	Issue ID:	SLXOS-71651
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-71199	Issue ID:	SLXOS-71693
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.3
Technology Group:	Layer 3 Routing/Network Layer	Technology:	ARP - Address Resolution Protocol
Symptom:	IPv6 traffic loss seen 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-71581	Issue ID:	SLXOS-71872
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.2h
Technology Group:	Management	Technology:	SNMP - Simple Network Management Protocol
Symptom:	For SNMP requests made to loopback interface address, SNMP response is sent with source IP address as outgoing interface address.		
Condition:	SNMP request made to loopback interface address.		

Parent Defect ID:	SLXOS-71412	Issue ID:	SLXOS-71898
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-71968	Issue ID:	SLXOS-71976
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.1c
Technology Group:	Layer 3 Routing/Network Layer	Technology:	Other
Symptom:	Seen in 9150/9250/8720/8750, "Hardware resource allocation failed" message in the console. This can be followed by some flows being blackholed or routed over wrong interfaces.		
Condition:	Usually seen when BGP-EVPN is enabled and the switch has been up for a long time, or has been through network churn. There is a case where the nexthops in the hardware are leaked. After the switch runs for a while, the nexthops can get exhausted and fresh hardware programming may fail.		

Parent Defect ID:	SLXOS-72298	Issue ID:	SLXOS-73787
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-73600	Issue ID:	SLXOS-73887
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.5.1a
Technology Group:	Security	Technology:	PBR - Policy-Based Routing
Symptom:	Cannot delete a route-map stanza if the route-map is applied to BGP. Error 'Route-map associated with a bgp neighbor' is seen.		
Condition:	Applying route-map on BGP neighbors		

The following software defects are open in SLX-OS 20.4.2b as of December 2022:

Parent Defect ID:	SLXOS-68275	Issue ID:	SLXOS-68691
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.2
Technology Group:	Layer 3 Routing/Network Layer	Technology:	Other
Symptom:	Increase in convergence time for 8K BFD scale		
Condition:	When interface is shutdown, or member port made DOWN with the scaled configuration after PIC is enabled.		

Parent Defect ID:	SLXOS-68282	Issue ID:	SLXOS-68736
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.1
Technology Group:	Layer 3 Routing/Network Layer	Technology:	BFD - BiDirectional Forwarding Detection
Symptom:	BFD session flaps for 20 minutes		
Condition:	Link break between Spine and Board-Leaf nodes		

Parent Defect ID:	SLXOS-68749	Issue ID:	SLXOS-68753
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.2b
Technology Group:	Layer 2 Switching	Technology:	VXLAN - Virtual Extensible LAN
Symptom:	VRF traffic loss is greater than 500msec upon spine node reboot.		
Condition:	Upon spine reboot, few BFD sessions from compute nodes to border-leaf flap and traffic loss greater than 500msec is observed.		

Parent Defect ID:	SLXOS-67385	Issue ID:	SLXOS-68878
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 18r.1.00ch
Technology Group:	MPLS	Technology:	MPLS VPLS - Virtual Private LAN Services
Symptom:	Pseudowires flaps		
Condition:	After a link-down event.		

Parent Defect ID:	SLXOS-68530	Issue ID:	SLXOS-68891
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.1b
Technology Group:	Layer 3 Routing/Network Layer	Technology:	ARP - Address Resolution Protocol

Symptom:	When user configures a VE with "0000.5e00.0101" MAC as static anycast-gateway-mac on 9740 platforms, it does not learn ARP entries for connected devices.
Condition:	When user configures a VE with VRRP MAC as static anycast-gateway-mac on 9740 platforms, it does not learn ARP entries for connected devices. Dedicated VRRP IPv4 mac addresses: 0000.5e00.01xx (xx – vrid) Dedicated VRRP IPv6 mac addresses: 0000.5e00.02xx
Workaround:	Any other MAC except the dedicated VRRP MACs are allowed to be used as static anycast-gateway macs on 9740 platforms.
Recovery:	No known recovery methods.

Parent Defect ID:	SLXOS-66842	Issue ID:	SLXOS-68900
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.4a
Technology Group:	Security	Technology:	SSH - Secure Shell
Symptom:	Public key authentication does not work sometimes.		
Condition:	Running "ssh" exec mode command.		
Recovery:			

Parent Defect ID:	SLXOS-67415	Issue ID:	SLXOS-68905
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.1
Technology Group:	Management	Technology:	SNMP - Simple Network Management Protocol
Symptom:	snmpwalk for OID .1.3.6.1.4.1.1916.1.51.1.8.1.3 (extremeBgp4V2PrefixInPrefixes) doesn't work		
Condition:	When snmpwalk executed for OID .1.3.6.1.4.1.1916.1.51.1.8.1.3		

Parent Defect ID:	SLXOS-68731	Issue ID:	SLXOS-68910
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 18r.1.00m
Technology Group:	Security	Technology:	AAA - Authentication, Authorization, and Accounting
Symptom:	Disabling AAA accounting does not appear in accounting log.		
Condition:	Disabling AAA accounting.		

Parent Defect ID:	SLXOS-66359	Issue ID:	SLXOS-68915
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.4ab

Technology Group:	Layer 3 Routing/Network Layer	Technology:	BFD - BiDirectional Forwarding Detection
Symptom:	Bfd session does not come up.		
Condition:	Fabric re-configuration or ecfе-speaker pod restart		

Parent Defect ID:	SLXOS-68350	Issue ID:	SLXOS-69206
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.2f
Technology Group:	Management	Technology:	CLI - Command Line Interface
Symptom:	May experience reload on Dcmd module.		
Condition:	Make Script to run periodically to collect 'show running nomore' output.		

Parent Defect ID:	SLXOS-68589	Issue ID:	SLXOS-69211
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 18r.1.00m
Technology Group:	Security	Technology:	RADIUS
Symptom:	CLI password string not masked on RADIUS accounting request and audit.log.		
Condition:	On executing authentication based CLI commands.		

Parent Defect ID:	SLXOS-69334	Issue ID:	SLXOS-69334
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.2
Technology Group:	Layer 3 Routing/Network Layer	Technology:	Multi-VRF
Symptom:	Not able to ping the SLX Ve anycast ip from external System.		
Condition:	After firmware download to 20.4.2a version.		

Parent Defect ID:	SLXOS-69102	Issue ID:	SLXOS-69365
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.2f
Technology Group:	Management	Technology:	SNMP - Simple Network Management Protocol
Symptom:	When trying to create a port configuration map using ifIndex as the key value, It is not possible to make a port configuration map because the key value(ifIndex) of the management port is not supported.		

Condition:	on SLX 9250 in 20.4.2a, issue is seen only after reloading, after reloading if SNMP walk is issued for IfIndex and later SNMP walk is issued for the IP Address table issue is not seen.
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Parent Defect ID:	SLXOS-69413	Issue ID:	SLXOS-69413
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.2
Technology Group:	Management	Technology:	SNMP - Simple Network Management Protocol
Symptom:	Link up/down interfaces are not generated for insight interface.		
Condition:	When TPVM STOP / START is configured		

Parent Defect ID:	SLXOS-67973	Issue ID:	SLXOS-69820
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.2d
Technology Group:	Layer 3 Routing/Network Layer	Technology:	BFD - BiDirectional Forwarding Detection
Symptom:	BFD session is not coming up		
Condition:	AMF POD reset		

Parent Defect ID:	SLXOS-67049	Issue ID:	SLXOS-69843
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-69858	Issue ID:	SLXOS-69858
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.2
Technology Group:	Management	Technology:	NTP - Network Time Protocol
Symptom:	Delayed NTP synchronization (>30 mins sometimes) after creating NTP server.		
Condition:	Creation of NTP server on SLX.		

