July 2021

Extreme SLX-OS 20.3.2a

Release Notes

Supporting ExtremeRouting and ExtremeSwitching SLX 9740, SLX 9640, SLX 9540, SLX 9150, and SLX 9250

Part Number 9037125-01 Rev AA

Contents

Document History

Version	Summary of changes	Publication date
1.0	Initial version for 20.3.2a	July 2021

Preface

Getting Help

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

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

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

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

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

Document Feedback

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

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

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

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

Release Overview

Release SLX-OS 20.3.2a provides the following features:

- Single folder/directory support for supportsave collection
- TPVM - NETConf RPC to perform TPVM image sanity
- TPVM Upgrade enhancements – TPVM migration on legacy to config mode
- BGP multihoming with EVPN VxLAN – additional capabilities

Release SLX-OS 20.3.2 provides the following features:

- BGP Multi-homing with EVPN VxLAN
- BGP neighbor teardown-restart-interval
- Allowing 64-character length VRF name
- TPVM Enhancements for EFA use case.
    - TPVM configuration persistence.
    - SLX OS Image upgrade
    - SLX OS configuration snapshot for upgrade and rollback.
- Connection limit option for IP ACL (Management port only)
- BFD timer config at global for both single hop and multi-hop sessions
- Secure (TLS 1.2) support for gNMI streaming
- RSPAN and ERSPAN support for VLAN mirroring
- Optimize Supportsave creation in low memory conditions
- Strong encryption support
- Confidentiality and integrity of O&M traffic

Release SLX-OS 20.3.1 provides the following features:

- Support for BGP Resource Public Key Infrastructure Prefix Origin Validation
- Added support for Unified Routing
- Maintenance Mode support is now available for all devices
- Enhanced Transmission Selection is now supported
- Forced password change on first login is now enforced
- Up to 6 DNS name servers can now be assigned
- Enhanced reporting for VE Statistics for SLX 9540 and SLX 9640
- Option available to drop BPDUs on L2 ports of the switch

Behavior Changes

The following are behavioral changes for SLX-OS 20.3.2a.

- Supportsave files will be copied under a **sub directory** under the remote path provided in the support save command. *Please refer the SLX OS 20.3.2a Manageability Guide for more information.*

The following are behavioral changes for SLX-OS 20.3.2.

- TPVM CLI commands are now available under config mode.
- LIF scale reduced to 13150 with EVPN MH feature addition.
- Supportsave threshold for low memory condition is changed from 200 MB to 500 MB.

Software Features

The following key software features are added in the SLX-OS 20.3.2a release.

Feature Name	Supported SLX Platforms	Description
Single folder/directory support for supportsave collection	All Platforms	Provide support to create a sub directory under the remote path provided in the support save command
TPVM - NETConf RPC to perform TPVM image sanity	All Platforms	Augments current “tpvm upgrade” command to sanitize image before downloading for parameters such as length, version, host access, user/credential authentication
TPVM Upgrade enhancement – TPVM migration support	All Platforms	Migrate the TPVM configurations done using legacy exec commands (in releases before SLX OS 20.3.2), to running-config, during the firmware download to SLX OS 20.3.2a.
BGP multihoming with EVPN VxLAN	SLX 9150, SLX 9250	Additional EVPN Multihoming support for 1) Core Isolation (Disable case) 2) IRB in multi-homed topology - L3 VNI 3) Maintenance Mode

The following key software features are added in the SLX-OS 20.3.2 release.

Feature Name	Supported SLX Platforms	Description
BGP Multi-homing with EVPN VxLAN	SLX 9150 SLX 9250	Supporting BGP EVPN VxLAN based multi-homing clients.
BGP neighbor teardown-restart-interval	All Platforms	To support automatic restart of BGP neighbor restarts after a teardown due to prefix-limit.
Allowing 64-character length VRF name	All Platforms	VRF name length is increased to 64 characters.

Feature Name	Supported SLX Platforms	Description
TPVM Image Upgrade via EFA and Configuration Persistence	All Platforms	TPVM Image can be upgrade via EFA and configuration preserved.
Connection limit option for IP ACL (Management port only)	All Platforms	Number of connection per-IP can be limited via ConnTrack module in IP tables.
BFD timer config at global for both single hop and multi-hop sessions	All Platforms	BFD timer value can be configured at global level for all session.
Secure (TLS 1.2) support for gNMI streaming	All Platforms	Interface counters can be streamed up via gNMI to gNMI clients.
RSPAN and ERSPAN support for VLAN mirroring	SLX 9150 SLX 9250 SLX 9740	Support port and flow based span
Strong encryption support	All Platforms	Capability to control the TLS version used by SLX-OS services
Confidentiality and integrity of O&M traffic	All Platforms	4096-bit SSH host key support.
Optimize Supportsave creation in low memory conditions	All Platforms	Depending on low system memory conditions hitting threshold (500 MB), support save creation will automatically move to basic support save.

Feature Name	Supported SLX Platforms	Description
TPVM Configuration Persistence	All Platforms	New config mode added to `deploy tpvm` and related TPVM configurations. When these TPVM configuration are persisted at SLX-OS config database too, they can be displayed by `show running-config tpvm` and other `show` commands Earlier, TPVM could be installed using the `tpvm install` or `tpvm deploy` or other similar commands. The configurations were applied using the `tpvm config` set of commands. These applied configurations were retained by the TPVM Guest OS. These configurations were available for use only when the switch rebooted. But across upgrade and SLX switch RMA, manual re-applying was needed on new installation. In the new mode, along with the new TPVM Upgrade CLIs, upgrade or RMA like operation becomes seamless and the device admin need not re-apply previously configured TPVM settings. For more information on configuring TPVM Configuration Persistence, refer the 'Management Configuration Guide' for SLX-OS 20.3.2. Note: Both modes of installation are allowed for backward compatibility, However, only one TPVM can be installed. It is recommended to use one of these two modes and not mix.
TPVM Upgrade	All Platforms	New CLI to download new TPVM image. If SLX had any previously deployed TPVM as per new mode introduced in this release SLX-OS 20.3.2, then that will be stop/uninstalled and new image shall be deployed and previously set TPVM configurations will be applied too. For more information on configuring TPVM Configuration Persistence, refer the 'Management Configuration Guide' for SLX-OS 20.3.2.

Feature Name	Supported SLX Platforms	Description
TPVM snapshot	All Platforms	Installed TPVM snapshot (backup) can be taken manually or as part of `tpvm upgrade` CLI. If admin finds upgrade failed or for any reason, TPVM instance can be reverted to backup instance. Note: in-between configs should not be updated and only one snapshot instance is supported. For more information on configuring TPVM Configuration Persistence, refer the 'Management Configuration Guide' for SLX-OS 20.3.2.

CLI Commands

The following commands were added, modified, or deprecated for the 20.3.2a program

New commands for 20.3.2a

- tpvm fileinfo
- tpvm download
- core-isolation-disable
- lacp system-id

Modified commands for 20.3.2a

- neighbor password
- ip ospf md5-authentication
- area authentication
- ip vrrp-extended auth-type
- auth-key
- isis auth-key
- tpvm upgrade

Deprecated commands for 20.3.2a

- neighbor accept-lldp-neighbors

The following commands were added, modified, or deprecated for the 20.3.2 program

New commands for 20.3.2

- auto-boot (tpvm mode)
- Ethernet-segment
- Esi
- gnmi server
- interface management (tpvm mode)
- ip route static bfd
- management-security
- neighbor <IPv4/v6> maximum-prefix <maxprefixcount> teardown restart-interval <interval>
- password (tpvm mode)
- ssl-profile
- tls min-version
- tpvm (mode)
- hostname (tpvm mode)
- timezone (tpvm mode)
- dns (tpvm mode)
- ntp (tpvm mode)
- ldap (tpvm mode)
- ldap ca-cert (tpvm mode)
- trusted-peer (tpvm mode)
- tpvm deploy (tpvm mode)

- tpvm snapshot
- tpvm upgrade (tpvm mode)

Modified commands for 20.3.2

- acl-mirror
- crypto ca import-pkcs
- crypto import
- ip access-list extended
- ipv6 access-list extended
- ip route static bfd
- ssh server key
- show ip/ipv6 bgp neighbor
- show tpvm status

  It adds one additional line of information to indicate "*additional status*".

  E.g.

  ```
  SLX# show tpvm status
  SSH and Sudo passwordless      :Enabled
  AutoStart                 :Enabled
  Tpvm status                 :Running
  Tpvm version                :4.2.5
  Tpvm additional status      :normal
  ```

  It is mainly set to **normal**, implying rest of above fields are normal. But if upgrade or deploy, is issued, then it reflects transiting state of that operation. For success completion, it again gets value "normal" else reflect error state.
- switchport access
- switchport trunk allowed

Deprecated commands for 20.3.2

- qos cos cos_value

The following commands were added, modified, or deprecated for the 20.3.1 program

New commands for 20.3.1

- bestpath prefix-validation disable
- bestpath prefix-validation disallow-invalid
- cee
- cee-map
- import l2vpn evpn reoriginate
- import vpnv4 unicast reoriginate
- import vpnv6 unicast reoriginate
- match rpki
- neighbor announce rpki state
- priority-group-table

- priority-table
- rpki priority
- server ssh
- server tcp
- show cee-map default

Modified commands for 20.3.1

- bpdu-drop-enable
- clear ip bgp rpki server
- clear counters
- clear counters access-list
- ip dns
- ip access-list
- password-attributes
- profile counters
- monitor session
- show lldp neighbors
- show system maintenance
- show ip bgp rpki details
- show ip bgp rpki server summary
- show ip bgp rpki table
- show ip bgp routes
- show hardware profile
- show interface stats detail
- show access-list
- show statistics access-list
- system maintenance
- system maintenance turn-off

Deprecated commands for 20.3.1

- match uda
- seq (deny/permit rules in UDAs)
- set uda interface null0
- show running-config uda access-list
- show running-config uda-key profile
- uda access-group
- uda access-list
- uda policy route-map
- uda-key profile
- uda-offsets
- uda-profile-apply

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
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
XN-ACPWR-750W-R	AC 750W PSU, Back to Front Airflow supported on VSP 7400, SLX 9150, SLX 9250, X695
XN-DCPWR-750W-F	DC 750W PSU, Front to Back Airflow supported on VSP 7400, SLX 9150, SLX 9250, X695
XN-DCPWR-750W-R	DC 750W PSU, Back to Front Airflow supported on VSP 7400, SLX 9150, SLX 9250, X695
XN-FAN-001-F	Front to back Fan for use in VSP 7400, SLX 9150, SLX 9250, X695
XN-FAN-001-R	Back to Front Fan for use in VSP 7400, SLX 9150, SLX 9250, X695
XN-4P-RKMT298	Four post rack mount rail kit supported on VSP 7400, SLX 9150, SLX 9250, X695
XN-2P-RKMT299	Two post rack mount rail kit supported on VSP 7400, SLX 9150, SLX 9250, X695

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

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

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

100G	SR4	RS-FEC	RS-FEC Disabled
100G	LR4	Disabled	RS-FEC Disabled
25G(Native)	DAC	Auto-Neg	RS-FEC FC-FEC Auto-Neg Disabled
25G(Native)	SFP	FC-FEC	RS-FEC FC-FEC Disabled

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 20.3.2a, see the *Extreme SLX-OS Software Upgrade Guide*.

Image files

Download the following images from www.extremenetworks.com.

Image file name	Description
SLX-OS_20.3.2a.tar.gz	SLX-OS 20.3.2a software
SLX-OS_20.3.2a_mibs.tar.gz	SLX-OS 20.3.2a MIBS
SLX-OS_20.3.2a.md5	SLX-OS 20.3.2a md5 checksum
SLX-OS_20.3.2a-digests.tar.gz	SLX-OS 20.3.2a sha checksum
SLX-OS_20.3.2a-releasenotes.pdf	Release Notes

Notes:

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

SLX 9740

To / From	20.2.2x	20.2.3x	20.3.1	20.3.2/a
20.2.1a	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use fullinstall	Use fullinstall
20.2.2x	Use the normal Firmware Download / coldboot*	Use the normal Firmware Download / coldboot	Use fullinstall	Use fullinstall
20.2.3x	Use the normal Firmware Download / coldboot	NA	Use fullinstall	Use fullinstall
20.3.1	Use fullinstall	Use fullinstall	NA	Use the normal Firmware Download / coldboot
20.3.2/a	Use fullinstall	Use fullinstall	Use the normal Firmware Download / 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 there for upgrade/downgrade between 20.2.3x and 20.3.x releases.

