May 2021

Extreme SLX-OS 20.2.3d

Release Notes

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

Part Number 9036916-04 Rev AA

Contents

Document History

Version	Summary of changes	Publication date
1.0	Initial version for 20.2.3d Removed version SLX-OS 20.2.3a and older	May 2021

Preface

Getting Help

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

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

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- 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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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 20.2.3d provides the following features:

No new features were added in this release.

Release SLX-OS 20.2.3c provides the following features:

No new features were added in this release.

Release SLX-OS 20.2.3b provides the following features:

- Support for 1000 BFD session scale for SLX 9740
- Supporting use case of active/back up links, with BFD-SW-session command for SLX9250
- CLI enhancement for `show interface management` command.

Behavior Changes

System Feature	Behavior Change
Auto-persistence Configuration Knob	All configurations are automatically preserved across reboot. The **copy running-config startup-config** command is used to take a backup of the configuration. This backup configuration is used only if the running-config 'database' becomes unusable for any reason. On execution of command "auto-persistence disable" the auto persistency of configuration get disabled and on reboot switch will come up with configuration present in startup database.
BGP Prefix-Independent-Convergence	After enabling or disabling the feature, user needs to do 'clear ip route all' for all the VRFs where BGP is enabled.
On platform SLX 9740, power supply units must be of the same kind.	It is recommended not to mix the AC and DC power supplies for those devices that support redundant power supplies. Always use two power supplies of the same type. For example, use 2 AC power supplies or 2 DC power supplies in the device. Do not use an AC power supply combined with a DC power supply.
Disabling "unattended upgrades" on TPVM	To reduce the EFA install time, "unattended-upgrades" is disabled on TPVM. Users will have an option to upgrade manually via CLI commands on TPVM.

Software Features

The following key software features are added in the SLX-OS 20.2.3 release.

Feature Name	Supported SLX Platforms	Description
User defined TPID support	SLX 9740	The SLX 9740 hardware allows two TPIDs to be configured. One of these TPIDs is the default TPID (0x8100). Therefore, only one additional TPID is available for user configuration. TPIDs are used to tag packets traversing a device. For dual tagged packets, the inner TPID must always be the default TPID (0x8100). User defined TPID is configured using the `tag-type` command.

Disabling unattended upgrades as a part of TPVM enhancement	All target platforms for 20.2.3	To speed up EFA installation immediately after TPVM is deployed, ”unattended-upgrades” is disabled.
		
		Unattended upgrades in Ubuntu downloads and installs security updates periodically. When these updates are being installed, system does not allow any other package installations. This causes the EFA installation to fail and user is required to wait till the completion of automatic updates to retry EFA deploy.
		
		From SLX-OS 20.2.3 release onwards, security patches will be updated within the TPVM image (every major SLX-OS release).
		
		To reduce the time taken for EFA installation, “unattended-upgrades” is disabled. Users can upgrade manually by executing the following commands in TPVM (in case of emergency patch updates only).
		
		`sudo apt get update`
		
		`sudo unattended-upgrade`

Feature Name	Supported SLX Platforms	Description
Trusted-Peer configuration support for TPVM	SLX 9150 SLX 9250 SLX 9740	EFA multi-node deployment requires a bi-directional password-less SSH connection between TPVM and Peer TPVM instances. In releases prior to SLX-OS 20.2.3, an utility script was provided by EFA for creating this password-less connection. A new CLI is introduced in this release that replaces the utility script.
SNMP trap daemon forwarding from TPVM with SNMP Agent Engine	All target platforms for 20.2.3	This change enables access to default SNMP Engine ID through CLI. This feature also extends support for both 12 bytes and 13 bytes SNMP Agent Engine IDs.
Tagged VLAN packet support over Dual management port Redundancy [a.k.a Dual Management Interface]	SLX 9250 and SLX 9740	Tagged VLAN packet forwarding is supported by default for TPVM traffic only.
RS-FEC mode support for 25G ports in SLX 9740	SLX 9740	Support for RS-FEC for 25G ports introduced for SLX 9740.
Scale support for BFDoMCT/VXLAN	SLX9740	From SLXOS 20.2.3b onwards 1k BFD sessions scale supported in SLX -9740
BFD Session Changes	SLX 9150 and SLX 9250	In active backup scenarios of BFD over MCT/, BFD sessions need to be configured as software sessions over the CEP ports pointing towards the servers. This command converts the hardware-based BFD sessions to software-based BFD sessions over the CEP ports

CLI Commands

For information about 20.2.3a and earlier releases, please refer to the 20.2.3a Release Notes.