Parent Defect ID:	SLXOS-69844	Issue ID:	SLXOS-69865
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Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.2ae
Technology Group:	Layer 3 Routing/Network Layer	Technology:	BGP4 - IPv4 Border Gateway Protocol
Symptom:	BGP daemon reload is seen in rare condition.		
Condition:	When clearing a bgp specific route.		

Parent Defect ID:	SLXOS-68208	Issue ID:	SLXOS-69890
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-69448	Issue ID:	SLXOS-69955
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-70231	Issue ID:	SLXOS-70231
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.2
Technology Group:	Layer 3 Routing/Network Layer	Technology:	VRRPv2 - Virtual Router Redundancy Protocol Version 2
Symptom:	L3 traffic won't get resumed after power-cycle when VEs are configured with static-anycast-gateway IP address (IPv4/IPv6).		
Condition:	When VE is configured with static-anycast-gateway (SAG), and both MCT nodes are power-cycled in one shot, it's been observed that the SAG macs were not properly programmed in hardware, which leads to L3 traffic drop.		
Recovery:	Unconfigure and configure VE. If there are more VEs, and manual unconfigure/configure VEs not possible, then MCT node reload should resolve the situation.		

Parent Defect ID:	SLXOS-67321	Issue ID:	SLXOS-70287
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.1
Technology Group:	Security	Technology:	SSH - Secure Shell
Symptom:	After deleting the SSH key from flash it come up again after reload.		
Condition:	After deleting the SSH key from flash it come up again after reload.		

Parent Defect ID:	SLXOS-70148	Issue ID:	SLXOS-70323
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.2fb
Technology Group:	Traffic Management	Technology:	Rate Limiting and Shaping
Symptom:	System reload while updating subnet CPU packet rate during monitoring process.		
Condition:	In rare scenario during monitoring process of subnet CPU packet rate in Extreme 8720/SLX 9150/SLX 9250 platforms.		

The following software defects are open in SLX-OS 20.4.2a as of October 2022:

Parent Defect ID:	SLXOS-68053	Issue ID:	SLXOS-68686
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.2
Technology Group:	Management	Technology:	SNMP - Simple Network Management Protocol
Symptom:	Delay in delivering SNMP traps		
Condition:	With SNMPv3 informs configuration		

Parent Defect ID:	SLXOS-68101	Issue ID:	SLXOS-68687
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.2
Technology Group:	Layer 3 Routing/Network Layer	Technology:	Multi-VRF
Symptom:	<p>During VRF delete, user notices brindge-domain VE number being displayed incorrectly as "Ve 0" in NSM raslogs as shown below: <date>, [NSM-1003], 109517, DCE, INFO, BL-1, interface Ve 0 is link down. <date>, [NSM-1001], 109518, DCE, INFO, BL-1, interface Ve 8150 is online. This is cosmetic display error, and no impact to VE functionality.</p>		

Condition:	During VRF delete, when all bounded VE interfaces goes for reset. During VE down, brindge-domain VE number will be displayed incorrectly as "Ve 0" in NSM raslogs. This issue is not observed for Vlan VEs.
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Parent Defect ID:	SLXOS-68166	Issue ID:	SLXOS-68688
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.2
Technology Group:	Management	Technology:	SNMP - Simple Network Management Protocol
Symptom:	After changing any SNMP configuration, snmpwalk of Entity MIB, HA MIB and SW MIB may sometimes result in "No Such Instance".		
Condition:	After changing any SNMP configuration, snmpwalk of Entity MIB, HA MIB and SW MIB may sometimes result in "No Such Instance".		
Recovery:	Restart SNMP agent. This can be achieved by shut/noshut of SNMP service on any VRF. SLX(config)# snmp-server use-vrf mgmt-vrf shut SLX(config)# no snmp-server use-vrf mgmt-vrf shut		

Parent Defect ID:	SLXOS-68275	Issue ID:	SLXOS-68691
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.2
Technology Group:	Layer 3 Routing/Network Layer	Technology:	Other
Symptom:	Increase in convergence time for 8K BFD scale		
Condition:	When interface is shutdown, or member port made DOWN with the scaled configuration after PIC is enabled.		

Parent Defect ID:	SLXOS-68416	Issue ID:	SLXOS-68693
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-68429	Issue ID:	SLXOS-68694
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.2
Technology Group:	Layer 3 Routing/Network Layer	Technology:	BFD - BiDirectional Forwarding Detection
Symptom:	Console message maybe seen - [RTM-1033], 65963, DCE, ERROR, BL-1, System Next-Hop limits exceeded. Current Profile Nexthop 2000. Configured Next-Hops 1003		
Condition:	When Clear bfd neighbors command is issued.		

Parent Defect ID:	SLXOS-68450	Issue ID:	SLXOS-68695
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.2
Technology Group:	Layer 3 Routing/Network Layer	Technology:	Other
Symptom:	Traffic takes more than 900 msec in the N-S direction when a port channel between the Gateway and Border Leaf fails.		
Condition:	Minimum link is configured over this port channel and the trigger is the shutdown of one interface belonging to the port channel.		

Parent Defect ID:	SLXOS-68283	Issue ID:	SLXOS-68710
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.2.3j
Technology Group:	Management	Technology:	CLI - Command Line Interface
Symptom:	SLX reloaded Unexpectedly.		
Condition:	The 'Dcmd' process memory size keeps increasing every time when we perform 'copy running-config to startup-config' on SLX device.		

Parent Defect ID:	SLXOS-67618	Issue ID:	SLXOS-68725
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.2d
Technology Group:	Management	Technology:	SNMP - Simple Network Management Protocol
Symptom:	The OID to pull the serial number is different for the 8720 than other SLX platforms.		
Condition:	If 8720 tries to fetch the serial num via entphysicalentry.		

Parent Defect ID:	SLXOS-68282	Issue ID:	SLXOS-68736
Severity:	S3 - Moderate		

Product:	SLX-OS	Reported in Release:	SLXOS 20.4.1
Technology Group:	Layer 3 Routing/Network Layer	Technology:	BFD - BiDirectional Forwarding Detection
Symptom:	BFD session flaps for 20 minutes		
Condition:	Link break between spine and BL nodes		

Parent Defect ID:	SLXOS-68749	Issue ID:	SLXOS-68753
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.2b
Technology Group:	Layer 2 Switching	Technology:	VXLAN - Virtual Extensible LAN
Symptom:	VRF traffic loss is greater than 500msec upon spine node reboot.		
Condition:	Upon spine reboot, few BFD sessions from compute nodes to border-leaf flap and traffic loss greater than 500msec is observed.		

Parent Defect ID:	SLXOS-67385	Issue ID:	SLXOS-68878
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 18r.1.00ch
Technology Group:	MPLS	Technology:	MPLS VPLS - Virtual Private LAN Services
Symptom:	Pseudowires flaps		
Condition:	After a link-down event.		

Parent Defect ID:	SLXOS-68530	Issue ID:	SLXOS-68891
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.1b
Technology Group:	Layer 3 Routing/Network Layer	Technology:	ARP - Address Resolution Protocol
Symptom:	When user configures a VE with "0000.5e00.0101" MAC as static anycast-gateway-mac on 9740 platforms, it does not learn ARP entries for connected devices.		
Condition:	When user configures a VE with VRRP MAC as static anycast-gateway-mac on 9740 platforms, it does not learn ARP entries for connected devices. Dedicated VRRP IPv4 mac addresses: 0000.5e00.01xx (xx – vrid) Dedicated VRRP IPv6 mac addresses: 0000.5e00.02xx		
Workaround:	Any other MAC except the dedicated VRRP MACs are allowed to be used as static anycast-gateway macs on 9740 platforms.		
Recovery:	No known recovery methods.		