SLX 9540 and SLX 9640

To / From	20.2.2x	20.2.3x	20.3.1	20.3.2/a
18r.2.00bc	For SLX 9540: 1. First upgrade to 20.1.2e using fullinstall. 2. Then upgrade to 20.2.2x using fullinstall. For SLX 9640: Use fullinstall.	For SLX 9540: 1. First upgrade to 20.1.2e using fullinstall. 2. Then upgrade to 20.2.3x using fullinstall. For SLX 9640: Use fullinstall.	For SLX 9540: 1. First upgrade to 20.1.2e using fullinstall. 2. Then upgrade to 20.3.1 using fullinstall. For SLX 9640: Use fullinstall.	For SLX 9540: 1. First upgrade to 20.1.2e using fullinstall. 2. Then upgrade to 20.3.2 using fullinstall. For SLX 9640: Use fullinstall.
20.1.1	For SLX 9540: 1. First upgrade to 20.1.2e using fullinstall. 2. Then upgrade to 20.2.2x using fullinstall. For SLX 9640: Use fullinstall.	For SLX 9540: 1. First upgrade to 20.1.2e using fullinstall. 2. Then upgrade to 20.2.3x using fullinstall. For SLX 9640: Use fullinstall.	For SLX 9540: 1. First upgrade to 20.1.2e using fullinstall. 2. Then upgrade to 20.3.1 using fullinstall. For SLX 9640: Use fullinstall.	For SLX 9540: 1. First upgrade to 20.1.2e using fullinstall. 2. Then upgrade to 20.3.2 using fullinstall. For SLX 9640: Use fullinstall.
20.1.2e, g	Use fullinstall	Use fullinstall	Use fullinstall	Use fullinstall
20.2.1a	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use fullinstall	Use fullinstall
20.2.2x	NA	Use the normal Firmware Download / coldboot	Use fullinstall	Use fullinstall
20.2.3x	Use the normal Firmware Download / coldboot	NA	Use fullinstall	Use fullinstall
20.3.1	Use fullinstall	Use fullinstall	NA	Use the normal Firmware Download / coldboot
20.3.2/a	Use fullinstall	Use fullinstall	Use the normal Firmware Download / coldboot	NA

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
20.1.1	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use fullinstall	Use fullinstall
20.1.2x	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use fullinstall	Use fullinstall
20.2.1x	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use fullinstall	Use fullinstall
20.2.2x	Use the normal firmware download / coldboot*	Use the normal firmware download / coldboot	Use fullinstall	Use fullinstall
20.2.3x	Use the normal firmware download / coldboot	NA	Use fullinstall	Use fullinstall
20.3.1	Use fullinstall	Use fullinstall	NA	Use the normal firmware download / coldboot
20.3.2/a	Use fullinstall	Use fullinstall	Use the normal firmware download / coldboot	NA

*within the patches

SLX TPVM Support Matrix for 9150 and 9250

SLX Build	TPVM – Fresh Install Supported	EFA
20.2.2	TPVM-4.1.1	EFA-2.3
20.2.2a	TPVM-4.1.2	EFA-2.3.x
20.2.2b	TPVM-4.1.2	EFA-2.3.x
20.2.3	TPVM-4.2.2	EFA-2.4.x, EFA-2.3.x
20.2.3a	TPVM-4.2.3	EFA-2.4.x, EFA-2.3.x, EFA-2.5x *
20.3.1	TPVM-4.2.4	EFA-2.4.x
20.3.2/a	TPVM-4.2.5	EFA-2.4.x, EFA-2.5x

* EFA-2.4.x feature parity in 20.2.3d

Upgrading the TPVM without configuration persistence (Legacy upgrade method)

Upgrading TPVM from 4.0.x or 4.1.x to 4.2.x

Consider the following when upgrading TPVM from 20.1.2x , 20.2.2/x to 20.2.3x, 20.3.1 to 20.3.2

- 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, take the following steps:
  - Upgrade to SLX-OS 20.3.x, 20.2.3/x with existing TPVM continue to run
  - Remove existing TPVM using the **tpvm stop** and **tpvm uninstall** commands.
  - Copy the new tpvm-4.2.x-0.amd64.deb to /tftpboot/SWBD2900 on the SLX device.
  - Install TPVM 4.2.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`.

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, as a best practice make a backup and then delete the old disks. Use the **tpvm disk remove name <disk name>** command, which requires TPVM to be started if not already running.
- Uninstall the older TPVM using the **tpvm stop** and **tpvm uninstall** command.
- Install the new TPVM package using the **tpvm install** or **tvpm deploy** command.

Alternatively, after the 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 backup of EFA installation."**

Notes:

Security updates are added to the TPVM, there is a change in size of TPVM image to ~1.95 GB. This TPVM package contains Ubuntu security patches available up to 10th May 2021.
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 20.3.2

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 plan to delete disk vdb (i.e. 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 new mode does not support new disk creation. Old "tpvm disk add" can be used.
4. As simple example for new mode deploy:
    a. Copy new TPVM debian Image under /tftpboot/SWBD2900. Only one file should be there and no subfolder.
    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 if say “tpvm config hostname xyz” command is used. It will still work and apply on TPVM instance. But this config shall not be persisted in SLX Database and will become inconsistent. Same true for any other config done in old way.
   b. As in above example, password, management config should always be set before deploy. If required later, refer User Guide and use tpvm stop, start for such update/maintenance reason.
   c. tpvm uninstall [force], if used, then you shall need “no deploy” and deploy, in new mode.

For more information on configuring TPVM Configuration Persistence, refer the 'Management Configuration Guide' for SLX-OS 20.3.2.

TPVM Migration

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

Consider the following when upgrading TPVM from SLX OS 20.1.2x, SLX OS 20.2.2/x, SLX OS 20.3.x to SLX OS 20.3.2a

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` … "

Limitations and Restrictions

TPVM Migration

When the 'copy default-config startup-config" command is executed and the system is reloaded, the installed TPVM will be removed. No error messages will be displayed when the TPVM is removed. DCMD logs are generated for debugging purposes and are collected in *supportsave.*

TPVM removal can be validated by executing the '`show tpvm status`' command.

This feature, introduced in SLX-OS version 20.3.2a, migrates some of the TPVM configurations made using the Privilege Execution Mode of the SLX-OS. These changes are now added to the SLX-OS's running configuration automatically.

This migration happens the first time the SLX device is upgraded to SLX-OS version 20.3.2a. This is a one time activity and this action will become obsolete in the next version.

Note: No user action is required for this migration to happen.

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 when configuring using the Privilege Execution Mode commands.
tpvm config ldap ca-cert	Not Migrated	
tpvm config trusted-peer	Not Migrated	All trusted-peer configurations are not migrated.

Port macro restrictions on breakout port configuration on SLX 9740

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

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

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

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

PM Configuration	Examples
If 4x25G breakout is configured, no 40G or 4x10G.	• If 0/1 is configured as 4x25G breakout, you cannot configure 0/3 or 0/4 as 40G. • If 0/1 is configured as 4x25G breakout, you cannot configure 0/3 as 4x10G breakout. • If 0/3 is configured as 4x25G breakout, you cannot configure 0/1 or 0/2 as 40G. • If 0/3 is configured as 4x25G breakout, you cannot configure 0/1 as 4x10G breakout.

FEC mode configuration

- The **no fec mode** configuration commands are not supported, users will not be able to go the default FEC mode due to this limitation, users can do explicit FEC configuration

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 is not working 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.
- The **show running ip prefix-list <name>** command can take a long time to complete in a scaled prefix-list configuration.
- 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 supports 16K flowset entries for SLX 9740, and 32K flowset entries for SLX 9150/9250.

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.

BGP Dynamic Neighbor

- MD5 password option is not supported for BGP dynamic neighbors.

Open Defects

The following software defects are open in SLX OS 20.3.2a as of **July 2021**:

Parent Defect ID:	SLXOS-58470	**Issue ID:**	SLXOS-59824
Severity:	S3 – Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3b
Technology Group:	Other	**Technology:**	Other
Symptom:	EFA fails to detect the TPVM and assumes the device as a standalone server. As TPVM has only 4GB of memory, the minimum requirement of 8GB on standalone server is not met and the installation fails.		
Condition:	This issue is seen when the disk pool for TPVM is not started and vdb disk is not attached to the TPVM.		
Workaround:	[root@B145-R2]# virsh pool-info tpvm_disk_pool Name: tpvm_disk_pool UUID: bd38c6ac-8ca5-4669-9b91-665812488df8 State: inactive Persistent: yes Autostart: yes [root@B145-R2]# virsh pool-start tpvm_disk_pool error: Failed to start pool tpvm_disk_pool error: cannot open directory '/TPVM/tpvm_disk_pool': No such file or directory [root@B145-R2]# cd /TPVM/ [root@B145-R2]# ls BVM_TPVM.xml* SWBD2900/ id_rsa.pub tpvm_version BVM_TPVM_DISK_POOL-common.xml* TPVM.img* interfaces BVM_TPVM_SVCPORT.xml* TPVM.xml* pwless SLX_TPVM.xml* extra/ tpvm_enable manually created a folder to recover [root@B145-R2]# mkdir tpvm_disk_pool [root@B145-R2]# virsh pool-start tpvm_disk_pool Pool tpvm_disk_pool started [root@B145-R2]# virsh pool-info tpvm_disk_pool Name: tpvm_disk_pool UUID: bd38c6ac-8ca5-4669-9b91-665812488df8 State: running Persistent: yes Autostart: yes Capacity: 54.00 GiB Allocation: 0.00 B Available: 54.00 GiB		

Parent Defect ID:	SLXOS-59453	**Issue ID:**	SLXOS-59982
Severity:	S3 – Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2
Technology Group:	Other	**Technology:**	Other
Symptom:	Device reload.		
Condition:	Issue the copy support save command when the free memory is below 350Mb		

Parent Defect ID:	SLXOS-59070	**Issue ID:**	SLXOS-60120
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3b
Technology Group:	Management	**Technology:**	Software Installation & Upgrade
Symptom:	'firmware commit' fails after executing 'firmware download' command with 'noreboot' option.		
Condition:	When 1) upgrade from 20.1.2x to 20.2.x with 'noreboot' option. 2) upgrade/downgrade between 20.2.x releases and between 20.3.x releases with 'noreboot' option.		

Parent Defect ID:	SLXOS-59700	**Issue ID:**	SLXOS-60129
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3c
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BFD - BiDirectional Forwarding Detection
Symptom:	UDP packets with destination port 4784 may be dropped by transit SLX-9740 node.		
Condition:	When packets are sent between end hosts with UDP destination port 4784 via MCT on SLX-9740 node, then packets will be trap to CPU and will not pass to final destination host.		

Parent Defect ID:	SLXOS-60150	**Issue ID:**	SLXOS-60242
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2b
Technology Group:	Other	**Technology:**	Other
Symptom:	Getting "[NSM-1042], 34187, DCE, WARNING, SLX, Unqualified SFP transceiver for interface Ethernet " message on the console.		
Condition:	Insert the QSFP28 PN: SPTSBP3PTCSM006 or reload the device with the QSFP28 inserted.		

Parent Defect ID:	SLXOS-60361	**Issue ID:**	SLXOS-60361

Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2a
Technology Group:	Layer 2 Switching	**Technology:**	VXLAN - Virtual Extensible LAN
Symptom:	ARP packets received from remote Leaf node may be dropped in multihomed leaf node.		
Condition:	In EVPN multihoming deployment, in some cases, based on the order of VxLAN tunnel creation between multihomed leaf node and the remote node, the SLX device may not forward BUM packets received from remote leaf node to local multihomed clients.		

Parent Defect ID:	SLXOS-60387	**Issue ID:**	SLXOS-60387
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	Other
Symptom:	Module reload seen under specific conditions in RIB		
Condition:	When different links to the same NH router are brought up as different BGP peers, in some cases the RIB reload might be seen.		

Parent Defect ID:	SLXOS-58858	**Issue ID:**	SLXOS-60433
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3b
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol
Symptom:	VxLAN tunnels do not come up after continuous reboots.		
Condition:	After 500 reboots of SLXOS, BGP/EVPN VxLAN tunnel did not come up.		
Recovery:	Reconfigure VLAN with no vlan <vlan-id>, vlan <vlan-id>		

Parent Defect ID:	SLXOS-60151	**Issue ID:**	SLXOS-60440
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3b
Technology Group:	Security	**Technology:**	PBR - Policy-Based Routing
Symptom:	Traffic not falling back to normal routing when PBR next hop is not available		
Condition:	PBR next-hop becomes unreachable		
Recovery:	rebind PBR		

Parent Defect ID:	SLXOS-60534	**Issue ID:**	SLXOS-60534
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2a
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	ARP - Address Resolution Protocol
Symptom:	Traffic loss maybe seen for any particular Host.		
Condition:	1. Centralized Routing and Border Leaf has MCT cluster configured. 2. One of the MCT nodes goes for a reload.		