The following commands were added, modified, or deprecated for the 20.2.3d program

New commands for 20.2.3d

None

Modified commands for 20.2.3d

None

Deprecated commands for 20.2.3d

None

The following commands were added, modified, or deprecated for the 20.2.3c program

New commands for 20.2.3c

None

Modified commands for 20.2.3c

None

Deprecated commands for 20.2.3c

None

The following commands were added, modified, or deprecated for the 20.2.3b program

New commands for 20.2.3b

- `SLX(config-Port-channel-<po-id>)# bfd-software-session`
  `SLX(conf-if-eth-<id>)# bfd-software-session`
  `This command is applicable for L2 interface and L2 Port channel CEP ports`
  In active backup scenarios of BFD over MCT/, BFD sessions need to be configured as software sessions over the CEP ports pointing towards the servers. This command converts the hardware-based BFD sessions to software-based BFD sessions over the CEP ports

  This CLI is supported on SLX 9150 and SLX 9250 platforms.

  The following example creates SW based BFD sessions.

  ```
  SLX(config-Port-channel-101)#  bfd-software-session
  SLX(conf-if-eth-0/9)# bfd-software-session
  ```

  For resetting BFD configuration, use

  ```
  MCT1(conf-if-eth-0/9)# no bfd-software-session ?
  Possible completions:
  <cr>
  ```

Modified commands for 20.2.3b

- `show interface management`

The `show interface management 0` command adds an additional line to the output to indicate the state of the management interfaces. It introduces marking the management interface as either (A)ctive, (P)rimary, and Standby.

A new line `rme-info` is added to display the state of the management interface.

The following is the output of the `show interface management 0` command:

```
SLX# show interface Management 0
Possible completions:
  ip            The IPv4 configurations for this management interface.
  ipv6          The IPv6 configurations for this management interface.
  line-speed    The line-speed characteristics for this management
interface.
  oper-status   Show the status of this management interface.
  redundant     Redundant management port info
  rme-info      Redundant Management member port (A)ctive (P)rimary
Standby role info.
  |             Output modifiers
  <cr>
```

Deprecated commands for 20.2.3b

None

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

Supported devices	Description
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 20.2.3d, see the *Extreme SLX-OS Software Upgrade Guide*.

Image files

Download the following images from www.extremenetworks.com.

Image file name	Description
SLX-OS_20.2.3d.tar.gz	SLX-OS 20.2.3d software
SLX-OS_20.2.3_mibs.tar.gz	SLX-OS 20.2.3 MIBS
SLX-OS_20.2.3d.md5	SLX-OS 20.2.3d md5 checksum
SLX-OS_20.2.3d-digests.tar.gz	SLX-OS 20.2.3d sha checksum
SLX-OS_20.2.3d-releasenotes.pdf	Release Notes

SLX 9740

To / From	20.2.2x	20.2.3_CR	20.2.3	20.2.3a/b/c	20.2.3d
20.2.1a	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot
20.2.2x	Use the normal Firmware Download / coldboot*	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot
20.2.3_CR	Use the normal Firmware Download / coldboot	NA	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot
20.2.3	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	NA	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot
20.2.3a/b/c	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	NA	Use the normal Firmware Download / coldboot
20.2.3d	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	NA

*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

SLX 9540 and SLX 9640

To / From	20.2.2a	20.2.2b	20.2.3a/b	20.2.3c
18r.2.00bc	For SLX 9540:	For SLX 9540:	For SLX 9540:	For SLX 9540:

To / From	20.2.2a	20.2.2b	20.2.3a/b	20.2.3c
	1. First upgrade to 20.1.2e using fullinstall. 2. Then upgrade to 20.2.2a using fullinstall. For SLX 9640: Use fullinstall.	1. First upgrade to 20.1.2e using fullinstall. 2. Then upgrade to 20.2.2b using fullinstall. For SLX 9640: Use fullinstall.	1. First upgrade to 20.1.2e using fullinstall. 2. Then upgrade to 20.2.3a using fullinstall. For SLX 9640: Use fullinstall.	1.First upgrade to 20.1.2g using full install. 2.Then upgrade to 20.2.3c using full install. For SLX 9640: Use full install.
20.1.1	For SLX 9540: 1. First upgrade to 20.1.2e using fullinstall. 2. Then upgrade to 20.2.2a using fullinstall. For SLX 9640: Use fullinstall.	For SLX 9540: 1. First upgrade to 20.1.2e using fullinstall. 2. Then upgrade to 20.2.2b using fullinstall. For SLX 9640: Use fullinstall.	For SLX 9540: 1. First upgrade to 20.1.2e using fullinstall. 2. Then upgrade to 20.2.3a using fullinstall. For SLX 9640: Use fullinstall.	For SLX 9540: 1.First upgrade to 20.1.2g using fullinstall. 2.Then upgrade to 20.2.3a/b using fullinstall. For SLX 9640: Use fullinstall.
20.2.1a	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot
20.2.2	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot
20.2.2a	NA	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot
20.2.3a	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	NA	Use the normal Firmware Download / coldboot

To / From	20.2.2a	20.2.2b	20.2.3a/b	20.2.3c
20.2.3c	Use the normal Firmware Download / coldboot	Use the normal Firmware Download / coldboot	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/20.2.3x, 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.
- Downgrading from 20.2.2x/20.2.3x to 20.1.1 requires 'fullinstall' option for all platforms due to a change in *glibc*
- Downgrading from 20.2.2x/20.2.3x to 20.1.1 may not require a 2-step procedure.

SLX 9150 and SLX 9250

To / From	20.2.2x	20.2.3_CR	20.2.3	20.2.3a/b/c	20.2.3d
20.1.1	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot
20.1.2x	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot
20.2.1x	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot
20.2.2x	Use the normal firmware download / coldboot*	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot
20.2.3_CR	Use the normal firmware download / coldboot	NA	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot

To / From	20.2.2x	20.2.3_CR	20.2.3	20.2.3a/b/c	20.2.3d
20.2.3	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	NA	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot
20.2.3a/b/c	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	NA	Use the normal firmware download / coldboot
20.2.3d	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	Use the normal firmware download / coldboot	NA

*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/b/c	TPVM-4.2.3	EFA-2.4.x, EFA-2.3.x
20.2.3d	TPVM-4.2.4	EFA-2.4.x, EFA-2.3.x

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 20.2.3

- SLX-OS 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 20.2.3/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 as part of 20.2.3a, there is a change in size of TPVM image to ~1.7 GB. This TPVM package contains Ubuntu security patches available up to 7th Feb 2021.

VDB disk size for EFA has changed to 52 GB and the remaining space is considered as reserved space, for the new TPVM installation.

Limitations and Restrictions

Port macro restrictions on breakout port configuration on SLX 9740

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

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

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

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

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
- When user explicitly configures "**fec mode auto-negotiation**", the configuration is not shown in running-config(SLXOS-55857)

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

- Secure channel (TLS) to access OperDB is not supported.
- 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.

Open Defects

Parent Defect ID:	SLXOS-55114	**Issue ID:**	SLXOS-55114
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-55211	**Issue ID:**	SLXOS-55211
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-56032	**Issue ID:**	SLXOS-56032
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2b
Technology Group:	Management	**Technology:**	High Availability
Symptom:	Around 1-2 seconds packet loss for some VLAN interfaces in the list of TPVM interfaces only, whenever there is toggle between Active(OOB) - Standby (RME) path. (Dual Management Interface feature)		
Condition:	Multiple VLAN interfaces at TPVM		

Parent Defect ID:	SLXOS-56194	**Issue ID:**	SLXOS-56194
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3
Technology Group:	Management	**Technology:**	Other
Symptom:	On dual management ethernet interface configured with "ip address dhcp", IP address is not assigned when the management peer link is brought up after reload.		
Condition:	Management interface has "ip address dhcp" configuration and the management peer link is down. After reload, management peer link is brought up.		
Recovery:	Delete and configure "ip address dhcp" on the management interface.		