Parent Defect ID:	SLXOS-66842	Issue ID:	SLXOS-68900
Severity:	S3 - Moderate		

Product:	SLX-OS	Reported in Release:	SLXOS 20.3.4a
Technology Group:	Security	Technology:	SSH - Secure Shell
Symptom:	Public key authentication wont work some times.		
Condition:	Running "ssh" exec mode command.		
Recovery:			

Parent Defect ID:	SLXOS-67415	Issue ID:	SLXOS-68905
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.1
Technology Group:	Management	Technology:	SNMP - Simple Network Management Protocol
Symptom:	snmpwalk for OID .1.3.6.1.4.1.1916.1.51.1.8.1.3 (extremeBgp4V2PrefixInPrefixes) doesn't work		
Condition:	when snmpwalk executed for OID .1.3.6.1.4.1.1916.1.51.1.8.1.3		

Parent Defect ID:	SLXOS-68731	Issue ID:	SLXOS-68910
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 18r.1.00m
Technology Group:	Security	Technology:	AAA - Authentication, Authorization, and Accounting
Symptom:	Disabling AAA accounting does not appear in accounting log.		
Condition:	Disabling AAA accounting.		

Parent Defect ID:	SLXOS-66359	Issue ID:	SLXOS-68915
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.4ab
Technology Group:	Layer 3 Routing/Network Layer	Technology:	BFD - BiDirectional Forwarding Detection
Symptom:	Bfd session does not come up due to SDK error		
Condition:	Fabric re-configuration or ecfe-speaker pod restart		

Parent Defect ID:	SLXOS-66943	Issue ID:	SLXOS-69042
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 18r.1.00j
Technology Group:	MPLS	Technology:	LDP - Label Distribution Protocol
Symptom:	SLX ignores the LDP MAC withdrawal from juniper.		
Condition:	SLX ignores the LDP MAC withdrawal from juniper when juniper sets the IP address as 0.0.0.0.		

Parent Defect ID:	SLXOS-67923	Issue ID:	SLXOS-69097
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 18r.1.00j
Technology Group:	Management	Technology:	Other
Symptom:	REST interface does not support configuring "vlan any" for mac access-list.		
Condition:	If "vlan any" is specified for mac access-list in REST configuration API		
Workaround:	Use CLI to configure "vlan any" for "mac access-list"		

Parent Defect ID:	SLXOS-69029	Issue ID:	SLXOS-69114
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.1
Technology Group:	Layer 2 Switching	Technology:	MCT - Multi-Chassis Trunking
Symptom:	Traffic may take >500ms to converge in non-clos fabric.		
Condition:	Check convergence time for traffic from South to North during leaf node reload.		

Parent Defect ID:	SLXOS-57372	Issue ID:	SLXOS-69121
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.2.3b
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 one of the two ports from Border Leaf to L3 gateway is shut.		
Condition:	This is a test for convergence numbers. There are two port channels between each Border Leaf to the two L3 gateways. One of the port channel is shut down at the Border Leaf. This forces the BL to reprogram the traffic going over that port channel for the South - North traffic to the other port channel. The convergence times vary and there are occasional spikes of over 700 msec.		

Parent Defect ID:	SLXOS-68350	Issue ID:	SLXOS-69206
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.2f
Technology Group:	Management	Technology:	CLI - Command Line Interface
Symptom:	May experience reload on Dcmd module.		
Condition:	Make Script to run periodically to collect 'show running nomore' output.		

Parent Defect ID:	SLXOS-68589	Issue ID:	SLXOS-69211
Severity:	S3 - Moderate		

Product:	SLX-OS	Reported in Release:	SLXOS 18r.1.00m
Technology Group:	Security	Technology:	RADIUS
Symptom:	CLI password string not masked on RADIUS accounting request and audit.log.		
Condition:	On executing authentication based CLI commands.		

Parent Defect ID:	SLXOS-67752	Issue ID:	SLXOS-69259
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.1
Technology Group:	Other	Technology:	Other
Symptom:	Reload is taking more time when hostname contains the . (dot) character.		
Condition:	When host name contains the dot character and reload the device		
Workaround:	Configure hostname without a dot		
Recovery:	system will recover with delayed time or configure hostname without dot		

Parent Defect ID:	SLXOS-68497	Issue ID:	SLXOS-69337
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.4
Technology Group:	Other	Technology:	Other
Symptom:	The link does not come up when the QSFP-SFPP-ADPT and 10G SR SFP+ is used in 8520-48XT ports 49,54.		
Condition:	When the optic+adapter combination QSFP-SFPP-ADPT and 10G SR SFP+ is used		

Parent Defect ID:	SLXOS-69102	Issue ID:	SLXOS-69365
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.2f
Technology Group:	Management	Technology:	SNMP - Simple Network Management Protocol
Symptom:	When trying to create a port configuration map using ifIndex as the key value, It is not possible to make a port configuration map because the key value(ifIndex) of the management port is not supported.		
Condition:	on SLX 9250 in 20.4.2a, issue is seen only after reloading, after reloading if SNMP walk is issued for Ifindex and later SNMP walk is issued for the IP Address table issue is not seen.		

Parent Defect ID:	SLXOS-68225	Issue ID:	SLXOS-69392
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 18r.1.00c

Technology Group:	Management	Technology:	CLI - Command Line Interface
Symptom:	Unexpected reload of the SLX device.		
Condition:	When we perform the CLI cmd "show bridge-domain" with presence of description has the special characters (Ex: <,>).		

Parent Defect ID:	SLXOS-69413	Issue ID:	SLXOS-69413
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.2
Technology Group:	Management	Technology:	SNMP - Simple Network Management Protocol
Symptom:	Link up/down interfaces are not generated for insight interface.		
Condition:	None.		

The following software defects are open in SLX-OS 20.4.2 as of September 2022:

Parent Defect ID:	SLXOS-50693	Issue ID:	SLXOS-50693
Severity:	S2 – Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.2.1
Technology Group:	Traffic Management	Technology:	Rate Limiting and Shaping
Symptom:	Display summation of forwarded and dropped packets for the confirmed counter		
Condition:	Applying Egress Rate Limit on bridge domain and checking the statistics with "show stat bridge-domain x"		

Parent Defect ID:	SLXOS-52599	Issue ID:	SLXOS-52599
Severity:	S3 – Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.2.1a
Technology Group:	Layer 3 Routing/Network Layer	Technology:	IPv6 Addressing
Symptom:	/127 prefix routes are accepted and traffic is dropped for them.		
Condition:	If route profile "ipv6-max-prefix64" is enabled on SLX 9150, or SLX 9250		

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-55243	Issue ID:	SLXOS-55243
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.2.2
Technology Group:	Security	Technology:	HTTP/HTTPS
Symptom:	Extreme switch bootup logs reports(sometimes) unavailable file (/usr/sbin/httpd.0)		
Condition:	Issue is seen after restarting HTTP(S) server multiple times		

Parent Defect ID:	SLXOS-55266	Issue ID:	SLXOS-55266
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.2.2
Technology Group:	Layer 2 Switching	Technology:	VLAN - Virtual LAN
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.		
Recovery:	No known recovery methods available.		

Parent Defect ID:	SLXOS-56576	Issue ID:	SLXOS-56576
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.2.2
Technology Group:	Other	Technology:	Other
Symptom:	On SLX 9740, when the user upgrades software from 20.2.2a to a later release, device becomes unreachable when accessing through an in-band port.		
Condition:	Software upgrade through in-band port.		