Parent Defect ID:	SLXOS-60536	**Issue ID:**	SLXOS-60536
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2a
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	ARP - Address Resolution Protocol
Symptom:	A few ARP entries are programmed for drop.		
Condition:	After triggers like clear bgp or after reload a few ARP entries were found to be programmed for drop.		

Parent Defect ID:	SLXOS-59602	**Issue ID:**	SLXOS-60577
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2b
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol
Symptom:	SLXOS BGP advertising routes with invalid (all ZEROs) COMMUNITY attribute value.		
Condition:	With a specific route policy configuration, SLXOS BGP could behave this way.		

Parent Defect ID:	SLXOS-60285	**Issue ID:**	SLXOS-60608
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3e
Technology Group:	Other	**Technology:**	Other
Symptom:	Observed NETCONF Error - 'N O T A K N O W N R e s o u r c e I d'		
Condition:	Configuring cluster-track repeatedly on the same interface		

Parent Defect ID:	SLXOS-60665	**Issue ID:**	SLXOS-60665
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2a
Technology Group:	Other	**Technology:**	Other
Symptom:	TVPM v4.2.5-2 with SLX20.3.2a not working on Avalanche 9540 and TPVM may boot to Ubuntu Rescue/Emergency mode.		

Condition:	Upgrade or fresh deployment of TPVM v4.2.5.-2 only
Workaround:	1. Do not use this TPVM image for Avalanche 9540. 2. Or Alternative, after starting TPVM boot process, watch its console. On Rescue/Emergency mode, login to TPVM and edit /etc/fstab. Remove mount rule for "/apps". From SLX CLI stop tpvm and re-start tpvm.

The following software defects were open in 20.3.2 as of **June 2021**:

Parent Defect ID:	SLXOS-40754	**Issue ID:**	SLXOS-40754
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.1
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BFD - BiDirectional Forwarding Detection
Symptom:	BFD sessions will flap and bring down associated client sessions bound to it.		
Condition:	Maximum Supported IPv4 Multi-hop BFD session is 16. When IPv4 BFD Multi-hop session count exceeds 16, BFD sessions will flap.		

Parent Defect ID:	SLXOS-42488	**Issue ID:**	SLXOS-42488
Severity:	S3 – Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.1
Technology Group:	Other	**Technology:**	Other
Symptom:	"show running-config ip prefix-list <list-name>" on specific prefix-list sometimes does not work		
Condition:	issue is observed during highly scaled scale prefix-list configurations		
Workaround:	use show running-config ip prefix-list show running-config show running-config ip prefix-list | include <prefix-list-name>		

Parent Defect ID:	SLXOS-43141	**Issue ID:**	SLXOS-43141
Severity:	S3 – Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 18r.2.00a
Technology Group:	Other	**Technology:**	Other
Symptom:	TRCE-5006 RASLOG has been observed		
Condition:	During the reload		

Parent Defect ID:	SLXOS-44973	**Issue ID:**	SLXOS-44973
Severity:	S2 – High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.1
Technology Group:	IP Multicast	**Technology:**	Other

Symptom:	The node forwards the traffic on PIM SG-RPT prune received port which causes double traffic at the receiver.
Condition:	1. RP and Source should be reachable in different paths from LHR. 2. The node should not have any PIM snooping (S,G) entry or IGMP version-3 entry in the corresponding VLAN, when it receives PIM SG-RPT prune. 3. The issue node should not have any local receivers for this group.
Workaround:	Adding a local receiver to the node in question (i.e. the node that is forwarding traffic on PIM SG-RPT prune received port) will avoid it sending traffic to the LHR. Therefore double traffic will be avoided at the receiver

Parent Defect ID:	SLXOS-45474	**Issue ID:**	SLXOS-45474
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.1
Technology Group:	Traffic Management	**Technology:**	Traffic Queueing and Scheduling
Symptom:	In some cases mcast drops are observed based on pkt size and number of replications.		
Condition:	Mcast drops will be observed when mcast traffic is sent with more replications along with unicast traffic.		
Workaround:	There is no traffic loss observed with following below numbers. 1 G link Egress (with 40% Unicast traffic) 48 OIFs (6 S,G's and 8 vlans (hosts) per S,G) without seeing loss. 10 G link Ingress/Egress (with 40% Unicast traffic) 54 vlan with 6 (S,G) Multicast groups per vlan 100G link Ingress/10G Egress (with 40% Unicast traffic) 42 vlan with 6 (S,G) Multicast groups per vlan		

Parent Defect ID:	SLXOS-46276	**Issue ID:**	SLXOS-46276
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.1
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol
Symptom:	The remote end tunnel retains old VTEP IP when VTEP IP is changed at the local end		
Condition:	When tunnel VTEP IP is changed locally, some of the evpn IMR routes for old VTEP IP are not withdrawn. Hence old tunnel exists at remote end.		
Workaround:	When VTEP IP is modified, please issue "clear bgp evpn neighbor all"		

Parent Defect ID:	SLXOS-46419	**Issue ID:**	SLXOS-46419
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.1
Technology Group:	Monitoring	**Technology:**	Port Mirroring
Symptom:	QoS service-policy configuration is not allowed on a mirror destination port-channel.		
Condition:	Configure a port-channel as mirror destination and configure a service-policy under this port-channel.		
Workaround:	Remove mirror configuration and add service-policy under this port-channel. Reconfigure mirror session with this port-channel as mirror destination.		

Parent Defect ID:	SLXOS-47644	**Issue ID:**	SLXOS-47644
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.1
Technology Group:	Security	**Technology:**	ACLs - Access Control Lists
Symptom:	OSPF neighbourship doesn't go down after applying IP ACL on the interface		
Condition:	Applying IP ACL after OSPF neighbourship up.		
Workaround:	Clear OSPF neighbourship after IP ACL applied.		

Parent Defect ID:	SLXOS-49440	**Issue ID:**	SLXOS-49440
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.1
Technology Group:	Traffic Management	**Technology:**	Traffic Queueing and Scheduling
Symptom:	Traffic Manager Virtual output queue statistics are not getting updated		
Condition:	Show command doesn't update the value - " show tm voq-stat ingress-device ethernet 0/75 egress-port ethernet 0/51:3"		
Workaround:	Check TM stats, for traffic related stats update.		

Parent Defect ID:	SLXOS-50693	**Issue ID:**	SLXOS-50693
Severity:	S2 - High		
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-51407	**Issue ID:**	SLXOS-51407
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.1
Technology Group:	MPLS	**Technology:**	MPLS VPLS - Virtual Private LAN Services
Symptom:	VPLS statistics will not be accounted in underlying MPLS tunnel statistics		
Condition:	When both Bridge-domain statistics and MPLS ingress-tunnel-account statistics are enabled, Traffic egress in VPLS PW under the bridge-domain will not be accounted in underlying MPLS tunnel statistics in which the VPLS PW is established.		

Parent Defect ID:	SLXOS-51794	**Issue ID:**	SLXOS-51822
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.1
Technology Group:	Traffic Management	**Technology:**	QoS - Quality of Service
Symptom:	Virtual output queue Statistics of Traffic manager Chip are not incrementing for priority traffic class.		
Condition:	CLI command: Traffic manager cmd "show tm voq-stat" is executed.		

Parent Defect ID:	SLXOS-51569	**Issue ID:**	SLXOS-51843
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.1
Technology Group:	Monitoring	**Technology:**	OAM - Operations, Admin & Maintenance
Symptom:	On 9740-80, CFM session doesn't come-up when a bridge domain (BD) is configured with logical interfaces on breakout front panel ports (in the series 0/41-80). On BD deletion, the CFM sessions are up		
Condition:	Bridge domain (BD) is configured with logical interfaces on breakout front panel ports of the series 0/41-80.		
Recovery:	Deleting the bridge domain, or unbinding the logical interface from the bridge domain recovers the issue. Otherwise, use the front panel port series 0/1-40 for BDs.		

Parent Defect ID:	SLXOS-49454	**Issue ID:**	SLXOS-52076
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.1
Technology Group:	Management	**Technology:**	CLI - Command Line Interface
Symptom:	Sometimes, show running-config ip prefix-list <name> takes around 25 mins to display output		
Condition:	Issue is seen when the user is querying for a specific prefix-list while the device has highly scaled prefix list configuration		

Workaround:	Use "show running-config ip prefix-list" or "show ip prefix-list <name>"

Parent Defect ID:	SLXOS-52329	**Issue ID:**	SLXOS-52329
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.1a
Technology Group:	IP Multicast	**Technology:**	IGMP - Internet Group Management Protocol
Symptom:	The IGMP querier node does not receive IGMP joins on Multicast tunnel even though there are receivers present on other LVTEP. This causes IGMP group entry expiry after the time-out.		
Condition:	1. There should be MCT nodes acting as a leaf (LVTEP) and receiver should be connected to CCEP client or CEP port. 2. The MDT Rx path is on one MCT peer and MDT Tx path is on other MCT peer. 3. IGMP Query should be received on Multicast tunnel. 4. IGMP report should land on the peer which is having MDT Rx path.		
Workaround:	If Source or Receiver is connected to one of the MCT nodes, then it is recommended to configure IGMP snooping querier for the vlan or Bridge domain on both the MCT peers.		

Parent Defect ID:	SLXOS-52506	**Issue ID:**	SLXOS-52506
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.1a
Technology Group:	Management	**Technology:**	Other
Symptom:	Netconf request to configure ip prefix-list without providing sequence number fails and returns error.		
Condition:	Issue exists only for configuration via Netconf		
Workaround:	Workaround is to provide sequence number value in the Netconf request while configuring ip prefix-list		

Parent Defect ID:	SLXOS-52599	**Issue ID:**	SLXOS-52599
Severity:	S3 - Medium		
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-52665	**Issue ID:**	SLXOS-52665
Severity:	S3 - Medium		

Product:	SLX-OS	**Reported in Release:**	SLXOS 18r.2.00bg
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	Other
Symptom:	Directed IPv6 NS packets that are transiting/routing through the SLX device are hitting the CPU		
Condition:	When IPv6 ND packets are sent with high rate they will be trapped to CPU		

Parent Defect ID:	SLXOS-52839	**Issue ID:**	SLXOS-52839
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.1a
Technology Group:	Traffic Management	**Technology:**	Rate Limiting and Shaping
Symptom:	Flapping of OSPFV3 sessions.		
Condition:	OSPFv3 session is configured and after that Ingress Port RL is applied. The rate configured is low compared to the data traffic that is ingressing.		
Workaround:	Do not use Ingress Port based RL. Instead configure ingress ACL based RL with "permit any any" as rule. This will filter similar to port based RL. In addition to that add another rule in ingress ACL based RL to match OSPF frames as given below. ipv6 access-list extended v6_any seq 5 deny 89 any any seq 15 permit ipv6 any any The deny rule will make sure that OSPF frames are not rate limited.		
Recovery:	Remove the Ingress Port RL.		

Parent Defect ID:	SLXOS-52746	**Issue ID:**	SLXOS-53722
Severity:	S3 - Medium		
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-54159	**Issue ID:**	SLXOS-54159
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 18r.1.00b
Technology Group:	Management	**Technology:**	CLI - Command Line Interface
Symptom:	When show cpu proc command is executed after 100 days incorrect date format (order change in display) will be seen		
Condition:	No Specific condition observed to hit is issue.		

Parent Defect ID:	SLXOS-55051	**Issue ID:**	SLXOS-55051
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 18r.2.00c
Technology Group:	Monitoring	**Technology:**	sFlow
Symptom:	A number of fields such as Header Length, IP Size and Subnet Masks are reported incorrectly in the sflow samples		
Condition:	collecting sflow samples with a sflow collector		

Parent Defect ID:	SLXOS-55184	**Issue ID:**	SLXOS-55184
Severity:	S4 - Low		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.2c
Technology Group:	Management	**Technology:**	CLI - Command Line Interface
Symptom:	While bring switch out of maintenance mode by executing "system maintenance turn-off" exec command, the output of "show system maintenance" command, it is shown as BGP "time out".		
Condition:	Issue is seen on disabling maintenance mode. No functional impact.		