Parent Defect ID:	SLXOS-56401	**Issue ID:**	SLXOS-56401
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-56725	**Issue ID:**	SLXOS-56725
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-56899	**Issue ID:**	SLXOS-57032
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 neighbor through NETCONF request is adding partial config.		
Condition:	Only while deleting a non-existing BGP neighbor through NETCONF this issue is seen, Deleting an existing BGP neighbor though NETCONF works fine.		

Parent Defect ID:	SLXOS-56958	**Issue ID:**	SLXOS-57060
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-57167	**Issue ID:**	SLXOS-57167
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-57174	**Issue ID:**	SLXOS-57174
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-57176	**Issue ID:**	SLXOS-57204
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 18r.1.00ch
Technology Group:	Layer 2 Switching	**Technology:**	LAG - Link Aggregation Group
Symptom:	Port channel is flapping once and stabilize . It is an interop issue		
Condition:	When it is connected with other vendor.		

Parent Defect ID:	SLXOS-57246	**Issue ID:**	SLXOS-57246
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-57029	**Issue ID:**	SLXOS-57248
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2b
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	Other
Symptom:	When fragmented pkts punted to CPU with high rate than it may cause protocol flaps.		

Condition:	When MTU violated pkts comes to CPU with high rate than it may lead to CPU congestion with protocol flaps.

Parent Defect ID:	SLXOS-57075	**Issue ID:**	SLXOS-57299
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-57142	**Issue ID:**	SLXOS-57501
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-56962	**Issue ID:**	SLXOS-57525
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-57272	**Issue ID:**	SLXOS-57537
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-57604	**Issue ID:**	SLXOS-57604
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-57605	**Issue ID:**	SLXOS-57605
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-57247	**Issue ID:**	SLXOS-57735
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-55554	**Issue ID:**	SLXOS-57789
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-57181	**Issue ID:**	SLXOS-57797
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-57571	**Issue ID:**	SLXOS-57837
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: core1.sat1.he.net# 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: core1.sat1.he.net# 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-57233	**Issue ID:**	SLXOS-57841
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-57012	**Issue ID:**	SLXOS-57845
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-57958	**Issue ID:**	SLXOS-57958
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.		

Defects Closed with Code Changes

Parent Defect ID:	SLXOS-50117	**Issue ID:**	SLXOS-50117
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.2
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	OSPF - IPv4 Open Shortest Path First
Symptom:	When multiple summary addresses with same prefix but different subnets are configured and unconfigured, one summary route is not removed in the system		
Condition:	Multiple summary addresses with same prefix but different subnets should be configured. Check the aggregated summary routes. Then unconfigure all the summary routes, and user will observe One aggregate route is still present in the system.		
Recovery:	unconfigure and reconfigure ospf will help recover		

Parent Defect ID:	SLXOS-50960	**Issue ID:**	SLXOS-50960
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.1
Technology Group:	Management	**Technology:**	CLI - Command Line Interface
Symptom:	CLI Command stuck to process and unexpected reload.		
Condition:	Rare scenario to hit. When Confd and DCMd control socket timeout.		

Parent Defect ID:	SLXOS-55167	**Issue ID:**	SLXOS-55167
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2a
Technology Group:	Management	**Technology:**	CLI - Command Line Interface
Symptom:	Display issue where 25 G optics is shown as 10G optics for the 4x25G DAC cable.		
Condition:	Display issue where 25 G optics is shown as 10G optics for the 4x25G DAC cable.		

Parent Defect ID:	SLXOS-55369	**Issue ID:**	SLXOS-55369
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2a
Technology Group:	Other	**Technology:**	Other
Symptom:	In MCT Configuration, Layer2 ARP broadcast packets are not getting forwarded on SLX-9740 when one of MCT switch reloads.		
Condition:	ARP suppression feature is enabled on the VLAN.		
Workaround:	Disable ARP suppression feature on the VLAN.		