Parent Defect ID:	SLXOS-57174	Issue ID:	SLXOS-57432
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.2.3b
Technology Group:	Management	Technology:	Other
Symptom:	System memory usage increases slowly over time while being managed by EFA		
Condition:	Memory increase is seen when EFA frequently polls SLX for updates and health checks		

Parent Defect ID:	SLXOS-55211	Issue ID:	SLXOS-57437
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.2.2
Technology Group:	Management	Technology:	Other

Symptom:	Command is not successful and displays an error saying "Cannot resolve hostname"
Condition:	Usage of "copy" command with FTP protocol and IPV6 address .
Workaround:	Use IPv4 interface address

Parent Defect ID:	SLXOS-57721	Issue ID:	SLXOS-57721
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.2.2
Technology Group:	Management	Technology:	CLI - Command Line Interface
Symptom:	When we are pinging the destination with the domain name, output will be in decimal format(IP address instead of domain name)		
Condition:	When the firmware is SLXOS 20.1.2, SLXOS 20.2.1 or above ping will have the output in IP address instead of domain name.		

Parent Defect ID:	SLXOS-57738	Issue ID:	SLXOS-57738
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.1.2f
Technology Group:	MPLS	Technology:	IP over MPLS
Symptom:	Hops are not displayed in IPoMPLS trace		
Condition:	During traceroute of IPoMPLS traffic		

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-60970	Issue ID:	SLXOS-60970
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.3
Technology Group:	Layer 3 Routing/Network Layer	Technology:	BGP4 - IPv4 Border Gateway Protocol
Symptom:	On SLX 9640. while programming 500 flowspec rules to hardware, a BFD session is down due to "Detection Time Expired" which in turn terminates BGP session. Some BGP sessions flapping are due to this.		
Condition:	In scaled setup, 500 BGP-flow spec rules are programmed in hardware		

Parent Defect ID:	SLXOS-61208	Issue ID:	SLXOS-61283
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 supptomsave when the free memory is below 600Mb.		
Recovery:	Power off/on the device		

Parent Defect ID:	SLXOS-61458	Issue ID:	SLXOS-61527
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.2b
Technology Group:	Other	Technology:	Other
Symptom:	When the encrypted password string has “\” or “?” in the startup config, ? or \ is missed in the running-config after config restore and TPVM login will be failed		
Condition:	Encrypted password string should not have these charater “\” or “?”		
Workaround:	TPVM password command needs to be executed till the encrypted password string doesn't have the '\ and '?'.		
Recovery:	TPVM password command needs to be executed again to recover TPVM login		

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-61510	Issue ID:	SLXOS-62106
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.2c
Technology Group:	Management	Technology:	Software Installation & Upgrade
Symptom:	<p>a) If the device is reloaded, running-configs is not retained with auto persistence enable as dcmd database is not present.</p> <p>b) If the device is not reloaded and do a normal fwdl or fullinstall, no issue will be seen.</p>		
Condition:	If "firmware download + noreboot" is issued and later if the "firmware commit" is done and rebooted the device.		

Parent Defect ID:	SLXOS-62773	Issue ID:	SLXOS-62773
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.4
Technology Group:	Layer 3 Routing/Network Layer	Technology:	BGP4 - IPv4 Border Gateway Protocol
Symptom:	Some BGP EVPN ND routes are not flushed in BGP EVPN table alone when one MH node comes out from MM and traffic is not getting forwarded for those ND routes		
Condition:	This EVPN ND routes sync issue happens inconsistently when one MH node comes out from MM		

Parent Defect ID:	SLXOS-61178	Issue ID:	SLXOS-62976
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.2.3d
Technology Group:	Layer 3 Routing/Network Layer	Technology:	ICMP - Internet Control Message Protocol
Symptom:	Slowness on the ping responses on SLX.		
Condition:	On SLX node, CPU is busy with the higher priority packets.		

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-63182	Issue ID:	SLXOS-63182
Severity:	S2 - Major		

Product:	SLX-OS	Reported in Release:	SLXOS 20.3.4
Technology Group:	Layer 3 Routing/Network Layer	Technology:	BGP4 - IPv4 Border Gateway Protocol
Symptom:	Sometimes the switch reload is seen in a scaled environment.		
Condition:	In scaled environment and BGP PIC configuration is enabled, when routes are learned through BGP and are getting processed.		

Parent Defect ID:	SLXOS-63023	Issue ID:	SLXOS-63982
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.1.2g
Technology Group:	Management	Technology:	Software Installation & Upgrade
Symptom:	Device will boot to ONIE on bootrom, and waits for ever.		
Condition:	Doing firmware downgrade from 20.2.3 to 20.1.2 via USB.		
Workaround:	Use methods of firmware download, other than the USB.		

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-64255	Issue ID:	SLXOS-65234
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 18r.1.00j
Technology Group:	Management	Technology:	CLI - Command Line Interface
Symptom:	ARP not resolved for the peer entry		
Condition:	When link fault is cleared.		

Parent Defect ID:	SLXOS-65700	Issue ID:	SLXOS-65700
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.1
Technology Group:	MPLS	Technology:	MPLS VPLS - Virtual Private LAN Services
Symptom:	LACP configured Port channels may flap after clearing MACs.		

Condition:	Executing "clear mac dynamic" command on a Provider Edge node with more than 600 VPLS bridge domain configuration may cause LACP port channels to flap.
Workaround:	MACs can be cleared one at a time or clear MAC by one VLAN at a time

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-66290	Issue ID:	SLXOS-66290
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.1
Technology Group:	Layer 3 Routing/Network Layer	Technology:	VRRPv2 - Virtual Router Redundancy Protocol Version 2
Symptom:	SAG mac is not programmed in hardware.		
Condition:	ESI flap on port-channel interface.		

Parent Defect ID:	SLXOS-66262	Issue ID:	SLXOS-66385
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.4a
Technology Group:	Layer 3 Routing/Network Layer	Technology:	ARP - Address Resolution Protocol
Symptom:	Response is not seen for Neighbor Solicitation		
Condition:	On capturing packets using port mirroring while receiving ICMP6 Neighbor Solicitations at the rate of 1pkt/sec or more, a sporadic miss of Neighbor Advertisements (NA) is seen in the pcap file, though SLX responds with NA for each of them.		

Parent Defect ID:	SLXOS-66718	Issue ID:	SLXOS-66718
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.1
Technology Group:	Other	Technology:	Other
Symptom:	Observed the optics removed for all ports.		
Condition:	After multiple device reloads on 9740 device.		

Parent Defect ID:	SLXOS-66738	Issue ID:	SLXOS-66738
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.1
Technology Group:	Monitoring	Technology:	Port Mirroring
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-66740	Issue ID:	SLXOS-66740
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.1
Technology Group:	Layer 3 Routing/Network Layer	Technology:	BFD - BiDirectional Forwarding Detection
Symptom:	BFD daemon reboot may be seen.		
Condition:	Multiple times add and remove of EPGs from EFA.		

Parent Defect ID:	SLXOS-66741	Issue ID:	SLXOS-66741
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.1
Technology Group:	Layer 3 Routing/Network Layer	Technology:	Other
Symptom:	RH entries are exhausting. Utilizing more resources		
Condition:	Enabling Maintenance mode makes RH entries exhaust and utilize more resources		

Parent Defect ID:	SLXOS-66742	Issue ID:	SLXOS-66742
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.1
Technology Group:	Layer 2 Switching	Technology:	MCT - Multi-Chassis Trunking
Symptom:	BUM packets failed to go out over CCEP(cluster client endpoint) ports		
Condition:	Below is the sequence of trigger: -Maintenance mode enable -Vlan delete/add against CCEP Interface -Disable Maintenance mode		

Parent Defect ID:	SLXOS-64538	Issue ID:	SLXOS-66864
Severity:	S2 - Major		

Product:	SLX-OS	Reported in Release:	SLXOS 20.3.4
Technology Group:	Other	Technology:	Other
Symptom:	RME port may be down		
Condition:	Redundant management ports on slx 9740 may not come up for certain ports in certain scenarios		
Workaround:	Reconfigure breakout cable and sh/no shut to resolve the issue		
Recovery:	Reconfigure breakout cable and sh/no shut to resolve the issue		

Parent Defect ID:	SLXOS-66951	Issue ID:	SLXOS-66988
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.1
Technology Group:	Other	Technology:	Other
Symptom:	"Last Runtime error" in the "show tpvm status" after power cycle.		
Condition:	While trying to get the tpvm status before TPVM is coming to alive.		
Recovery:	After executing "show tpvm ip" with proper ip, issue will be resolved.		

