

SLX-OS 18r.1.00g for SLX 9850 and SLX 9540

Release Notes

Copyright © 2021 Extreme Networks, Inc. All Rights Reserved.

Legal Notice

Extreme Networks, Inc. reserves the right to make changes in specifications and other information contained in this document and its website without prior notice. The reader should in all cases consult representatives of Extreme Networks to determine whether any such changes have been made.

The hardware, firmware, software or any specifications described or referred to in this document are subject to change without notice.

Trademarks

Extreme Networks and the Extreme Networks logo are trademarks or registered trademarks of Extreme Networks, Inc. in the United States and/or other countries.

All other names (including any product names) mentioned in this document are the property of their respective owners and may be trademarks or registered trademarks of their respective companies/owners.

For additional information on Extreme Networks trademarks, please see: www.extremenetworks.com/company/legal/trademarks

Open Source Declarations

Some software files have been licensed under certain open source or third-party licenses. End-user license agreements and open source declarations can be found at:

www.extremenetworks.com/support/policies/software-licensing

Contents

Release Notes	
Contents	3
Document history	4
Preface	5
Contacting Extreme Technical Support	5
Extreme resources	5
Document feedback	6
Overview	7
New SKUs	8
Behavior changes	g
Behavior changes in release 18r.1.00g	g
Behavior changes in release 18r.1.00f	g
Behavior changes in release 18r.1.00e	g
Software Features	10
New software features in 18r.1.00g	10
New software features in 18r.1.00f	10
New software features in 18r.1.00e	10
CLI commands	12
CLI commands introduced in R18r.1.00g	12
CLI commands introduced in R18r.1.00f	12
CLI commands introduced in R18r.1.00e	13
RFCs, Standards, and Scalability	14
Hardware support	15
Supported devices	
Supported power supplies	16
Supported optics	
Supported Extreme optics in SLX-OS 18r.1.00d	18
Software upgrade and downgrade	
Image file names	19
Upgrade and downgrade considerations	19
MCT Upgrade Process	22
Limitations and restrictions	26
Defects closed in 18r.1.00g	29
Defects closed in 18r.1.00f	
Defects closed in 18r.1.00e	35
Defects closed in 18r.1.00d	40
Defects closed in 18r 1 00c	46

Document history

Version	Summary of changes	Publication date
1.0	Initial Release	January 2021
	Removed versions	
	18r.1.00d and older	
2.0	Updated description for	February 2021
	Defect ID 55742	
	Defect ID 46859 was	
	added under the section	
	'Defects closed in	
	18r.1.00e'	

Preface

Contacting Extreme Technical Support

As an Extreme customer, you can contact Extreme Technical Support using one of the following methods: 24x7 online or by telephone. OEM customers should contact their OEM/solution provider. If you require assistance, contact Extreme Networks using one of the following methods:

- GTAC (Global Technical Assistance Center) for immediate support
- Phone: 1-800-998-2408 (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.
- Email: support@extremenetworks.com. To expedite your message, enter the product name or model number in the subject line.
- GTAC Knowledge Get on-demand and tested resolutions from the GTAC Knowledgebase or create a help case if you need more guidance.
- The Hub A forum for Extreme customers to connect with one another, get questions answered, share ideas and feedback, and get problems solved. This community is monitored by Extreme Networks employees but is not intended to replace specific guidance from GTAC.
- Support Portal Manage cases, downloads, service contracts, product licensing, and training and certifications.

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

- Your Extreme Networks service contract number and/or serial numbers for all involved Extreme Networks products
- A description of the failure
- A description of any action(s) 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

Extreme resources

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

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

Document feedback

Quality is our first concern at Extreme, and we have made every effort to ensure the accuracy and completeness of this document. However, if you find an error or an omission, or you think that a topic needs further development, we want to hear from you.

You can provide feedback in two ways:

- Use our short online feedback form at https://www.extremenetworks.com/documentation-feedback/
- 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.

Overview

SLX-OS 18r.1.00e adds Password Encryption Policy: SHA-512 Support .

SLX-OS 18r.1.00d supports multiple customer found defect solutions.

SLX-OS 18r.1.00a supports the following solutions and features:

- L2 Exchange
 - Egress ACL rate-limiting: This is a key feature for IXP customers to flexibly rate-limit ACL filtered traffic on port/VLAN/BD
- vSLX
 - o IP fabric BGP EVPN VXLAN control plane
 - L2 Exchange control plane

Note:

vSLX is community supported in the Extreme "The Hub" Community pages for Switching and Routing Data Center products.

https://community.extremenetworks.com/extreme/categories/extreme_switchingrouting

Details of support process for vSLX is available in the vSLX guide and release note.

New SKUs

No new SKUs are introduced in this release.