Parent Defect ID:	SLXOS-55421	**Issue ID:**	SLXOS-55421
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.2e
Technology Group:	Other	**Technology:**	Other
Symptom:	Some 4x25G optical modules do not link up after reboot and require a shut/no-shut to bring the link up.		
Condition:	SLX 9250 with EQPT1H4SR4UCM100 and 4x25G breakout cable; 4x25G breakout configuration		
Recovery:	shut/no-shut on the interface after reload		

Parent Defect ID:	SLXOS-55540	**Issue ID:**	SLXOS-55540
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2a
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	ARP - Address Resolution Protocol
Symptom:	L3 traffic drop sometimes for a few streams that have their next hops over the bridge domain on SLX-9740.		
Condition:	L3 traffic is flowing through next hops learnt over bridge domain and clear arp no-refresh is performed.		

Parent Defect ID:	SLXOS-55577	**Issue ID:**	SLXOS-55577
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.2c
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	Static Routing (IPv4)
Symptom:	Traffic will be incorrectly forwarded		
Condition:	When a Static Route Nexthop's resolution is via a VXLAN tunnel and the VxLAN tunnel is changed to another one (either in the case of ECMP or manually)		

Parent Defect ID:	SLXOS-55587	**Issue ID:**	SLXOS-55587
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.2e
Technology Group:	Management	**Technology:**	Other
Symptom:	Unexpected reload		
Condition:	Rare scenario . When the CLI stuck for long time.		

Parent Defect ID:	SLXOS-55916	**Issue ID:**	SLXOS-55916
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2b

Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	Other
Symptom:	IPv6 packets with source address of fe80:: are trapped to CPU.		
Condition:	Receiving IPv6 packets with source address of LinkLocal fe80:: on SLX 9540/9640/9740 device.		
Workaround:	Work around is to disable LinkLocal trap via a debugging cmd. SLX#debug ppc linklocal trap 0 <dev-id>		

Parent Defect ID:	SLXOS-55960	**Issue ID:**	SLXOS-55960
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2b
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BFD - BiDirectional Forwarding Detection
Symptom:	BFD session flaps for a few seconds on SLX-9740.		
Condition:	During reload, when BFD session comes up, session flap may be observed.		

Parent Defect ID:	SLXOS-55975	**Issue ID:**	SLXOS-55975
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2b
Technology Group:	Layer 2 Switching	**Technology:**	MCT - Multi-Chassis Trunking
Symptom:	Layer2 and Layer3 traffic convergence may take longer time in SLX 9740		
Condition:	When the below triggers are performed on the switch with 500 VLANs, 50 BDs, around 15 CCEP and 50 BFD sessions, traffic convergence may take more time. 1) Clear arp no-refresh 2) ICL Port channel flap 3) Put the system in maintenance mode and bring it back 4) Multiple (up to 5) CCEP interface shutdown and then no shutdown 5) Reloading one of the node in MCT		
Recovery:	The system automatically recovers when left idle for sometime		

Parent Defect ID:	SLXOS-56069	**Issue ID:**	SLXOS-56069
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2b
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	ARP - Address Resolution Protocol
Symptom:	LACP and BFD sessions flap for some time after reload of device.		

Condition:	On SLX 9740, with MCT enabled on scaled up configuration, when the switch comes up, LACP and BFD sessions flap and stabilize after some time.

Parent Defect ID:	SLXOS-56093	**Issue ID:**	SLXOS-56093
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	GRE - Generic Routing Encapsulation
Symptom:	On SLXOS 9740, Ping between GRE tunnel endpoints is failing.		
Condition:	GRE encapsulated Transmit packets from the node are corrupted		

Parent Defect ID:	SLXOS-56121	**Issue ID:**	SLXOS-56121
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.1
Technology Group:	Other	**Technology:**	Other
Symptom:	Some optical modules from Extreme Networks have the vendor programmed as BROCADE and are being reported as "non Extreme branded"		
Condition:	Optical module's eeprom are programmed with BROCADE as vendor instead of EXTEME NETWORKS		
Workaround:	none		
Recovery:	none		

Parent Defect ID:	SLXOS-56170	**Issue ID:**	SLXOS-56170
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2b
Technology Group:	Traffic Management	**Technology:**	QoS - Quality of Service
Symptom:	On SLX 9540, CPU traffic will be dropped and could impact the protocols, when below QOS rx-queue cmd with [no] option is executed - "no qos rx-queue"		
Condition:	When QOS rx-queue cmd is used with [no] option to configure default queue configuration.		