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-67058	Issue ID:	SLXOS-67177
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.1
Technology Group:	Other	Technology:	Other
Symptom:	BGP IPV6 trap with BGP peer remote address in its varbind list.		
Condition:	During BGP IPV6 traps generation, the bgp peer remote address got stored in ipAddress value type.		

Parent Defect ID:	SLXOS-67321	Issue ID:	SLXOS-67373
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.1
Technology Group:	Security	Technology:	SSH - Secure Shell
Symptom:	After deleting the SSH key from flash it come up again after reload.		
Condition:	After deleting the SSH key from flash it come up again after reload.		

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-67049	Issue ID:	SLXOS-67663
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.		
Workaround:	Rebind ACL on the Source interface configured in flow based monitor session		

Parent Defect ID:	SLXOS-66416	Issue ID:	SLXOS-67705
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.2e
Technology Group:	Security	Technology:	User Accounts & Passwords
Symptom:	Unable to login to the device on SLX9740.		
Condition:	When following the password recovery method.		

Parent Defect ID:	SLXOS-66994	Issue ID:	SLXOS-67853
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-67492	Issue ID:	SLXOS-67928
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.1a
Technology Group:	Management	Technology:	Other
Symptom:	Failed to bring up the interfaces(0/49:1 & 0/54:1) on SLX9150-48XT.		
Condition:	With presence of QSFP-SFPP-ADPT and 10G SR SFP+ optics on 0/49 or 0/54.		

Parent Defect ID:	SLXOS-67965	Issue ID:	SLXOS-67965
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.2

Technology Group:	Monitoring	Technology:	RAS - Reliability, Availability, and Serviceability
Symptom:	Dcmd core file will be generated and system will boot up.		
Condition:	When support save is started if there is a network connectivity issue and file transfer takes a very long time.		

Parent Defect ID:	SLXOS-67837	Issue ID:	SLXOS-68001
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.2fb
Technology Group:	Layer 3 Routing/Network Layer	Technology:	BGP4 - IPv4 Border Gateway Protocol
Symptom:	In routing table, POD prefixes with /25 routes are not added instead the route which has next-hop points to gateway is added.		
Condition:	During POD reboot the routes are installed with gateway's next-hop address.		

Parent Defect ID:	SLXOS-68053	Issue ID:	SLXOS-68053
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.2
Technology Group:	Management	Technology:	SNMP - Simple Network Management Protocol
Symptom:	Delay in delivering SNMP traps		
Condition:	With SNMPv3 informs configuration		

Parent Defect ID:	SLXOS-67941	Issue ID:	SLXOS-68061
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.4b
Technology Group:	Monitoring	Technology:	Hardware Monitoring
Symptom:	SLXCLI route command "show hw route-info linecard 0" will show invalid values in the LPM output display.		
Condition:	When route command "show hw route-info linecard 0" is executed from SLXCLI.		

Parent Defect ID:	SLXOS-68101	Issue ID:	SLXOS-68101
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.2
Technology Group:	Layer 3 Routing/Network Layer	Technology:	Multi-VRF

Symptom:	During VRF delete, user notices brindge-domain VE number being displayed incorrectly as “Ve 0” in NSM raslogs as shown below: <date>, [NSM-1003], 109517, DCE, INFO, BL-1, interface Ve 0 is link down. <date>, [NSM-1001], 109518, DCE, INFO, BL-1, interface Ve 8150 is online. This is cosmetic display error, and no impact to VE functionality.
Condition:	During VRF delete, when all bounded VE interfaces goes for reset. During VE down, brindge-domain VE number will be displayed incorrectly as “Ve 0” in NSM raslogs. This issue is not observed for Vlan VEs.

Parent Defect ID:	SLXOS-68166	Issue ID:	SLXOS-68166
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.2
Technology Group:	Management	Technology:	SNMP - Simple Network Management Protocol
Symptom:	After changing any SNMP configuration, snmpwalk of Entity MIB, HA MIB and SW MIB may sometimes result in "No Such Instance".		
Condition:	After changing any SNMP configuration, snmpwalk of Entity MIB, HA MIB and SW MIB may sometimes result in "No Such Instance".		
Recovery:	Restart SNMP agent. This can be achieved by shut/noshut of SNMP service on any VRF. SLX(config)# snmp-server use-vrf mgmt-vrf shut SLX(config)# no snmp-server use-vrf mgmt-vrf shut		

Parent Defect ID:	SLXOS-66943	Issue ID:	SLXOS-68200
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 18r.1.00j
Technology Group:	MPLS	Technology:	LDP - Label Distribution Protocol
Symptom:	SLX ignores the LDP MAC withdrawal from juniper.		
Condition:	SLX ignores the LDP MAC withdrawal from juniper when juniper sets the IP address as 0.0.0.0.		

Parent Defect ID:	SLXOS-67899	Issue ID:	SLXOS-68239
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.2fb

Technology Group:	Layer 3 Routing/Network Layer	Technology:	BGP4 - IPv4 Border Gateway Protocol
Symptom:	Route entries with 2 next-hops are added where one next-hop is inactive.		
Condition:	During the POD reboot scenario, PODs advertise different next-hop address. Though one of the next-hop is detected as BFD DOWN, route with this next-hop still present in routing table.		
Recovery:	Execute "clear ip route <route>"		

Parent Defect ID:	SLXOS-67978	Issue ID:	SLXOS-68324
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.2.3ab
Technology Group:	Layer 3 Routing/Network Layer	Technology:	Other
Symptom:	Reload is seen in Fibagt module.		
Condition:	1 million BGP routes are advertised and withdrawn in a loop with a gap of 5 seconds in between.		

Parent Defect ID:	SLXOS-67850	Issue ID:	SLXOS-68337
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.2ae
Technology Group:	Layer 3 Routing/Network Layer	Technology:	BGP4 - IPv4 Border Gateway Protocol
Symptom:	BGP learnt best route is getting withdrawn and re-programmed once new additional path route is programmed.		
Condition:	Additional Path feature is enabled for BGP.		

Parent Defect ID:	SLXOS-67973	Issue ID:	SLXOS-68392
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.2d
Technology Group:	Layer 3 Routing/Network Layer	Technology:	BFD - BiDirectional Forwarding Detection
Symptom:	BFD session is not coming up		
Condition:	AMF POD reset		

Parent Defect ID:	SLXOS-68393	Issue ID:	SLXOS-68393
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.2

Technology Group:	Layer 3 Routing/Network Layer	Technology:	BFD - BiDirectional Forwarding Detection
Symptom:	BFD session will remain in down state.		
Condition:	BFD packet is transmitted with wrong UDP checksum value.		
Recovery:	Flap the IP interface once over which BFD Session is created.		