Behavior changes

For information about 18r.1.00d and earlier releases, please refer to the SLX-OS 18r.1.00d Release Notes.

Behavior changes in release 18r.1.00g

None

Behavior changes in release 18r.1.00f

None

Behavior changes in release 18r.1.00e

The following system behaviors have changed in this release

• Password Encryption Policy: SHA-512 Support

Software Features

For information about 18r.1.00d and earlier releases, please refer to the SLX-OS 18r.1.00d Release Notes.

New software features in 18r.1.00g

No new software features were added in this release.

New software features in 18r.1.00f

No new software features were added in this release.

New software features in 18r.1.00e

Password Encryption Policy: SHA-512 Support

Password encryption policy

The software supports encrypting the passwords of all existing user accounts by enabling password encryption at the device level. By default, the encryption service is enabled.

The following rules apply to password encryption:

- When you enable password encryption, all existing clear-text passwords are encrypted.
 Subsequently, passwords that are added in clear text are stored in encrypted format.
- There are three levels of password encryption:
 - o Encryption Level 0: No encryption, clear text
 - o Encryption Level 7: AES-256 encryption
 - o Encryption Level 10: SHA-512 salted HASH format. This is the default encryption level.
- In the following example, the testuser account password is created in clear text after password encryption is enabled. The global encryption policy overrides command-level encryption settings, and the password is stored as encrypted.

- When you disable the password encryption service, any new passwords added in clear text are stored as clear text on the device. Existing encrypted passwords remain encrypted.
- In the following example, the testuser account password is stored in clear text after password encryption is disabled. The default accounts, user and admin, remain encrypted.

```
device(config) # no service password-encryption
device(config) # do show running-config service password-encryption
no service password-encryption
device(config) # username testuser role testrole desc "Test User" encryption-level 0 password hellothere
enable true
device(config) # do show running-config username
username admin password #6$mAog0c./JxVGulzy$6wFogQmekOKOEgTav.0DVKXzlvRodclUCAbipYft/DWnTSR6/
Y3qpq7V3JHhRNVtwguLgXnzdtBDKPKaXbBg/encryption-level 10 role admin desc Administrator
username testuser password hellothere encryption-level 0 role testrole desc "Test User"
username user password $6$mAog0c./JxVGulzy$6wFogQmekOKOEgTav.0DVXXzlvRodclUCAbipYft/DWnTSR6/
Y3qpq7V3JHhRNVtwguLgXnzdtBDKPKaXbBg/encryption-level 10 role user desc User
```

- If you have passwords with encryption-level 7 on the device, then you can use the exec command password-encryption convert-enc-to-level-10 to upgrade the passwords to encryption-level 10 (SHA-512 hash format), making the passwords more secure. After you run this command, all encryption-level 7 passwords are converted to encryption-level 10. However, if you downgrade to a release lower than SLX 18r.1.00e, these accounts will not be available.
- This command is available only to admin users. Any clear-text (encryption-level 0) passwords are retained as-is in the configuration database and not converted to encryption-level 10 (SHA-512 hash format). These clear-text passwords can be converted using the service passwordencryption configuration command.
- In the following example, testuser1 has encryption-level 7, and after running the exec command, the encryption-level is changed to 10.

```
SLX# show running-config user | inc testuser
username testuser password "cONW1RQOnTV9Az42/9uCQg==\n" encryption-level 7 role
testrole desc "Test User"
SLX# password-encryption convert-enc-to-level-10
%WARN:This operation will convert all existing user passwords to SHA-512 format.
However, the enc level 0 (clear-text) passwords, if any, will be retained as is in the
configurationdatabase. These configurations will be lost if the system is downgraded
to lower releases than SLX 20.1.1
Do you want to continue? [Y/N]y
All passwords are converted successfully.
SLX# show running-config user | inc testuser
username testuser password $6$gV7AS1DXqcGc8/ma
$MEVxe20jaBarALGhmSYw.p3oc9IXVj9xqNUGDnfNABGs.FAqwrM8EPDMvCJcZe/MsY9geY0ej01gma7mWWWTz0
encryption-level 10 role testrole desc "Test User"
SLX#
```

 The exec command password-encryption convert-enc-to-level-10 is not allowed if there is a configuration rollback in-progress.

CLI commands

For information about 18r.1.00d and earlier releases, please refer to the SLX-OS 18r.1.00d Release Notes.

CLI commands introduced in R18r.1.00g

There are no new commands introduced in R18r.1.00g.

CLI commands introduced in R18r.1.00f

New commands

The following command is new in this release:

• [no] bpdu-drop-enable

This command is added at a port level to drop RPVST BPDUs. The bpdu-drop-enable command on a bridge domain should drop IEEE standard STP BPDU (with DMAC of 01-80-C2-00-00-00) as well as RPVST BPDU (which uses a non standard, proprietary DMAC). However, RPVST packets were not dropped on bridge domains. This command enables dropping of RPVST BPDUs at port level.