Parent Defect ID:	SLXOS-56230	**Issue ID:**	SLXOS-56230
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3
Technology Group:	Management	**Technology:**	Inband Management
Symptom:	Traceroute to the device management is not working		
Condition:	On default boot-up, the switch comes up with "ip icmp unreachable" being disabled.		
Workaround:	Configure "ip icmp unreachable" on the management interface		

Recovery:	On 'interface management 0' provision 'ip icmp unreachable'

Parent Defect ID:	SLXOS-56326	**Issue ID:**	SLXOS-56326
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2b
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	GRE - Generic Routing Encapsulation
Symptom:	On SLX 9740, Transit GRE Encapsulated packets of 258 byte packet size are copied to the CPU.		
Condition:	Transit GRE Encapsulated packets of 258 byte packet size will be copied to CPU		

Parent Defect ID:	SLXOS-56409	**Issue ID:**	SLXOS-56409
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3
Technology Group:	Management	**Technology:**	SNMP - Simple Network Management Protocol
Symptom:	IPV6 SNMP traps are not having configured source interface.		
Condition:	Do file replay of backed up config and perform shut/ no shut on the source interface		
Recovery:	Reconfigure the source interface after file replay		

Parent Defect ID:	SLXOS-56514	**Issue ID:**	SLXOS-56514
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-56646	**Issue ID:**	SLXOS-56646
Severity:	S3 - Medium		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2b
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	GRE - Generic Routing Encapsulation
Symptom:	On SLX 9540 and SLX 9640, GRE Tunnel packets with size 200-300 are copied to the CPU.		
Condition:	GRE Tunnelled packets on transit nodes.		

Parent Defect ID:	SLXOS-56801	**Issue ID:**	SLXOS-56801
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-56807	**Issue ID:**	SLXOS-56807
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.3a
Technology Group:	Management	**Technology:**	Configuration Fundamentals
Symptom:	On firmware downgrade with 'noreboot' option from 20.2.3a to 20.2.3 and before reloading the switch if CLI maintenance mode enable is configured then system does not enter into maintenance mode.		
Condition:	This issue is observed when maintenance mode enable CLI is configured just after firmware downgrade with 'noreboot' option and before reloading the switch.		
Workaround:	After firmware download, reboot the switch to complete the process of firmware downgrade. Do not configure on the switch before reboot.		

Parent Defect ID:	SLXOS-57027	**Issue ID:**	SLXOS-57027
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-56998	**Issue ID:**	SLXOS-57159
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-57232	**Issue ID:**	SLXOS-57232
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:	On 9150/9250, and in MCT configuration, ICL shut/noshut is triggered multiple times every 30 seconds continuously for more than 12 hours		

Parent Defect ID:	SLXOS-57261	**Issue ID:**	SLXOS-57261
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:	Few BFD session flaps maybe seen at random intervals in SLX 9740		
Condition:	With 1000 BFD sessions		

Parent Defect ID:	SLXOS-57287	**Issue ID:**	SLXOS-57287
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-57291	**Issue ID:**	SLXOS-57291
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.		
Recovery:	Delete the VLAN, its associated VE and then reconfigure VLAN and VE		

Parent Defect ID:	SLXOS-57293	**Issue ID:**	SLXOS-57293
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-57368	**Issue ID:**	SLXOS-57368
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-57371	**Issue ID:**	SLXOS-57371
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-55495	**Issue ID:**	SLXOS-57701
Severity:	S2 - High		
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.2.2a
Technology Group:	Layer 2 Switching	**Technology:**	MCT - Multi-Chassis Trunking
Symptom:	The packets go out as Untagged from a tagged trunk port that is configured Cluster Edge Port (CEP) physical port.		
Condition:	When the port 0/1 (Or Breakout ports 0/1:1-4) are used as CEP ports, and configured as "switchport trunk", the packets egressing out of the port are Untagged. Problem is not seen with the other ports.		