Parent Defect ID:	SLXOS-68416	Issue ID:	SLXOS-68416
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-68429	Issue ID:	SLXOS-68429
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.2
Technology Group:	Layer 3 Routing/Network Layer	Technology:	BFD - BiDirectional Forwarding Detection
Symptom:	Console message maybe seen - [RTM-1033], 65963, DCE, ERROR, BL-1, System Next-Hop limits exceeded. Current Profile Nexthop 2000. Configured Next-Hops 1003		
Condition:	When Clear bfd neighbors command is issued.		

Parent Defect ID:	SLXOS-68374	Issue ID:	SLXOS-68435
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.2fd
Technology Group:	Traffic Management	Technology:	Rate Limiting and Shaping
Symptom:	When high rate of IGMP traffic is received, device may experience OSPF and BFD sessions flaps.		
Condition:	When high rate of IGMP traffic is received with destination IP address 224.224.224.224.		

Parent Defect ID:	SLXOS-67423	Issue ID:	SLXOS-68447
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.4ab
Technology Group:	Layer 3 Routing/Network Layer	Technology:	BGP4 - IPv4 Border Gateway Protocol
Symptom:	BGP reload and sessions went down		

Condition:	redeployment of VMs that causes MACs to be advertised
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Parent Defect ID:	SLXOS-68498	Issue ID:	SLXOS-68498
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.2
Technology Group:	Management	Technology:	SNMP - Simple Network Management Protocol
Symptom:	Delay in delivering traps		
Condition:	When there is flood of traps observed that traps are delivered slowly		

Parent Defect ID:	SLXOS-68190	Issue ID:	SLXOS-68561
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.2fd
Technology Group:	IP Multicast	Technology:	MLD - Multicast Listener Discovery
Symptom:	Reload is observed in MLD module, followed by node reload and link flaps.		
Condition:	The node receives MLD traffic from peer (with a large length value), on an L3 interface with no multicast configuration.		

Defects Closed with Code Changes

The following software defects were closed in 20.4.2c with code change as of August 2023:

Parent Defect ID:	SLXOS-66842	Issue ID:	SLXOS-68900
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLX-OS 20.3.4a
Technology Group:	Security	Technology:	SSH - Secure Shell
Symptom:	Public key authentication does not work sometimes.		
Condition:	Running "ssh" exec mode command.		

Parent Defect ID:	SLXOS-68731	Issue ID:	SLXOS-68910
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLX-OS 18r.1.00m
Technology Group:	Security	Technology:	AAA - Authentication, Authorization, and Accounting
Symptom:	Disabling AAA accounting does not appear in accounting log.		
Condition:	Disabling AAA accounting.		

Parent Defect ID:	SLXOS-69102	Issue ID:	SLXOS-69365
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLX-OS 20.3.2f
Technology Group:	Management	Technology:	SNMP - Simple Network Management Protocol
Symptom:	When trying to create a port configuration map using ifIndex as the key value, It is not possible to make a port configuration map because the key value(ifIndex) of the management port is not supported.		
Condition:	on SLX 9250 in 20.4.2a, issue is seen only after reloading, after reloading if SNMP walk is issued for IfIndex and later SNMP walk is issued for the IP Address table issue is not seen.		

Parent Defect ID:	SLXOS-69413	Issue ID:	SLXOS-69413
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLX-OS 20.4.2
Technology Group:	Management	Technology:	SNMP - Simple Network Management Protocol
Symptom:	Link up/down interfaces are not generated for insight interface.		
Condition:	When TPVM STOP / START is configured		

Parent Defect ID:	SLXOS-70392	Issue ID:	SLXOS-70728
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Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLX-OS 20.3.4
Technology Group:	Layer 3 Routing/Network Layer	Technology:	ARP - Address Resolution Protocol
Symptom:	Invalid checksum in IPv6 NA packets.		
Condition:	When anycast IPv6 address is enabled.		

Parent Defect ID:	SLXOS-70482	Issue ID:	SLXOS-70825
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLX-OS 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-69717	Issue ID:	SLXOS-71022
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLX-OS 20.3.2ae
Technology Group:	Traffic Management	Technology:	Rate Limiting and Shaping
Symptom:	ICMP packets may cause drops once exception queue limit is hit in SLX 9540/9640 platforms.		
Condition:	When ICMP packets are sent with TTL1 with MTR or traceroute tool, they may cause drops once exception queue limit is hit in SLX 9540/9640 platforms.		

Parent Defect ID:	SLXOS-70795	Issue ID:	SLXOS-71073
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLX-OS 20.4.1cb
Technology Group:	Layer 3 Routing/Network Layer	Technology:	BGP4 - IPv4 Border Gateway Protocol
Symptom:	High volume BGP TTL1 packets received could cause BGP flaps.		
Condition:	BGP TTL1 packets may get classified to Exception queue with threshold limit hit which may result in BGP flaps due to IP-FEC issue.		

Parent Defect ID:	SLXOS-71300	Issue ID:	SLXOS-71300
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLX-OS 20.4.2
Technology Group:	Traffic Management	Technology:	QoS - Quality of Service
Symptom:	When tm voq-stats CLI command is executed, destination port shown as N/A when there are CPU discards.		

Condition:	During execution of "show tm voq-stat ingress-device all discards" command.
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Parent Defect ID:	SLXOS-69875	Issue ID:	SLXOS-71384
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLX-OS 18r.1.00m
Technology Group:	Layer 2 Switching	Technology:	LAG - Link Aggregation Group
Symptom:	Invalid "Time since last interface status change" value for Port-channel.		
Condition:	Member port flap.		

Parent Defect ID:	SLXOS-70559	Issue ID:	SLXOS-71570
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLX-OS 20.2.3ja
Technology Group:	Layer 2 Switching	Technology:	xSTP - Spanning Tree Protocols
Symptom:	When no switch-port is initiated on PO interface, the device might block traffic on other interface as it updates wrong h/w entry with drop.		
Condition:	When no switch-port is done on PO interface.		

Parent Defect ID:	SLXOS-70832	Issue ID:	SLXOS-71989
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLX-OS 20.4.1
Technology Group:	Management	Technology:	SNMP - Simple Network Management Protocol
Symptom:	Duplicate CPU/memory threshold monitoring SNMP traps seen.		
Condition:	CPU/memory usage in SLX reaching its configured threshold limits.		

The following software defects were closed in 20.4.2b with code change as of January 2023:

Parent Defect ID:	SLXOS-67618	Issue ID:	SLXOS-68725
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.2d
Technology Group:	Management	Technology:	SNMP - Simple Network Management Protocol
Symptom:	The OID to pull the serial number is different for the Extreme 8720 than other SLX platforms.		
Condition:	If Extreme 8720 tries to fetch the serial number via entPhysicalEntry.		

Parent Defect ID:	SLXOS-68853	Issue ID:	SLXOS-68853
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.2
Technology Group:	Management	Technology:	SNMP - Simple Network Management Protocol
Symptom:	When MM disable is configured, extremeMaintenanceModeExitTrap generated has extremeMaintenanceModeConvergenceStatus as timedout when show system maintenance CLI showed MCT in stage2 as completed.		
Condition:	When MM disable is configured.		

Parent Defect ID:	SLXOS-67923	Issue ID:	SLXOS-69097
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 18r.1.00j
Technology Group:	Management	Technology:	Other
Symptom:	REST interface does not support configuring "vlan any" for mac access-list.		
Condition:	If "vlan any" is specified for mac access-list in REST configuration API		

Parent Defect ID:	SLXOS-69409	Issue ID:	SLXOS-69409
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.2
Technology Group:	Management	Technology:	Other
Symptom:	HTTP(S) connection fails on reload		
Condition:	Before reload if web service is running on port 80 in all VRF and then https certificate is imported and web service is restarted in one vrf and not in others.		