Parent Defect ID:	SLXOS-55185	**Issue ID:**	SLXOS-55185
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.2c
Technology Group:	Monitoring	**Technology:**	RAS - Reliability, Availability, and Serviceability
Symptom:	Few RAS logs are missing		
Condition:	After reaching the higher value of sequence number in RAS logs. EX: [NSM-1020], 5610250(sequence number), DCE, INFO, SLX-R1, interface Ethernet 0/x is administratively down.		

Parent Defect ID:	SLXOS-55198	**Issue ID:**	SLXOS-55198
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2a
Technology Group:	Management	**Technology:**	Other
Symptom:	"no fec mode " CLI support is removed		
Condition:	"no fec mode " CLI support is removed and due to this the User will not be able to go to Default FEC mode on specified port.		
Workaround:	User can do Explicit FEC Configuration either Enable with appropriate FEC mode or Disable FEC for specified port.		

Parent Defect ID:	SLXOS-55243	**Issue ID:**	SLXOS-55243
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2a

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 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2a
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-55372	**Issue ID:**	SLXOS-55372
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2a
Technology Group:	MPLS	**Technology:**	LDP - Label Distribution Protocol
Symptom:	"show mpls statistics ldp" command statistics will not increment on transit nodes for SLX9740 for transient session accounting.		
Condition:	MPLS XC statistics will not increment on transit nodes for SLX9740 if following transit-session-accounting config is enabled. ---------- router mpls policy transit-session-accounting		

Parent Defect ID:	SLXOS-55467	**Issue ID:**	SLXOS-55467
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 18r.2.00bd
Technology Group:	Management	**Technology:**	CLI - Command Line Interface
Symptom:	show running-config ip prefix-list <name> takes a long time to start displaying the output and elevates CPU		
Condition:	Issue is seen when the user is querying for a specific prefix-list while the device has highly scaled prefix list configuration		
Workaround:	Instead of “show running-config ip prefix-list <prefix-list-name>”, use commands as below, oshow ip prefix-list <prefix-list-name> oshow running-config ip prefix-list oshow running-config ip prefix-list | include <prefix-list-name>		

Parent Defect ID:	SLXOS-55554	**Issue ID:**	SLXOS-55554
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2_CVR
Technology Group:	Management	**Technology:**	CLI - Command Line Interface
Symptom:	On SLX 9250, Device may rarely boot to the ONIE boot prompt.		
Condition:	After "copy config default to startup" and followed by a reload.		

Parent Defect ID:	SLXOS-55569	**Issue ID:**	SLXOS-55569
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.2c
Technology Group:	Layer 2 Switching	**Technology:**	VLAN - Virtual LAN
Symptom:	L2 Loop not detected and blocked		
Condition:	Loop-detection feature doesn't detect and block L2 loop when provisioned on Ethernet or Port-channel interface		
Workaround:	Configure loop-detection on VLAN to which Ethernet or Port-channel is member. This will detect the loop and block it.		

Parent Defect ID:	SLXOS-55586	**Issue ID:**	SLXOS-55586
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.2a
Technology Group:	Monitoring	**Technology:**	sFlow
Symptom:	SFLOW not working as expected		
Condition:	monitoring inbound and outbound traffic with Netflow		

Parent Defect ID:	SLXOS-55856	**Issue ID:**	SLXOS-55856
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2b
Technology Group:	Traffic Management	**Technology:**	Traffic Queueing and Scheduling
Symptom:	1.No Raslogs will be generated when “threshold-monitor Buffer poll <val> retry <val> limit <val> actions loginfo” is configured. 2."show qos tx-queue interface" shows incorrect buffer value		
Condition:	when command “threshold-monitor Buffer poll <val> retry <val> limit <val> actions loginfo” is configured and buffer usage exceeds the given limit specified ,raslogs will not be displayed. when command "show qos tx-queue interface" is configured incorrect total buffer value will be displayed.		

Parent Defect ID:	SLXOS-56079	**Issue ID:**	SLXOS-56079
Severity:	S2 - High		

Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2b
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol
Symptom:	The switch might reload unexpectedly after a BGP process failure.		
Condition:	On SLX 9740, that is configured as a border leaf MCT node, and BGP is configured with BFD is enabled for all the BGP peering sessions. Sometimes on a reload of one of the border leaf switch, BFD sessions flap unexpectedly and can cause BGP session reset.		

Parent Defect ID:	SLXOS-56316	**Issue ID:**	SLXOS-56316
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.2d
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	ICMP - Internet Control Message Protocol
Symptom:	Traceroute output fails to print first hop for the destination sometimes.		
Condition:	On traceroute initiator node, when we move nexthop ip address of destination between two interfaces.		

Parent Defect ID:	SLXOS-56538	**Issue ID:**	SLXOS-56538
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 18r.2.00bg
Technology Group:	Traffic Management	**Technology:**	QoS - Quality of Service
Symptom:	Functionality of Layer 3 ECMP with OSPF protocol is not working sometimes. Traffic goes only on one path.		
Condition:	Layer 3 ECMP enabled with OSPF on ve interfaces.		

Parent Defect ID:	SLXOS-56533	**Issue ID:**	SLXOS-56553
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.2g
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol
Symptom:	Unexpected reload		
Condition:	BGP peer interface shut/no shut with BGP PIC configuration		
Workaround:	Try to avoid using BGP PIC configs		

Parent Defect ID:	SLXOS-56559	**Issue ID:**	SLXOS-56559
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2b

Technology Group:	Management	**Technology:**	Software Installation & Upgrade
Symptom:	bootenv could be missing under ONIE.		
Condition:	when ONIE is updated.		

Parent Defect ID:	SLXOS-56576	**Issue ID:**	SLXOS-56576
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2a
Technology Group:	Other	**Technology:**	Other
Symptom:	On SLX 9740, User upgrades software from 20.2.2a to 20.2.2b and device becomes unreachable when accessing through inband port.		
Condition:	Software upgrade through in-band port.		

Parent Defect ID:	SLXOS-56605	**Issue ID:**	SLXOS-56605
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 18r.2.00c
Technology Group:	Monitoring	**Technology:**	Hardware Monitoring
Symptom:	On SLX 9540, Output of operational interface counter statistics may display zero when traffic is alive		
Condition:	Display of interface counter statistics		

Parent Defect ID:	SLXOS-56635	**Issue ID:**	SLXOS-56635
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.2d
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	IS-IS - IPv4 Intermediate System to Intermediate System
Symptom:	Default route is installed in level-2 ISIS router.		
Condition:	During interop scenario when the other vendor device installs a loopback interface(L2), on SLX this issue is seen.		

Parent Defect ID:	SLXOS-56743	**Issue ID:**	SLXOS-56743
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2b
Technology Group:	Management	**Technology:**	SNMP - Simple Network Management Protocol
Symptom:	SNMP dot1qTpFdbPort is showing as "0" on a dynamically learnt mac address. instead of the port number.		
Condition:	SNMP walk to OID dot1qTpFdbPort		

Parent Defect ID:	SLXOS-56861	**Issue ID:**	SLXOS-56861
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2b
Technology Group:	Other	**Technology:**	Other
Symptom:	Any interface randomly goes down when an optic is inserted. This occurrence is not every time.		
Condition:	When a new optic is inserted in SLX9740.		

Parent Defect ID:	SLXOS-56958	**Issue ID:**	SLXOS-56958
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.2g
Technology Group:	Other	**Technology:**	Other
Symptom:	Port may not be operational with admin UP		
Condition:	a) DUT should have connection with cisco device. b) DUT Interface connected to cisco configured with "speed auto-neg" and Cisco interface configured with "speed 100"		

Parent Defect ID:	SLXOS-57142	**Issue ID:**	SLXOS-57142
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 18r.1.00eb
Technology Group:	MPLS	**Technology:**	MPLS Traffic Engineering
Symptom:	May experience consistent RSVP session flap due to timeout on reservation message reception.		
Condition:	There is no specific trigger for this case, but could be chance of hitting this with multiple RSVP session.		
Workaround:	configure config-router-mpls-rsvp refresh-reduction summary-refresh		

Parent Defect ID:	SLXOS-57181	**Issue ID:**	SLXOS-57181
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3
Technology Group:	Security	**Technology:**	DoS (Denial of Service) protection
Symptom:	SLXOS is responding to unknown TCP ports		
Condition:	If an external router tries to send TCP packet to unknown TCP ports		

Parent Defect ID:	SLXOS-57247	**Issue ID:**	SLXOS-57247
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2b
Technology Group:	Traffic Management	**Technology:**	QoS - Quality of Service
Symptom:	Protocols may flap with high rate of host traffic when TM Rx max queue size is increased to 35MB or more.		

Condition:	When QOS CLI is configured with max queue size 35MB or more. qos rx-queue unicast traffic-class 0 min-queue-size 1024 max-queue-size 35
Workaround:	Configure rx-queue to 30MB or lower. qos rx-queue unicast traffic-class 0 min-queue-size 1024 max-queue-size 30.

Parent Defect ID:	SLXOS-57272	**Issue ID:**	SLXOS-57272
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.2g
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	ICMP - Internet Control Message Protocol
Symptom:	None of the local (direct, loopback, self) IPv4 interfaces is responding to PING on both default-vrf and lab-vrf		
Condition:	VE interface connected to customer CDN cache is enabled on the device		

Parent Defect ID:	SLXOS-57274	**Issue ID:**	SLXOS-57274
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2b
Technology Group:	Management	**Technology:**	CLI - Command Line Interface
Symptom:	On execution of "show run route-map" command with route map name like "show run route-map <route-map-name>" it throws error.		
Condition:	Issue is seen when "show run route-map" command is invoked with route map name.		
Workaround:	As a workaround command "show run route-map" can be executed and it will display the output for all configured route maps.		

Parent Defect ID:	SLXOS-57276	**Issue ID:**	SLXOS-57276
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 18r.2.00b
Technology Group:	Monitoring	**Technology:**	sFlow
Symptom:	In sflow sample outgoing interface will be reported as -1[4294967295]		
Condition:	Unknown VPLS traffic is sflow sampled on VPLS endpoint		

Parent Defect ID:	SLXOS-57294	**Issue ID:**	SLXOS-57294
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3
Technology Group:	Other	**Technology:**	Other
Symptom:	Some breakout links may not come up for AFBR-89CDDZ-EX1 optic.		
Condition:	After reload, having 100G port with 4x25g breakout is configured.		

Parent Defect ID:	SLXOS-57357	**Issue ID:**	SLXOS-57357
Severity:	S4 - Low		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.2a
Technology Group:	Traffic Management	**Technology:**	QoS - Quality of Service
Symptom:	Unsupported QoS CLI		
Condition:	When the CLI "qos cos" is tried.		
Workaround:	This CLI is wrongly documented in the technical guide.		

Parent Defect ID:	SLXOS-57370	**Issue ID:**	SLXOS-57370
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4+ - IPv6 Border Gateway Protocol
Symptom:	BGP session bring up may take 30+ minutes		
Condition:	During upgrade		

Parent Defect ID:	SLXOS-57246	**Issue ID:**	SLXOS-57428
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3b
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BFD - BiDirectional Forwarding Detection
Symptom:	BFD session establishment will be delayed by 75-120 seconds in SLX 9740.		
Condition:	After MCT/ICL link comes UP .		

Parent Defect ID:	SLXOS-57174	**Issue ID:**	SLXOS-57432
Severity:	S2 - High		
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 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2a
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-56401	**Issue ID:**	SLXOS-57443
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3
Technology Group:	Other	**Technology:**	Other
Symptom:	The following Brocade branded 4x10G breakout DAC modules are not detected sometimes. The affected module SKU's are 40G-DACP-QSFP4SFP1M, 40G-DACP-QSFP4SFP3M, 40G-DACP-QSFP4SFP5M		
Condition:	Over a period of time, the issue is seen from a corruption in the EEPROM MSA programming		

Parent Defect ID:	SLXOS-55114	**Issue ID:**	SLXOS-57446
Severity:	S1 - Critical		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2a
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	Static Routing (IPv4)
Symptom:	L3 traffic drop of more than 1 second is observed on SLX-9740.		
Condition:	Maintenance mode enabled on one of the nodes in the MCT cluster or one of the nodes in the MCT cluster is rebooted.		

Parent Defect ID:	SLXOS-57371	**Issue ID:**	SLXOS-57471
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3b
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BFD - BiDirectional Forwarding Detection
Symptom:	Few BFD sessions will flap once during system bring up.		
Condition:	On 9740,during system bring up after reload.		

Parent Defect ID:	SLXOS-57552	**Issue ID:**	SLXOS-57552
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 18r.1.00e
Technology Group:	MPLS	**Technology:**	LDP - Label Distribution Protocol
Symptom:	CE to CE ping may fail with MPLS configured on transit nodes.		
Condition:	There is no specific external events which triggers this MPLS label mismatch issue.		