Parent Defect ID:	SLXOS-57859	**Issue ID:**	SLXOS-57859
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-57888
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-58065	**Issue ID:**	SLXOS-58232
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-58280	**Issue ID:**	SLXOS-58372
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-58321	**Issue ID:**	SLXOS-58378
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 get converge.
Condition:	Post maintainence mode diable, after the router boots up.

Parent Defect ID:	SLXOS-58519	**Issue ID:**	SLXOS-58554
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.		

Defects Closed without Code Changes

Parent Defect ID:	SLXOS-54726	**Issue ID:**	SLXOS-54726
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:**	BFD - BiDirectional Forwarding Detection
Symptom:	BFD sessions over CCEP interface will flap few times.		
Condition:	CCEP Port-channel interface is shut.		

Parent Defect ID:	SLXOS-55238	**Issue ID:**	SLXOS-55238
Reason Code:	Insufficient Information	**Severity:**	S2 - High
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.1
Technology Group:	Management	**Technology:**	PoE/PoE+ - Power over Ethernet
Symptom:	SLX device failed to bring online		
Condition:	System was running and all of sudden power cut and lead to missing/corruption in the file system.		
Recovery:	Net-install the SLXOS software to bring the SLX online.		

Parent Defect ID:	SLXOS-55554	**Issue ID:**	SLXOS-55554
Reason Code:	Not Reproducible	**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-55658	**Issue ID:**	SLXOS-55658
Reason Code:	Not Reproducible	**Severity:**	S2 - High
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.2d
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	BGP4 - IPv4 Border Gateway Protocol
Symptom:	Sometimes, even though Nhop/Peer is not reachable, BGP peering succeeds.		
Condition:	Layer 3 BGP feature is enabled		

Parent Defect ID:	SLXOS-55730	**Issue ID:**	SLXOS-55730
Reason Code:	Insufficient Information	**Severity:**	S3 - Medium

Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.2d
Technology Group:	Management	**Technology:**	CLI - Command Line Interface
Symptom:	SLX reporting - Error: SLX-OS is not ready. Please login later after confd core file generation		
Condition:	confd module fails to load properly.		
Recovery:	Reload system		

Parent Defect ID:	SLXOS-55903	**Issue ID:**	SLXOS-55903
Reason Code:	Already Implemented	**Severity:**	S1 - Critical
Product:	SLX-OS	**Reported in Release:**	SLXOS 18r.2.00a
Technology Group:	Layer 3 Routing/Network Layer	**Technology:**	ARP - Address Resolution Protocol
Symptom:	Duplicate entries has been observed in RAS log and ARP age-out not working as expected.		
Condition:	SLX device configured with "ip dhcp relay address"		
Workaround:	clear arp no-refresh		

Parent Defect ID:	SLXOS-56974	**Issue ID:**	SLXOS-56986
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-57073	**Issue ID:**	SLXOS-57083
Reason Code:	Already Implemented	**Severity:**	S3 - Medium
Product:	SLX-OS	**Reported in Release:**	SLXOS 20.1.2f
Technology Group:	Monitoring	**Technology:**	Hardware Monitoring
Symptom:	show media output is not showing the transceiver value as expected. It is cosmetic issue and no functional impact.		
Condition:	When we have 25G SFP transceiver is inserted		

Parent Defect ID:	SLXOS-57243	**Issue ID:**	SLXOS-57243
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:	BFD Sessions may flap once in SLX 9740-80C		

Condition:	When BFD Tx and Rx intervals are modified.

Parent Defect ID:	SLXOS-57282	**Issue ID:**	SLXOS-57282
Reason Code:	Not Reproducible	**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-57889	**Issue ID:**	SLXOS-57889
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.		
Recovery:	Remove all the configurations on the interface on the peer device. Shutdown/no-shutdown the interface and re-configure the interface.		