Parent Defect ID:	SLXOS-69513	Issue ID:	SLXOS-69513
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.2
Technology Group:	Management	Technology:	SNMP - Simple Network Management Protocol
Symptom:	SNMP not responding to snmp operations		
Condition:	After the power cycle or reload with continuous snmpwalk		

Parent Defect ID:	SLXOS-69512	Issue ID:	SLXOS-69580
Severity:	S3 - Moderate		

Product:	SLX-OS	Reported in Release:	SLXOS 18r.1.00m
Technology Group:	Layer 3 Routing/Network Layer	Technology:	ARP - Address Resolution Protocol
Symptom:	When ARP requests are received on a physical IP interface, duplicated ARP responses will be sent by SLX 9540/SLX 9640.		
Condition:	When ARP request is received on a physical IP interface on SLX 9540/SLX 9640.		

Parent Defect ID:	SLXOS-69681	Issue ID:	SLXOS-69681
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.2
Technology Group:	Management	Technology:	Other
Symptom:	HTTP(S) connection fails on reload		
Condition:	Before reload if web service is running on port 80 in all VRF and then https certificate is imported and web service is restarted in one vrf and not in others.		

Parent Defect ID:	SLXOS-69585	Issue ID:	SLXOS-69792
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.1
Technology Group:	Management	Technology:	SNMP - Simple Network Management Protocol
Symptom:	FRU notifications not getting generated.		
Condition:	When FRU related events occurred.		

Parent Defect ID:	SLXOS-69335	Issue ID:	SLXOS-70140
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.1
Technology Group:	Management	Technology:	Other
Symptom:	HTTP(S) connection fails on reload		
Condition:	Before reload if web service is running on port 80 in all VRF and then https certificate is imported and web service is restarted in one vrf and not in others.		

Parent Defect ID:	SLXOS-69572	Issue ID:	SLXOS-70156
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.2a
Technology Group:	Management	Technology:	SNMP - Simple Network Management Protocol

Symptom:	Timer mismatch of SNMP GET call of OID bgpPeerFsmEstablishedTime when compared with CLI.
Condition:	BGP configuration should be present on the device and peer to be established. This issue is seen when we poll OID 1.3.6.1.2.1.15.3.1.16 using SNMP.

The following software defects were closed in 20.4.2a with code change as of October 2022:

Parent Defect ID:	SLXOS-68498	Issue ID:	SLXOS-68696
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.2
Technology Group:	Management	Technology:	SNMP - Simple Network Management Protocol
Symptom:	Delay in delivering traps		
Condition:	When there is flood of traps observed that traps are delivered slowly		

Parent Defect ID:	SLXOS-67614	Issue ID:	SLXOS-68705
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.1a
Technology Group:	Security	Technology:	PBR - Policy-Based Routing
Symptom:	IPv6 transit packets are getting dropped.		
Condition:	When L3 interface is configured with IPv4 and IPv6 addresses and IPv4 PBR rule is applied to drop all IPv4 packets.		

Parent Defect ID:	SLXOS-56576	Issue ID:	SLXOS-68717
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.2.2
Technology Group:	Other	Technology:	Other
Symptom:	On SLX 9740, when the user upgrades software from 20.2.2a to a later release, device becomes unreachable when accessing through an in-band port.		
Condition:	Software upgrade through in-band port.		

Parent Defect ID:	SLXOS-67910	Issue ID:	SLXOS-68809
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.1
Technology Group:	Layer 3 Routing/Network Layer	Technology:	IPv6 Addressing
Symptom:	SLX reloads, when we try to fetch the ipv6 link-local neighbors information.		

Condition:	When we try to retrieve the neighbor info from the SLX-CLI. "show ipv6 neighbor <link-local address>"
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Parent Defect ID:	SLXOS-64538	Issue ID:	SLXOS-69094
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.4
Technology Group:	Other	Technology:	Other
Symptom:	RME port may be down		
Condition:	Redundant management ports on slx 9740 may not come up for certain ports in certain scenarios		

Parent Defect ID:	SLXOS-68190	Issue ID:	SLXOS-69257
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.2fd
Technology Group:	IP Multicast	Technology:	MLD - Multicast Listener Discovery
Symptom:	Reload is observed in MLD module, followed by node reload and link flaps.		
Condition:	The node receives MLD traffic from peer (with a large length value), on an L3 interface with no multicast configuration.		

Parent Defect ID:	SLXOS-69386	Issue ID:	SLXOS-69386
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.2
Technology Group:	Management	Technology:	SNMP - Simple Network Management Protocol
Symptom:	SNMP GET gives wrong value for OID 1.3.6.1.2.1.31.1.1.1.17 (ifConnectorPresent)		
Condition:	None		

The following software defects were closed in 20.4.2 with code change as of September 2022:

Parent Defect ID:	SLXOS-62115	Issue ID:	SLXOS-62126
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.2b
Technology Group:	Management	Technology:	SNMP - Simple Network Management Protocol
Symptom:	SNMP trap is not sent for Loopback interface which is a VTEP, during cluster bring-up after a reload.		

Condition:	Reload of switch that is in a MCT cluster. SNMP trap is not sent when an interface comes up. Issue is seen when VTEP comes up as part of cluster bring-up after reload.
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Parent Defect ID:	SLXOS-65436	Issue ID:	SLXOS-65436
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.1
Technology Group:	Layer 3 Routing/Network Layer	Technology:	Other
Symptom:	Not able to delete a logical interface.		
Condition:	When a new BD/LIF was created after LIF limit is reached.		

Parent Defect ID:	SLXOS-66708	Issue ID:	SLXOS-66708
Severity:	S1 - Critical		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.1
Technology Group:	Other	Technology:	Other
Symptom:	observed the reload		
Condition:	when kernel panic is done on the device.		

Parent Defect ID:	SLXOS-66716	Issue ID:	SLXOS-66727
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.4a
Technology Group:	MPLS	Technology:	MPLS VPLS - Virtual Private LAN Services
Symptom:	show bridge-domain <BD#> logical-interface" displays the LIF as untagged, when it is configured as a tagged interface. This is cosmetic issue.		
Condition:	This is only cosmetic bug as traffic was working as tagged. When bridge-domain is configured with tagged interface, show command show it as untagged.		

Parent Defect ID:	SLXOS-66305	Issue ID:	SLXOS-66802
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.4
Technology Group:	Other	Technology:	Other
Symptom:	In 9640, other unrelated 1G ports go down when one particular 1G port is reseated.		
Condition:	In 9640, for example, if ports 0/13, 0/14, 0/16, 0/17 have 1G optics and are UP, and when 0/13 optic is reseated, 0/14 and 0/16 also go down.		

Parent Defect ID:	SLXOS-66829	Issue ID:	SLXOS-66836
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Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.2.3j
Technology Group:	Layer 2 Switching	Technology:	Other
Symptom:	Switch does not allow new tag-type or TPID to be configured.		
Condition:	While trying to configure a new tag-type the node throws an error - Exceeded the system max on how many different Tag Type can be configured.		

Parent Defect ID:	SLXOS-66826	Issue ID:	SLXOS-66850
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 session state mismatch between SLX and neighbor.		
Condition:	In SLX-9740,during BFD sessions bringup.		

Parent Defect ID:	SLXOS-66426	Issue ID:	SLXOS-66859
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.4
Technology Group:	Layer 2 Switching	Technology:	VLAN - Virtual LAN
Symptom:	'show interface <phy/po> switchport' output has incorrect Active VLANs after a VLAN is removed from the interface.		
Condition:	When a Vlan is added on to an interface in the order 'switchport trunk native-vlan <vlan-id>' and 'switchport trunk allowed vlan add <vlan-id>', due to cleanup issue, even after removing the vlan using 'switchport trunk allowed vlan remove <vlan-id>', vlan is still showing up in 'show interface <phy/po> switchport' output and also in LIF output associated to vlan.		