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

Parent Defect ID:	SLXOS-57753	**Issue ID:**	SLXOS-57853
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 18r.1.00h
Technology Group:	MPLS	**Technology:**	LDP - Label Distribution Protocol
Symptom:	Unexpected reload.		
Condition:	On continuous MPLS interface flap for every 60 seconds run for minimum 5 hrs, to re-establish LDP tunnels.		

Parent Defect ID:	SLXOS-57876	**Issue ID:**	SLXOS-57876
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.2f
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	DHCP - Dynamic Host Configuration Protocol
Symptom:	IP DHCP relay configuration may go missing after SLX upgrade		
Condition:	When a SLX upgrade happens to an image where 'source interface' configuration was made mandatory, IP DHCP relay configuration may get lost.		

Parent Defect ID:	SLXOS-58035	**Issue ID:**	SLXOS-58035
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2
Technology Group:	Layer 2 Switching	**Technology:**	VXLAN - Virtual Extensible LAN
Symptom:	Tunnel egress statistics will not increment for the traffic encapsulation over EVPN VxLAN tunnel		
Condition:	Tunnel destined to the MH nodes will have the issue in an EVPN Multi-homing IP fabric topology. Issue not seen when the tunnel destination is standalone leaf of MCT leaf.		

Parent Defect ID:	SLXOS-58041	**Issue ID:**	SLXOS-58041
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.1

Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol
Symptom:	BGP Route would not be installed in RIB despite nexthop recursion configuration.		
Condition:	BGP route has a BGP nexthop attribute that requires nexthop-recursion configuration for resolving the next-hop.		

Parent Defect ID:	SLXOS-58073	**Issue ID:**	SLXOS-58073
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3b
Technology Group:	Layer 2 Switching	**Technology:**	Other
Symptom:	VPLS traffic terminating towards TPVM insight interface will trap to CPU instead of forwarding it out		
Condition:	TPVM insight interface has to be the AC the interface for VPLS terminating packets		

Parent Defect ID:	SLXOS-57604	**Issue ID:**	SLXOS-58074
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3c
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BFD - BiDirectional Forwarding Detection
Symptom:	BFD flap issue is seen when a Border Leaf node is reloaded.		
Condition:	This issue occurs when a new route update comes once a Border Leaf node comes up after reload.		

Parent Defect ID:	SLXOS-57958	**Issue ID:**	SLXOS-58082
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3c
Technology Group:	Management	**Technology:**	Configuration Fundamentals
Symptom:	If switchport CLI is configured on more than 70 port channel interfaces then the output of get-interface-switchport returns response for only 70 interfaces. RPC doesn't has a way to get the output for rest of the interfaces.		
Condition:	Issue will be seen if switchport is configured on more than 70 port channel interfaces.		
Workaround:	Complete output can be retrieved by executing "show interface switchport" operational command.		

Parent Defect ID:	SLXOS-58151	**Issue ID:**	SLXOS-58151
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2

Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BFD - BiDirectional Forwarding Detection
Symptom:	BFD sessions flapped once during interval change.		
Condition:	BFD interval changed for 250 bfd sessions.		

Parent Defect ID:	SLXOS-58240	**Issue ID:**	SLXOS-58240
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BFD - BiDirectional Forwarding Detection
Symptom:	BFD session establishment will be delayed by 75-120 seconds in SLX 9740.		
Condition:	After MCT/ICL link comes UP .		

Parent Defect ID:	SLXOS-58255	**Issue ID:**	SLXOS-58255
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.1
Technology Group:	MPLS	**Technology:**	IP over MPLS
Symptom:	Traffic does not flow using MPLS after shutdown/no shutdown of interface		
Condition:	Shutdown/no shutdown of interface.		

Parent Defect ID:	SLXOS-58321	**Issue ID:**	SLXOS-58321
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3b
Technology Group:	Layer 2 Switching	**Technology:**	MCT - Multi-Chassis Trunking
Symptom:	East west locally switched traffic takes 2 seconds to converge.		
Condition:	Post maintenance mode disable, after the router boots up.		

Parent Defect ID:	SLXOS-58416	**Issue ID:**	SLXOS-58416
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2
Technology Group:	Security	**Technology:**	ACLs - Access Control Lists
Symptom:	ACL rule cannot be deleted via REST		
Condition:	Rest query to delete ACL		
Workaround:	Customer usecases do not delete ACLs via REST. Delete via CLI.		

Parent Defect ID:	SLXOS-58470	**Issue ID:**	SLXOS-58470
Severity:	S3 - Medium		

Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3b
Technology Group:	Other	**Technology:**	Other
Symptom:	EFA fails to detect the TPVM and assumes the device as a standalone server. As TPVM has only 4GB of memory, the minimum requirement of 8GB on standalone server is not met and the installation fails.		
Condition:	This issue is seen when the disk pool for TPVM is not started and vdb disk is not attached to the TPVM.		
Workaround:	[root@B145-R2]# virsh pool-info tpvm_disk_pool Name: tpvm_disk_pool UUID: bd38c6ac-8ca5-4669-9b91-665812488df8 State: inactive Persistent: yes Autostart: yes [root@B145-R2]# virsh pool-start tpvm_disk_pool error: Failed to start pool tpvm_disk_pool error: cannot open directory '/TPVM/tpvm_disk_pool': No such file or directory [root@B145-R2]# cd /TPVM/ [root@B145-R2]# ls BVM_TPVM.xml* SWBD2900/ id_rsa.pub tpvm_version BVM_TPVM_DISK_POOL-common.xml* TPVM.img* interfaces BVM_TPVM_SVCPORT.xml* TPVM.xml* pwless SLX_TPVM.xml* extra/ tpvm_enable manually created a folder to recover [root@B145-R2]# mkdir tpvm_disk_pool [root@B145-R2]# virsh pool-start tpvm_disk_pool Pool tpvm_disk_pool started [root@B145-R2]# virsh pool-info tpvm_disk_pool Name: tpvm_disk_pool UUID: bd38c6ac-8ca5-4669-9b91-665812488df8 State: running Persistent: yes Autostart: yes Capacity: 54.00 GiB Allocation: 0.00 B Available: 54.00 GiB		

Parent Defect ID:	SLXOS-58518	**Issue ID:**	SLXOS-58518
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2

Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	IP Addressing
Symptom:	Error message is seen on console when IP address is removed from port-channel. Issue is seen only on SLX 9740.		
Condition:	Issue occurs when IP address is removed from port-channel while port-channel was kept in shut state.		
Workaround:	Port-channel can be kept in no-shut state while IP address is removed.		

Parent Defect ID:	SLXOS-58534	**Issue ID:**	SLXOS-58534
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2
Technology Group:	Layer 2 Switching	**Technology:**	Other
Symptom:	Traffic drop seen towards the VPLS tunnel		
Condition:	Issue seen Intermittently when statistics enabled and disabled consecutively.		
Recovery:	Removing and re-adding the problematic peer under "Bridge-domain" configuration recovers the issue.		

Parent Defect ID:	SLXOS-56801	**Issue ID:**	SLXOS-58631
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2b
Technology Group:	Management	**Technology:**	Other
Symptom:	On SLX 9540, "ImportError: No module named 'runpy'" is seen on configuration of python script for event handler.		
Condition:	On configuration of python module for event handler.		

Parent Defect ID:	SLXOS-58541	**Issue ID:**	SLXOS-58649
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3d
Technology Group:	Layer 2 Switching	**Technology:**	MCT - Multi-Chassis Trunking
Symptom:	EAST-WEST traffic took 120 secs to converge		
Condition:	MM disable		

Parent Defect ID:	SLXOS-58576	**Issue ID:**	SLXOS-58798
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3c
Technology Group:	Management	**Technology:**	Other
Symptom:	https not started after registration		
Condition:	Device registration. Not reproduced after last occurrence.		
Workaround:	Reimport certificates and perform https restart via CLI - http server use-vrf mgmt-vrf shut and no http server use-vrf mgmt-vrf shut		

Parent Defect ID:	SLXOS-59050	**Issue ID:**	SLXOS-59050
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2
Technology Group:	Layer 2 Switching	**Technology:**	MCT - Multi-Chassis Trunking
Symptom:	Discrepancy between the configured interface status and displayed status		
Condition:	Running config shows that the interface is "no shutdown" but the interface state is shown as administratively down		

Parent Defect ID:	SLXOS-59084	**Issue ID:**	SLXOS-59084
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol
Symptom:	Overlay traffic loss		
Condition:	With resilient hashing feature enabled, adjacent peer node reload may cause IPv6 traffic to get blocked.		

Parent Defect ID:	SLXOS-59114	**Issue ID:**	SLXOS-59114
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BFD - BiDirectional Forwarding Detection
Symptom:	BFD sessions may flap in SLX-9740.		
Condition:	On shutting down the member interface of the port-channel .		

Parent Defect ID:	SLXOS-59415	**Issue ID:**	SLXOS-59415
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2
Technology Group:	Layer 2 Switching	**Technology:**	Other
Symptom:	In Multi-homing IP fabric topology, EVPN macs of a vlan/bridge-domain are missing on remote VTEP leaf after doing config change of remove and add vlan/bride-domain under evpn context on one of the Multi-Homing nodes.		
Condition:	Config change of remove and add vlan/bride-domain under EVPN context on one of the Multi-homing nodes in an EVPN Multi-homing IP fabric topology.		
Workaround:	"Clear mac-address-table dynamic vlan/bridge-domain" operation to sync the macs again.		

Parent Defect ID:	SLXOS-59437	**Issue ID:**	SLXOS-59437
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2
Technology Group:	Layer 2 Switching	**Technology:**	Other
Symptom:	BD election for EVPN-MH is not happening after shutdown and further no-shutdown of client		
Condition:	BD election is not happening after 'shutdown' and 'no shutdown' of an EVPN-MH client configured with 'lacp-auto' in an EVPN Multi-homing IP fabric topology.		

Parent Defect ID:	SLXOS-59440	**Issue ID:**	SLXOS-59440
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol
Symptom:	Dynamic BGP session won't come up		
Condition:	BGP session won't come up with MD5 password configuration		

Parent Defect ID:	SLXOS-59469	**Issue ID:**	SLXOS-59469
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BFD - BiDirectional Forwarding Detection
Symptom:	BFD sessions may flap once in Border Leaf SLX9740.		
Condition:	On reloading one of the Spine Router in Centralized Routing .		

Parent Defect ID:	SLXOS-59489	**Issue ID:**	SLXOS-59489
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol
Symptom:	In Manual VNI mapping case, Tunnel - VNI mapping is not getting updated properly after changing VNI for a VLAN		
Condition:	Issue is seen only when static VNI is changed for a VLAN in Multi-homing IP fabric topology.		

Parent Defect ID:	SLXOS-59830	**Issue ID:**	SLXOS-59830
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2

Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BFD - BiDirectional Forwarding Detection
Symptom:	BFD session flap may be observed for the sessions over tunnel.		
Condition:	ECMP tunnel path goes down due to delay of link detection failure.		

Parent Defect ID:	SLXOS-59936	**Issue ID:**	SLXOS-59936
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2
Technology Group:	Monitoring	**Technology:**	Port Mirroring
Symptom:	On SLXOS-9740, ACL based Egress mirroring does not mirror traffic from source port in the transmit direction.		
Condition:	Monitor session is created with "tx" direction and flow-based. After Egress ACL is applied with "mirror" action on the source port, the transmit direction traffic is not mirrored.		

Defects Closed with Code Changes

The following software defects were closed in 20.3.2a with a code change as of **July 2021**:

Parent Defect ID:	SLXOS-59050	**Issue ID:**	SLXOS-59504
Severity:	S2 – High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2
Technology Group:	Layer 2 Switching	**Technology:**	MCT - Multi-Chassis Trunking
Symptom:	Discrepancy between the configured interface status and displayed status		
Condition:	Running config shows that the interface is "no shutdown" but the interface state is shown as administratively down		

Parent Defect ID:	SLXOS-59437	**Issue ID:**	SLXOS-59505
Severity:	S2 – High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2
Technology Group:	Layer 2 Switching	**Technology:**	Other
Symptom:	BD election for EVPN-MH is not happening after shutdown and further no-shutdown of client		
Condition:	BD election is not happening after 'shutdown' and 'no shutdown' of an EVPN-MH client configured with 'lacp-auto' in an EVPN Multi-homing IP fabric topology.		

Parent Defect ID:	SLXOS-59458	**Issue ID:**	SLXOS-59522
Severity:	S3 – Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.1

Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4+ - IPv6 Border Gateway Protocol
Symptom:	BGPD reload while executing show command		
Condition:	In scaled environment, while executing "show ip[v6] bgp neighbors all-vrfs", BGPd reload was seen.		

Parent Defect ID:	SLXOS-58518	**Issue ID:**	SLXOS-59707
Severity:	S3 – Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	IP Addressing
Symptom:	Error message is seen on console when IP address is removed from port-channel. Issue is seen only on SLX 9740.		
Condition:	Issue occurs when IP address is removed from port-channel while port-channel was kept in shutdown state.		

Parent Defect ID:	SLXOS-58541	**Issue ID:**	SLXOS-59800
Severity:	S2 – High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3d
Technology Group:	Layer 2 Switching	**Technology:**	MCT - Multi-Chassis Trunking
Symptom:	EAST-WEST traffic took 120 secs to converge		
Condition:	MM disable		

Parent Defect ID:	SLXOS-58416	**Issue ID:**	SLXOS-59814
Severity:	S2 – High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2
Technology Group:	Security	**Technology:**	ACLs - Access Control Lists
Symptom:	ACL rule cannot be deleted via REST		
Condition:	REST query to delete ACL		

Parent Defect ID:	SLXOS-59469	**Issue ID:**	SLXOS-59816
Severity:	S2 – High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BFD - BiDirectional Forwarding Detection
Symptom:	BFD sessions may flap once in Border Leaf SLX9740.		
Condition:	On reloading one of the Spine Router in Centralized Routing .		

Parent Defect ID:	SLXOS-59415	**Issue ID:**	SLXOS-59818
Severity:	S2 – High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2
Technology Group:	Layer 2 Switching	**Technology:**	Other
Symptom:	In Multi-homing IP fabric topology, EVPN macs of a vlan/bridge-domain are missing on remote VTEP leaf after doing config change of remove and add vlan/bride-domain under evpn context on one of the Multi-Homing nodes.		
Condition:	Config change of remove and add vlan/bride-domain under EVPN context on one of the Multi-homing nodes in an EVPN Multi-homing IP fabric topology.		
Workaround:	"Clear mac-address-table dynamic vlan/bridge-domain" operation to sync the macs again.		

Parent Defect ID:	SLXOS-58035	**Issue ID:**	SLXOS-59819
Severity:	S2 – High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2
Technology Group:	Layer 2 Switching	**Technology:**	VXLAN - Virtual Extensible LAN
Symptom:	Tunnel egress statistics will not increment for the traffic encapsulation over EVPN VxLAN tunnel		
Condition:	Tunnel destined to the MH nodes will have the issue in an EVPN Multi-homing IP fabric topology. Issue not seen when the tunnel destination is standalone leaf of MCT leaf.		

Parent Defect ID:	SLXOS-59489	**Issue ID:**	SLXOS-59821
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol
Symptom:	In Manual VNI mapping case, Tunnel - VNI mapping is not getting updated properly after changing VNI for a VLAN		
Condition:	Issue is seen only when static VNI is changed for a VLAN in Multi-homing IP fabric topology.		

Parent Defect ID:	SLXOS-58687	**Issue ID:**	SLXOS-59826
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3c
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol
Symptom:	Issue is seen when different MAC is dynamically learnt for the same IP in distributed routing.		

Condition:	Issue occurs only when different MAC same IP is learnt rapidly.

Parent Defect ID:	SLXOS-59084	**Issue ID:**	SLXOS-59829
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol
Symptom:	Overlay traffic loss		
Condition:	With resilient hashing feature enabled, adjacent peer node reload may cause IPv6 traffic to get blocked.		

Parent Defect ID:	SLXOS-59133	**Issue ID:**	SLXOS-59837
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BFD - BiDirectional Forwarding Detection
Symptom:	BFD sessions not coming up.		
Condition:	After changing ICL link and PO direction, BFD sessions do not come up.		

Parent Defect ID:	SLXOS-58421	**Issue ID:**	SLXOS-59948
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3b_CVR
Technology Group:	Other	**Technology:**	Other
Symptom:	Console is not able to use, due to continuously getting the SMBus Message "i801_smbus 0000:00:1f.4: SMBus is busy".		
Condition:	After reload the device. the console is getting continuously "i801_smbus 0000:00:1f.4": SMBus Message.		

Parent Defect ID:	SLXOS-59830	**Issue ID:**	SLXOS-59950
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BFD - BiDirectional Forwarding Detection
Symptom:	BFD session flap may be observed for the sessions over tunnel.		
Condition:	ECMP tunnel path goes down due to delay of link detection failure.		

Parent Defect ID:	SLXOS-59936	**Issue ID:**	SLXOS-59951
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2

Technology Group:	Monitoring	**Technology:**	Port Mirroring
Symptom:	On SLX-9740, ACL based Egress mirroring does not mirror traffic from source port in the transmit direction.		
Condition:	Monitor session is created with "tx" direction and flow-based. After Egress ACL is applied with "mirror" action on the source port, the transmit direction traffic is not mirrored.		

Parent Defect ID:	SLXOS-59987	**Issue ID:**	SLXOS-59994
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3b
Technology Group:	Management	**Technology:**	Software Installation & Upgrade
Symptom:	Firmware download may fail.		
Condition:	If the hostkey is changed at the server side or the device connected to a new server (i.e upgrade/downgrade via new server)		

Parent Defect ID:	SLXOS-59497	**Issue ID:**	SLXOS-60016
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2b
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	Other
Symptom:	Ping and Inband responses may get impacted when TTL1 packets are sent with high rate to SLX 9740.		
Condition:	When TTL1 packets are sent with high rate then it may impacts ping and inband response to CPU on SLX 9740.		

Parent Defect ID:	SLXOS-58052	**Issue ID:**	SLXOS-60166
Severity:	S3 – Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3b
Technology Group:	Other	**Technology:**	Other
Symptom:	IP Traffic after VxLAN termination will not load-balance towards ECMP path.		
Condition:	VxLAN tunnel terminated Traffic with same source and destination IP but varying Source and destination MAC will not load-balanced towards ECMP paths.		

Parent Defect ID:	SLXOS-60392	**Issue ID:**	SLXOS-60392
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	ARP - Address Resolution Protocol
Symptom:	In SLX 9250 BFD Sessions gets stuck in INIT state.		

Condition:	Reloading of BFD configured neighbor device and it comes up with different mac-address.
Workaround:	Re-configure BFD sesison

Parent Defect ID:	SLXOS-60590	**Issue ID:**	SLXOS-60593
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3f
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	Static Routing (IPv4)
Symptom:	L3 traffic will get dropped due to ARP missing from hardware routing table.		
Condition:	During Border Leaf Reload Scenario, Routing Table Manager data structure may go to invalid state resulting in ARP resolution to be ignored.		

Parent Defect ID:	SLXOS-52561	**Issue ID:**	SLXOS-60648
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 18r.1.00cg
Technology Group:	Other	**Technology:**	Other
Symptom:	SLX9540 stopped responding		
Condition:	HW failure		

The following software defects were closed in 20.3.2 with a code change as of **June 2021**:

Parent Defect ID:	SLXOS-51789	**Issue ID:**	SLXOS-51912
Severity:	S2 -– High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.2b
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BFD - BiDirectional Forwarding Detection
Symptom:	BFD sessions are flapping.		
Condition:	IP address are re-used across VRF's which have overlapping VLANs between Bridge-domain and VLAN based tenants.		

Parent Defect ID:	SLXOS-51790	**Issue ID:**	SLXOS-51913
Severity:	S2 -– High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.2b
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BFD - BiDirectional Forwarding Detection
Symptom:	BFD sessions will flap when IP address is re-used across VRFs over CEP L3 Router-port interfaces or CEP L3 Port-channel interfaces.		

Condition:	IP address is re-used across VRFs over CEP L3 Router-port interfaces or CEP L3 Port-channel interfaces.

Parent Defect ID:	SLXOS-52447	**Issue ID:**	SLXOS-52447
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 18r.2.00bg
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol
Symptom:	When packets with TCP port 179 are received with high rate it may cause impact to other protocols with CPU processing delays in the system.		
Condition:	When packets with TCP port 179 are received with high rate		

Parent Defect ID:	SLXOS-53946	**Issue ID:**	SLXOS-53946
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2
Technology Group:	Other	**Technology:**	Other
Symptom:	BFD sessions may flap on a different interface when multiple interfaces are shutdown/no-shutdown together.		
Condition:	When multiple interfaces are shutdown/no-shutdown together.		

Parent Defect ID:	SLXOS-55584	**Issue ID:**	SLXOS-55584
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 18r.1.00aa
Technology Group:	Management	**Technology:**	Other
Symptom:	a)Unexpected reload b) Not possible to collect ssv as 100% /root directory used.		
Condition:	Not specific		

Parent Defect ID:	SLXOS-56241	**Issue ID:**	SLXOS-56241
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 18r.2.00bd
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol
Symptom:	Console display of BGP DOWN with reason code as "TCP Connection Closed by Remote" instead of expected BGP DOWN message "Peer had exceeded the prefix limit"		
Condition:	Configure BGP maximum ip prefix allowed as 500 Violate above rule by redistributing routes greater than 500 from BGP peer		

Parent Defect ID:	SLXOS-56443	**Issue ID:**	SLXOS-56443
Severity:	S1 - Critical		
Product:	SLX-OS	**Reported in Release:**	SLXOS 18r.1.00e
Technology Group:	MPLS	**Technology:**	MPLS VPLS - Virtual Private LAN Services
Symptom:	Unexpected restart of MPLSd with core file (without System reload)		
Condition:	When peer interface is flapping carrying the LDP sessions.		

Parent Defect ID:	SLXOS-56694	**Issue ID:**	SLXOS-56694
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.1
Technology Group:	IP Multicast	**Technology:**	IPv4 Multicast Routing
Symptom:	Some vendor routers do not recognize SLX router as a PIM neighbor, as SLX PIM hello packet contains Option 24 with length 0		
Condition:	SLX enabled with PIM and interworking with other vendor router.		

Parent Defect ID:	SLXOS-56899	**Issue ID:**	SLXOS-56899
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.1
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol
Symptom:	Deleting a non-existing BGP neighbour through NETCONF request is adding partial config.		
Condition:	Only while deleting a non-existing BGP neighbour through NETCONF this issue is seen, Deleting an existing BGP neighbour though NETCONF works fine.		

Parent Defect ID:	SLXOS-56959	**Issue ID:**	SLXOS-56959
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.2f
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol
Symptom:	During rapid host moves, stale ARP entries are seen in device.		
Condition:	Only when host moves rapidly, issue is seen.		

Parent Defect ID:	SLXOS-56962	**Issue ID:**	SLXOS-56962
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 18r.2.00bd
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol

Symptom:	"show ip bgp summary" shows negative values for bytes counters.
Condition:	In scaled BGP scenario, when traffic is send to all routes "show ip bgp summary".

Parent Defect ID:	SLXOS-56967	**Issue ID:**	SLXOS-56967
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2b
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	ICMP - Internet Control Message Protocol
Symptom:	Console may get flooded with RADV-1009 RASLOG		
Condition:	In SLXOS, by default, all global IPv6 address will have ‘online’ and ‘autonomus’ flag in its prefix option field. If a remote device sends IPv6 router advertisement packet without autonomous address flag in its prefix option field, SLXOS will flag will it as inconsistency and RASLOG 1009 will be generated.		

Parent Defect ID:	SLXOS-56998	**Issue ID:**	SLXOS-56998
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2b
Technology Group:	Layer 2 Switching	**Technology:**	LAG - Link Aggregation Group
Symptom:	Traffic impact on non port-channel interface		
Condition:	One of the member port is removed from Port-channel		

Parent Defect ID:	SLXOS-57012	**Issue ID:**	SLXOS-57012
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3a
Technology Group:	Traffic Management	**Technology:**	QoS - Quality of Service
Symptom:	TM VOQ CLI does not show correct results for max queue depth in 9740.		
Condition:	When SLXCLI command "show tm voq-stat ingress-device all max-queue-depth" is executed.		

Parent Defect ID:	SLXOS-57075	**Issue ID:**	SLXOS-57075
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2b
Technology Group:	Monitoring	**Technology:**	Telemetry
Symptom:	Interface counters for Bits per second display may show spikes when a port is bounced in SLX 9740.		
Condition:	An interface is flapped.		