Parent Defect ID:	SLXOS-66893	Issue ID:	SLXOS-66940
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 enabled stays down.		
Condition:	In SLX-9250/SLX-9150/SLX-8720, BFD Sessions over CEP interface enabled with "bfd-software-session".		

Parent Defect ID:	SLXOS-67323	Issue ID:	SLXOS-67333
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.1

Technology Group:	Layer 3 Routing/Network Layer	Technology:	VRRPv2 - Virtual Router Redundancy Protocol Version 2
Symptom:	TCP packets received from a VxLAN tunnel maybe copied to CPU and forwarded as duplicate packets to host.		
Condition:	When a specific TCP packet with the Acknowledgement number matches with a certain pattern, the packet maybe incorrectly copied to CPU and forwarded as duplicate packet to end host.		

Parent Defect ID:	SLXOS-67007	Issue ID:	SLXOS-67379
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.2fa
Technology Group:	Layer 3 Routing/Network Layer	Technology:	ARP - Address Resolution Protocol
Symptom:	Some of the BFD sessions are going down		
Condition:	SRIOV ports are connected with a Leaf pair in Active-Standby mode. When the port connected to active SRIOV is shutdown, some of the BFD sessions go down.		

Parent Defect ID:	SLXOS-67430	Issue ID:	SLXOS-67640
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.2
Technology Group:	Traffic Management	Technology:	QoS - Quality of Service
Symptom:	When IGMP packets are received at high rate via VXLAN tunnel, OSPF sessions may flap.		
Condition:	When IGMP packets are received at high rate via VXLAN tunnel.		

Parent Defect ID:	SLXOS-66927	Issue ID:	SLXOS-67670
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.4
Technology Group:	Monitoring	Technology:	OAM - Operations, Admin & Maintenance
Symptom:	SLX 9540/9640 does not reply with DMR pkts when CFM y.1731 DMM pkts are received from other devices.		
Condition:	SLX 9540/9640 does not reply with DMR response when CFM y.1731 DMM pkts are received from other devices.		

Parent Defect ID:	SLXOS-67528	Issue ID:	SLXOS-67676
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.2d

Technology Group:	Layer 2 Switching	Technology:	MCT - Multi-Chassis Trunking
Symptom:	May encounter continuous Tx Discard count increment on Ports.		
Condition:	Reported behavior specific to MCT-ICL ports on SLX Leaf switch.		

Parent Defect ID:	SLXOS-67588	Issue ID:	SLXOS-67765
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.4ab
Technology Group:	Layer 2 Switching	Technology:	MCT - Multi-Chassis Trunking
Symptom:	May encounter continuous Tx Discard count increment on Ports.		
Condition:	Reported behavior specific to MCT-ICL ports on SLX Leaf switch.		

Parent Defect ID:	SLXOS-67934	Issue ID:	SLXOS-67946
Severity:	S2 - Major		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.1b
Technology Group:	Management	Technology:	Other
Symptom:	Upon the boot up of SLX, system persists directory file /TPVM/tpvm_disk_pool/		
Condition:	When "write erase all" issued without issuing command, "tpvm uninstall force"		

Parent Defect ID:	SLXOS-67995	Issue ID:	SLXOS-68182
Severity:	S3 - Moderate		
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.1
Technology Group:	Layer 3 Routing/Network Layer	Technology:	BGP4 - IPv4 Border Gateway Protocol
Symptom:	BGP EVPN MH AD-per-EVI route incorrectly setting VNI value to 0 rather than global value		
Condition:	For BGP EVPN MH, when generated AD-per-EVI route contains VNI field in the NLRI		

Defects Closed without Code Changes

The following software defects were closed in 20.4.2b without code changes as of January 2023.

Parent Defect ID:	SLXOS-68058	Issue ID:	SLXOS-69705
Reason Code:	Already Implemented	Severity:	S3 - Moderate
Product:	SLX-OS	Reported in Release:	SLXOS 20.2.3j
Technology Group:	Management	Technology:	CLI - Command Line Interface
Symptom:	SLX reloads when 'show media' command is executed		
Condition:	On 'show media' command execution when some SFPs are plugged in.		

The following software defects were closed in 20.4.2a without code changes as of October 2022.

Parent Defect ID:	SLXOS-67978	Issue ID:	SLXOS-68318
Reason Code:	Insufficient Information	Severity:	S3 - Moderate
Product:	SLX-OS	Reported in Release:	SLXOS 20.2.3ab
Technology Group:	Layer 3 Routing/Network Layer	Technology:	Other
Symptom:	Reload is seen in Fibagt module.		
Condition:	1 million BGP routes are advertised and withdrawn in a loop with a gap of 5 seconds in between.		

Parent Defect ID:	SLXOS-67965	Issue ID:	SLXOS-68682
Reason Code:	Not Reproducible	Severity:	S2 - Major
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.2
Technology Group:	Monitoring	Technology:	RAS - Reliability, Availability, and Serviceability
Symptom:	Dcmd core file will be generated and system will boot up.		
Condition:	When support save is started if there is a network connectivity issue and file transfer takes a very long time.		

The following software defects were closed in 20.4.2 without code changes as of September 2022.

Parent Defect ID:	SLXOS-63118	Issue ID:	SLXOS-63118
Reason Code:	Not Reproducible	Severity:	S2 - Major
Product:	SLX-OS	Reported in Release:	SLXOS 20.3.4
Technology Group:	Other	Technology:	Other
Symptom:	2nd and 3rd BO ports of 8520-48XT and 8520-48Y do not come up when OIR is done and they are connected to Spirent or a SLX 9150 respectively.		
Condition:	When OIR is done on 8520-48XT or 8520-48Y devices.		

Workaround:	Remove and configure the breakout config or reload the device.
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Parent Defect ID:	SLXOS-66291	Issue ID:	SLXOS-66291
Reason Code:	Working as Designed	Severity:	S2 - Major
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.1
Technology Group:	Layer 3 Routing/Network Layer	Technology:	BGP4 - IPv4 Border Gateway Protocol
Symptom:	Peer group command not accepted under router bgp user vrf		
Condition:	While trying to add peer group for BGP under user vrf.		

Parent Defect ID:	SLXOS-66494	Issue ID:	SLXOS-66494
Reason Code:	Not a Software Defect	Severity:	S1 - Critical
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.1
Technology Group:	Other	Technology:	Other
Symptom:	With FEC mode RS-FEC/FC-FEC configuration, the link is not coming up.		
Condition:	When configuring the "no shutdown" on the port, with FEC mode as RS-FEC /FC-FEC.		

Parent Defect ID:	SLXOS-66686	Issue ID:	SLXOS-66686
Reason Code:	Already Implemented	Severity:	S3 - Moderate
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.1
Technology Group:	Other	Technology:	Other
Symptom:	"show efa status" is not getting the status from EFA and throwing the error		
Condition:	While doing multiple EFA upgrade without "no efa deploy", "show efa status" is not getting the status from EFA		
Workaround:	Execute "no efa deploy" before doing the "efa deploy" on the node with already EFA deployed.		

Parent Defect ID:	SLXOS-67955	Issue ID:	SLXOS-67955
Reason Code:	Question Answered	Severity:	S2 - Major
Product:	SLX-OS	Reported in Release:	SLXOS 20.4.2
Technology Group:	MPLS	Technology:	MPLS Traffic Engineering
Symptom:	LSP is not coming up between MLX and SLX devices.		
Condition:	SLX MPLS TE is not able to find link between MLX and SLX. Also seeing the delay on hello packets.		