Parent Defect ID:	SLXOS-57092	**Issue ID:**	SLXOS-57092
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2b
Technology Group:	MPLS	**Technology:**	IP over MPLS
Symptom:	Packets sent over mpls tunnels carry zero destination mac. Traffic gets dropped at the receiving side.		
Condition:	When an interface where mpls is configured is flapped, addressed removed and re-added etc		

Parent Defect ID:	SLXOS-57129	**Issue ID:**	SLXOS-57129
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2a
Technology Group:	Monitoring	**Technology:**	sFlow
Symptom:	SFLOW pkts are not completely forwarding to SFLOW collector due to sflow CPU rate-limit on 9540/9640/9740 devices.		
Condition:	When SFLOW is enabled on the device, complete flows are not forwarded to SFLOW collector on 9740/9640/9540.		

Parent Defect ID:	SLXOS-57233	**Issue ID:**	SLXOS-57233
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 18r.2.00
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	Other
Symptom:	Receive ACL (RACL) deny is working but its logging feature is not working		
Condition:	RACL deny packets are dropped but not logged in RASLOG		

Parent Defect ID:	SLXOS-57277	**Issue ID:**	SLXOS-57277
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3a
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol
Symptom:	When one of the ECMP path goes down, L3 traffic loss of the order of multiple seconds may be observed		
Condition:	L3 configuration having multiple user VRFs and multiple VE interfaces		

Parent Defect ID:	SLXOS-57422	**Issue ID:**	SLXOS-57422
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3b
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol

Symptom:	BGP neighbour password for ipv4 & ipv6 unicast through NETCONF may create an invalid password.
Condition:	This issue is seen if the BGP neighbour password for ipv4 & ipv6 unicast is set through the NETCONF request.

Parent Defect ID:	SLXOS-57293	**Issue ID:**	SLXOS-57433
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3b
Technology Group:	Layer 2 Switching	**Technology:**	LAG - Link Aggregation Group
Symptom:	Traffic loss can be seen for BUM traffic for some of the Port-Channel interfaces.		
Condition:	On SLX 9740, deletion of VLAN/BD many sometimes, with the Port-Channel still belonging to the VLAN/BD.		

Parent Defect ID:	SLXOS-57291	**Issue ID:**	SLXOS-57442
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3b
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	ARP - Address Resolution Protocol
Symptom:	Traffic drop for a few hosts in a VRF		
Condition:	The address family was removed for a vrf and the configuration was pushed again from the EFA. Traffic drop was observed for a few of the hosts under that VRF.		

Parent Defect ID:	SLXOS-57027	**Issue ID:**	SLXOS-57444
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3b
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BFD - BiDirectional Forwarding Detection
Symptom:	BFD sessions will flap once after reload.		
Condition:	On SLX 9740, reload of the MCT Border Leaf peer.		

Parent Defect ID:	SLXOS-56725	**Issue ID:**	SLXOS-57447
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	Multi-VRF
Symptom:	Some traffic streams from the L3 Gateway to MCT CCEP Client have up to 800ms of traffic loss		

Condition:	In IP Fabric solution for centralized routing, reload of the border leaf router.

Parent Defect ID:	SLXOS-56514	**Issue ID:**	SLXOS-57449
Severity:	S1 - Critical		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3
Technology Group:	Management	**Technology:**	CLI - Command Line Interface
Symptom:	"show interface ethernet slot/port" - CLI displaying previous FEC mode after reconnection as it has not updated by switch software.		
Condition:	Display FEC CLI is showing earlier FEC MODE when optics is swapped between SR and LR4.		

Parent Defect ID:	SLXOS-57167	**Issue ID:**	SLXOS-57460
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3b
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BFD - BiDirectional Forwarding Detection
Symptom:	BFD sessions will flap once with MCT configuration in SLX 9740		
Condition:	When active-backup link fail over happens in server connecting to a MCT cluster.		

Parent Defect ID:	SLXOS-57287	**Issue ID:**	SLXOS-57465
Severity:	S1 - Critical		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3b
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	ARP - Address Resolution Protocol
Symptom:	In BD configuration and multi-LIF configuration under a port-channel, ARP resolution failure results for some of the LIF's.		
Condition:	On SLX9740-80C, Bridge domain configuration with support of multiple logical interfaces under a given port-channel.		

Parent Defect ID:	SLXOS-57232	**Issue ID:**	SLXOS-57466
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3b
Technology Group:	Layer 2 Switching	**Technology:**	MCT - Multi-Chassis Trunking
Symptom:	Switch reload with OOM		
Condition:	MCT configuration, ICL shut/noshut is triggered multiple times every 30 seconds continuously for more than 12 hours		

Parent Defect ID:	SLXOS-57368	**Issue ID:**	SLXOS-57474
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3b
Technology Group:	Management	**Technology:**	Software Installation & Upgrade
Symptom:	Unexpected reload of SLXOS.		
Condition:	Upgrade from of SLXOS software from 20.1.2x to 20.2.3x. And then user performs - "copy running-config startup-config", the switch reloads once. The device boots successfully subsequently. There is no issue when the user does the same CLI configuration "copy running-config startup-config" again.		

Parent Defect ID:	SLXOS-57556	**Issue ID:**	SLXOS-57556
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2b
Technology Group:	Management	**Technology:**	Other
Symptom:	"show media optical-monitoring interface ethernet <No>" displaying TX value even though the interface is down.		
Condition:	Shutdown the ethernet interface and check the TX power using this "show media optical-monitoring interface ethernet <No>" command.		

Parent Defect ID:	SLXOS-57650	**Issue ID:**	SLXOS-57650
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3a
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	Multi-VRF
Symptom:	When one of the ECMP path goes down, L3 traffic loss of the order of multiple seconds may be observed		
Condition:	L3 configuration having multiple user VRFs and multiple VE interfaces		

Parent Defect ID:	SLXOS-57728	**Issue ID:**	SLXOS-57728
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3b
Technology Group:	Security	**Technology:**	Security Vulnerability
Symptom:	Multiple security vulnerabilities were reported as part of the linux kernel in Ubuntu. These result in denial of service, invalid access and multiple other issues.		
Condition:	This vulnerability is detected as part of the security scans run on TPVM.		

Parent Defect ID:	SLXOS-57881	**Issue ID:**	SLXOS-57881
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2bb

Technology Group:	Layer 2 Switching	**Technology:**	Other
Symptom:	VPLS traffic drop observed		
Condition:	Issue seen only if underlying IGP path (ospf/ISIS) are in a P2MP network.		

Parent Defect ID:	SLXOS-57912	**Issue ID:**	SLXOS-57912
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2b
Technology Group:	Security	**Technology:**	DoS (Denial of Service) protection
Symptom:	RSVP packets with RA option are copied to CPU on transient router on 9740.		
Condition:	When RSVP packets with RA option sent, pkts are copied to CPU on transient router on 9740.		

Parent Defect ID:	SLXOS-57966	**Issue ID:**	SLXOS-57966
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2b
Technology Group:	Traffic Management	**Technology:**	Rate Limiting and Shaping
Symptom:	When Sflow config is enabled than sflow traffic will be rate-limited to low shaper with drops which may impact collector output.		
Condition:	When Sflow config is enabled than sflow traffic will be rate-limited with cpu sflow drops.		

Parent Defect ID:	SLXOS-57969	**Issue ID:**	SLXOS-57969
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3b
Technology Group:	Traffic Management	**Technology:**	Rate Limiting and Shaping
Symptom:	When TTL1 traffic is sent with high rate than it may impact protocol with flaps on 9640/9540.		
Condition:	When TTL1 traffic is sent with high rate to specific port may cause impact to system.		

Parent Defect ID:	SLXOS-58001	**Issue ID:**	SLXOS-58001
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.2e
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol
Symptom:	Unexpected reload of SLX		
Condition:	When "show ip bgp neighbor" CLI is executed		

Parent Defect ID:	SLXOS-58003	**Issue ID:**	SLXOS-58003
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.1
Technology Group:	Security	**Technology:**	Security Vulnerability
Symptom:	A flaw was found in xterm. A specially crafted sequence of combining characters causes an out of bounds write leading to arbitrary code execution. The highest threat from this vulnerability is to confidentiality, integrity, as well as system availability.		
Condition:	This vulnerability is detected as part of the security scans run.		

Parent Defect ID:	SLXOS-58065	**Issue ID:**	SLXOS-58065
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3b
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol
Symptom:	When VLANs are added slowly to EVPN instance, it takes time for MACs for those VLANs to be learnt from peers.		
Condition:	This symptom is seen only when VLANs are added slowly via EFA.		

Parent Defect ID:	SLXOS-57859	**Issue ID:**	SLXOS-58079
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3c
Technology Group:	Management	**Technology:**	CLI - Command Line Interface
Symptom:	"show media int eth <>" causes switch goes for reload when some port initialization fails due to hardware issues.		
Condition:	Upon failure of port initialization due to hardware issues.		

Parent Defect ID:	SLXOS-57888	**Issue ID:**	SLXOS-58080
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3c
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	Static Routing (IPv4)
Symptom:	Routed traffic blackholing		
Condition:	In case of a static route with nexthop resolved via /31 interface IP address, after interface shutdown, static route continues to remain installed in the route table.		

Parent Defect ID:	SLXOS-57889	**Issue ID:**	SLXOS-58081
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3c

Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	ARP - Address Resolution Protocol
Symptom:	IPv6 neighborship state is stuck in pre Neighbor discovery state on the default link local address.		
Condition:	a. Configure interface with an IPv6 address, and followed by IPv6 link local address. b. After the neighborship is formed on the peer, wait for the default link local address to age out.		

Parent Defect ID:	SLXOS-58156	**Issue ID:**	SLXOS-58156
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.1
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BFD - BiDirectional Forwarding Detection
Symptom:	After executing "no debug all", "show debug" is still showing a few BFD debugs enabled		
Condition:	Configure "no debug all" on the switch followed by "show debug".		

Parent Defect ID:	SLXOS-58280	**Issue ID:**	SLXOS-58280
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3
Technology Group:	Layer 2 Switching	**Technology:**	LAG - Link Aggregation Group
Symptom:	On deletion of all member ports from a port channel interface and a system reload the output of get-port-channel-detail RPC and "show port-channel detail" command is missing the port channel.		
Condition:	The issue is seen post system reload after deletion of all member ports from a port channel interface.		

Parent Defect ID:	SLXOS-58519	**Issue ID:**	SLXOS-58519
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3a
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	Static Routing (IPv4)
Symptom:	On SLX-9740, sometimes Routed traffic for some of the flows are dropped.		
Condition:	In the centralized routing scenario, resilient hashing is enabled inside a VRF. And one of the MCT cluster nodes is then reloaded.		

Parent Defect ID:	SLXOS-55297	**Issue ID:**	SLXOS-58766
Severity:	S2 - High		

Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.1
Technology Group:	Monitoring	**Technology:**	Telemetry
Symptom:	On SLXOS 9740, inoctets/outoctets counter output of interfaces or snmp query for these same counters of ports spike at some point and the spiked values continue. These spikes are not real reflection of data but just a counter read issue.		
Condition:	There is no specific condition for this inaccuracy in the counter		

Parent Defect ID:	SLXOS-58687	**Issue ID:**	SLXOS-58888
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3c
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol
Symptom:	Issue is seen when different MAC is dynamically learnt for the same IP in distributed routing.		
Condition:	Issue occurs only when different MAC same IP is learnt rapidly.		

Defects Closed without Code Changes

The following software defects were closed in 20.3.2a without code change as of **July 2021**.

Parent Defect ID:	SLXOS-58534	**Issue ID:**	SLXOS-59799
Reason Code:	Not Reproducible	**Severity:**	S2 – High
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2
Technology Group:	Layer 2 Switching	**Technology:**	Other
Symptom:	Traffic drop seen towards the VPLS tunnel		
Condition:	Issue seen Intermittently when statistics enabled and disabled consecutively.		
Recovery:	Removing and re-adding the problematic peer under "Bridge-domain" configuration recovers the issue.		

Parent Defect ID:	SLXOS-58151	**Issue ID:**	SLXOS-59820
Reason Code:	Cannot Fix	**Severity:**	S2 - High
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BFD - BiDirectional Forwarding Detection
Symptom:	BFD sessions flapped once during interval change.		
Condition:	BFD interval changed for 250 bfd sessions.		

Parent Defect ID:	SLXOS-59114	**Issue ID:**	SLXOS-59822
Reason Code:	Insufficient Information	**Severity:**	S2 - High
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BFD - BiDirectional Forwarding Detection
Symptom:	BFD sessions may flap in SLX-9740.		
Condition:	On shutting down the member interface of the port-channel .		

Parent Defect ID:	SLXOS-58240	**Issue ID:**	SLXOS-59827
Reason Code:	Cannot Fix	**Severity:**	S2 - High
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.2
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BFD - BiDirectional Forwarding Detection
Symptom:	BFD session establishment will be delayed by 75-120 seconds in SLX 9740.		
Condition:	After MCT/ICL link comes UP .		

Parent Defect ID:	SLXOS-59490	**Issue ID:**	SLXOS-60492
Reason Code:	Already Implemented	**Severity:**	S3 - Medium
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.3.1
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol
Symptom:	When rules are advertised from Policy server to SLXOS running 20.3.1 via BGP, rules are not activated. All entries were Active: No (unsupported match/action type OR No TCAM space available)		
Condition:	This is seen when device running SLXOS 20.3.1 and FLOWSPEC rules are sent from policy server via BGP. Rules will not be activated.		

The following software defects were closed in 20.3.2 without code change as of **June 2021**.

Parent Defect ID:	SLXOS-43341	**Issue ID:**	SLXOS-43341
Reason Code:	Will Not Fix	**Severity:**	S2 - High
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.1
Technology Group:	Management	**Technology:**	Other
Symptom:	Rollback operation fails.		
Condition:	Rollback checkpoint has 'standard' ACL and running-config has 'extended' ACL (vice versa) with same name and applied to the same interfaces.		
Workaround:	Avoid using same name for standard and extended ACLs		
Recovery:	Manually configure ACLs and its application on interfaces		

Parent Defect ID:	SLXOS-53866	**Issue ID:**	SLXOS-53866
Reason Code:	Feature/Function Not Supported	**Severity:**	S2 - High
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	Other
Symptom:	Traffic flows utilizing L3 Prefixes (IPv4/IPv6) reachable through ECMP of VXLAN tunnels, may get disrupted in case of one of the VXLAN tunnel path goes away.		
Condition:	L3 Prefixes (IPv4/IPv6) reachable through ECMP of VXLAN tunnels.		

Parent Defect ID:	SLXOS-54106	**Issue ID:**	SLXOS-54106
Reason Code:	Feature/Function Not Supported	**Severity:**	S3 - Medium
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.2c

Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol
Symptom:	Unexpected reload		
Condition:	when we enable the MP tool for BGP module.		

Parent Defect ID:	SLXOS-54162	**Issue ID:**	SLXOS-54162
Reason Code:	Watch	**Severity:**	S3 - Medium
Product:	SLX-OS	**Reported in Release:**	SLXOS 18r.2.00bd
Technology Group:	Layer 2 Switching	**Technology:**	QinQ - IEEE 802.1Q
Symptom:	Destination packets are sending out with ZERO MAC address.		
Condition:	Hardware resources are completed when the scaled environment.		

Parent Defect ID:	SLXOS-54302	**Issue ID:**	SLXOS-54302
Reason Code:	Working as Designed	**Severity:**	S2 - High
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol
Symptom:	When the best path interface is made down after new best path selection (by changing weight value), traffic for some routes (around 8%) flows in non-best path for some time (around 1 min). After that it's started flowing through best path properly		
Condition:	This issue is observed only when the best path interface is made down immediately after changing the weight value		
Workaround:	This issue will not occur when the best path interface is made down after some time (i.e)15 mins after changing the weight value		
Recovery:	Traffic (around 8%) will recover from the issue state and start flowing through best path properly after 1 min.		

Parent Defect ID:	SLXOS-54304	**Issue ID:**	SLXOS-54304
Reason Code:	Cannot Fix	**Severity:**	S2 - High
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2
Technology Group:	Traffic Management	**Technology:**	Rate Limiting and Shaping
Symptom:	OSPF V2 session flaps when Ingress ACL based rate limiting is applied on the interface.		
Condition:	When Ingress ACL based RL is applied on the interface and the configured rate is low compared to the data traffic that is ingressing,		
Workaround:	In the Ingress ACL based RL, add another deny rule with higher precedence that will match OSPF frames. SLX# show running-config ip access-list extended any ip access-list extended any seq 10 deny 89 any any		

	seq 20 permit ip any any seq 10 will make sure that OSPF frames are not rate limited.
Recovery:	Same as workaround.

Parent Defect ID:	SLXOS-55278	**Issue ID:**	SLXOS-55278
Reason Code:	Already Implemented	**Severity:**	S3 - Medium
Product:	SLX-OS	**Reported in Release:**	SLXOS 18r.1.00ch
Technology Group:	Security	**Technology:**	RADIUS
Symptom:	SLX may ignore RADIUS server response for REST API authentication		
Condition:	1.Configure one or more radius servers with "aaa authentication login radius local-auth-fallback" 2.Send REST query to SLX from any linux device (SLX chooses lower source UDP port numbers, hence it ignores such responses)		

Parent Defect ID:	SLXOS-55755	**Issue ID:**	SLXOS-55755
Reason Code:	Already Implemented	**Severity:**	S3 - Medium
Product:	SLX-OS	**Reported in Release:**	SLXOS 18r.2.00a
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol
Symptom:	on SLXOS 9540, BGP flowspec rules are not working for some source ports.		
Condition:	Action configured is Redirect to IP Nexthop in the flowspec rule.		

Parent Defect ID:	SLXOS-56317	**Issue ID:**	SLXOS-56317
Reason Code:	Working as Designed	**Severity:**	S3 - Medium
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.2d
Technology Group:	Monitoring	**Technology:**	Hardware Monitoring
Symptom:	Traffic egresses out of VXLAN tunnel modifies original carried TTL value with 254 as TTL, irrespective of the value of the incoming TTL.		
Condition:	Establish a VXLAN tunnel between two directly connected switches and initiate ping/traceroute from one of the node.		

Parent Defect ID:	SLXOS-56456	**Issue ID:**	SLXOS-56456
Reason Code:	Will Not Fix	**Severity:**	S2 - High
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.2d
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	Other
Symptom:	On SLXOS 9540, Fragmented packets with no UDP port number(non-initial packets) are getting re-directed in PBR policy incorrectly.		
Condition:	PBR policy enabled with UDP port match and with Fragmented packets.		

Parent Defect ID:	SLXOS-56468	**Issue ID:**	SLXOS-56468
Reason Code:	Will Not Fix	**Severity:**	S2 - High
Product:	SLX-OS	**Reported in Release:**	SLXOS 18r.2.00bd
Technology Group:	MPLS	**Technology:**	IP over MPLS
Symptom:	Traffic latency in the network.		
Condition:	On SLX 9540, sometimes, HSLagtd process is showing high CPU utilization.		

Parent Defect ID:	SLXOS-56718	**Issue ID:**	SLXOS-56718
Reason Code:	Network Tuning	**Severity:**	S3 - Medium
Product:	SLX-OS	**Reported in Release:**	SLXOS 18r.2.00bd
Technology Group:	Traffic Management	**Technology:**	Rate Limiting and Shaping
Symptom:	On SLX 9540, we may notice frame loss ratio of up to 9% during end-to-end traffic testing.		
Condition:	a) Send traffic with fixed size 1500 bytes with CBS as 1.3mb b) No rate limit configuration on transit nodes c) Customer nodes configured with bandwidth profile CIR 500 Mbps, CBS 1280 Kib, EIR 3 Mbps, EBS 8 Kib		

Parent Defect ID:	SLXOS-56974	**Issue ID:**	SLXOS-56974
Reason Code:	Already Implemented	**Severity:**	S2 - High
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.2g
Technology Group:	IP Multicast	**Technology:**	IGMP - Internet Group Management Protocol
Symptom:	May encounter unexpected reload		
Condition:	There is no specific trigger for this but they can hit when SLX device with mcastd process consumes memory in incremental way.		

Parent Defect ID:	SLXOS-57172	**Issue ID:**	SLXOS-57429
Reason Code:	Insufficient Information	**Severity:**	S2 - High
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3b
Technology Group:	Layer 2 Switching	**Technology:**	MCT - Multi-Chassis Trunking
Symptom:	Sometimes BUM Traffic loss is seen for few VLANs, when traffic is sent over ICL from the MCT peer node.		
Condition:	With MCT configuration, "cluster shut clients" is performed repetitively, on the alternate MCT peer nodes.		

Parent Defect ID:	SLXOS-57365	**Issue ID:**	SLXOS-57458

Reason Code:	Not Reproducible	**Severity:**	S2 - High
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3b
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BFD - BiDirectional Forwarding Detection
Symptom:	A few BFD session flaps maybe seen after ARP age out.		
Condition:	Two node MCT topology with BFD sessions formed over bridge-domain and ARP entry for BFD neighbor ages out. After ARP ages out, ARP request is sent out but for few of the ARP's, unicast ARP reply packet is being dropped.		

Parent Defect ID:	SLXOS-57282	**Issue ID:**	SLXOS-57476
Reason Code:	Will Not Fix	**Severity:**	S2 - High
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3b
Technology Group:	Other	**Technology:**	Other
Symptom:	Sometimes breakout port links may not come up after software upgrade.		
Condition:	After software upgrade, and with breakout configuration enabled on the ports and ports are in default FEC auto-negotiation.		
Recovery:	Changing FEC mode to "FC-FEC" ports, or change it to FC-FEC and then reverting to auto-neg.		

Parent Defect ID:	SLXOS-57571	**Issue ID:**	SLXOS-57571
Reason Code:	Working as Designed	**Severity:**	S3 - Medium
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2b
Technology Group:	Other	**Technology:**	Other
Symptom:	Interface HW Address got changed(decremented) by 2 Ex: 18r.2.00ac: # show int | i protocol|Hardware Port-channel 1 is up, line protocol is down (link protocol down) Hardware is AGGREGATE, address is d884.66ea.6b62 Ethernet 0/1 is up, line protocol is down (link protocol down) Hardware is Ethernet, address is d884.66ea.6b19 20.2.2b: # show int | i protocol|Hardware Port-channel 1 is up, line protocol is down (link protocol down) Hardware is AGGREGATE, address is d884.66ea.6b60 Ethernet 0/1 is up, line protocol is down (link protocol down) Hardware is Ethernet, address is d884.66ea.6b17		
Condition:	After upgrade from 18r.2.x to 20.x version		

Parent Defect ID:	SLXOS-57909	**Issue ID:**	SLXOS-57909
Reason Code:	Already Implemented	**Severity:**	S3 - Medium
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3b

Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	Other
Symptom:	In case of MCT deployments with user induced kernel reload, traffic convergence takes more than a seconds delay		
Condition:	In MCT deployments, in case of user induced kernel reload to check convergence time, user may observe this behavior		

Parent Defect ID:	SLXOS-57916	**Issue ID:**	SLXOS-57916
Reason Code:	Working as Designed	**Severity:**	S4 - Low
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2b
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	IPv6 Addressing
Symptom:	Secondary ipv6 address on an interface is lost		
Condition:	When SLX is upgraded from 18r2 to 20.2.x release		

Parent Defect ID:	SLXOS-57970	**Issue ID:**	SLXOS-57970
Reason Code:	Will Not Fix	**Severity:**	S4 - Low
Product:	SLX-OS	**Reported in Release:**	SLXOS 18r.1.00ch
Technology Group:	Management	**Technology:**	CLI - Command Line Interface
Symptom:	CLI "show mac-address-table dynamic bridge-domain <BD ID>" is not displaying mac address output		
Condition:	When we try to execute show command to fetch the specific BD ID details. Ex: "show mac-address-table dynamic bridge-domain <BD ID>" CLI in the noscli mode.		

Parent Defect ID:	SLXOS-57605	**Issue ID:**	SLXOS-58075
Reason Code:	Not Reproducible	**Severity:**	S2 - High
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3c
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BFD - BiDirectional Forwarding Detection
Symptom:	A few BFD sessions between MCT node and CCEP client do not come up in scaling tests.		
Condition:	In scaling tests with 1000 BFD sessions, the port channel from an MCT node to CCEP client was shut down and the node was reloaded. A few of the BFD sessions with the other client did not come up.		
Recovery:	Do shutdown and no shutdown on the interfaces		

Parent Defect ID:	SLXOS-58181	**Issue ID:**	SLXOS-58181
Reason Code:	Already Implemented	**Severity:**	S2 - High
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.2ec

Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol
Symptom:	SLX rebooted with BGP daemon reload		
Condition:	When route-map is applied to a BGP neighbor		

Parent Defect ID:	SLXOS-58303	**Issue ID:**	SLXOS-58303
Reason Code:	Already Implemented	**Severity:**	S3 - Medium
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.1
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	GRE - Generic Routing Encapsulation
Symptom:	GRE tunnel is not up		
Condition:	When the upstream bgp running interface connected to internet is shut		