Command Syntax:

```
[no] bpdu-drop-enable
Default is no bpdu-drop-enable
```

Run this command in global context to turn on this feature on all interfaces. This command enables/disables BPDU drop on all Layer 2 (switchport) interfaces and is displayed in the running config.

```
SLX # show running config
.
.
bpdu-drop-enable
```

To enable L2 BPDU drop on all L2 interface use:

```
conf terminal
bpdu-drop-enable
end
```

Similarly to disable L2 BPDU drop on all L2 interface use:

```
conf terminal
no bpdu-drop-enable
end
```

To enable or disable L2 BPDU drop on a specific L2 interface, navigate into its context and apply this command. This command applies to any BPDU received on this interface.

```
conf terminal
interface ethernet <slot/port>
bpdu-drop-enable
end
```

When configured on a particular L2 interface, it will be displayed in the running configuration as:

```
SLX# show running-config interface ethernet <slot/port>
interface Ethernet <slot/port>
bpdu-drop-enable
switchport
```

Command Limitations:

- 1. This command is not available for port-channels.
- 2. Do not use this command when protocol spanning tree is configured. In such a scenario, spanning tree configuration takes precedence over this configuration.

Modified commands

No commands were modified in this release

Deprecated commands

No commands were deprecated in this release.

CLI commands introduced in R18r.1.00e

There are no new commands introduced in R18r.1.00e.

RFCs, Standards, and Scalability

For RFCs, standards, and scale numbers supported in this release, refer to the <u>Extreme SLX-OS Scale and Standards Matrix for SLX 9850 and SLX 9540.</u>

Hardware support

Supported devices

The following devices are supported in this release:

Supported Hardware	Description
	Extreme SLX 9850 4-slot chassis with 1 management module, 5 switch fabric modules, 2 3000W AC
BR-SLX9850-4-BND-AC	power supplies, 3 fan modules, and accessory kit. Power cord not included.
BR-SLX9850-4-BND-DC	Extreme SLX 9850 4-slot chassis with 1 management module, 5 switch fabric modules, 2 3000W DC power supplies, 3 fan modules, and accessory kit. Power cord not included.
BR-SLX9850-8-BND-AC	Extreme SLX 9850 8-slot chassis with 1 management module, 5 switch fabric modules, 4 3000W AC power supplies, 3 fan modules, and accessory kit. Power cord not included.
BR-SLX9850-8-BND-DC	Extreme SLX 9850 8-slot chassis with 1 management module, 5 switch fabric modules, 4 3000W DC power supplies, and 3 fan modules, and accessory kit. Power cord not included.
BR-SLX9850-10GX72S-M	Extreme SLX 9850 72-port 10 GbE/1 GbE dual-speed (M) interface module with IPv4/IPv6/MPLS hardware support. Requires SFP+ optics for 10 GbE connectivity and SFP optics for 1 GbE connectivity. Supports up to 750,000 MAC. Supports up to 1,500,000 IPv4 routes, 140,000 IPv6 routes with OptiScale™ Internet Routing.
BR-SLX9850-100GX36CQ-M	Extreme SLX 9850 36-port 100 GbE, 60-port 40 GbE, or 240-port 10 GbE flex-speed (M) interface module with IPv4/IPv6/MPLS hardware support. Requires QSFP28 optics for 100 GbE, QSFP+ optics for 40 GbE, and 40 GbE to 10 GbE breakout for 10 GbE connectivity. Supports up to 750,000 MAC. Supports up to 1,500,000 IPv4 routes, 140,000 IPv6 routes with OptiScale™ Internet Routing.
BR-SLX9850-10GX72S-D	Extreme SLX985072-port 10GbE/1GbE (D) interface module with IPv4/IPv6 hardware support. Requires SFP+ optics for 10GbE connectivity and SFP optics for 10Gbe connectivity. Supports 750K MAC, 256K IPv4 routes and 64K IPv6 routes with up to 8GB packet buffers
BR-SLX9850-100GX36CQ-D	Extreme SLX 9850 36-port 100GbE, 60-port 40GbE, or 240-port 10GbE flex-speed (D) interface module with IPv4/IPv6 hardware support. Requires QSFP28, QSFP+ optics & 40GbE to 10GbE
BR-SLX9850-100GX12CQ-M	Extreme SLX 9850 12-port 100 GbE, 20-port 40GbE, or 80-port 10GbE flex-speed (M) interface module with IPv4/IPv6/MPLS hardware support. Requires QSFP28, QSFP+ optics & 40GbE to 10GbE breakout (for 10 GbE) connectivity. Supports up to 750,000 MAC. Supports up to 1,500,000 IPv4 routes, 140,000 IPv6 routes with OptiScale™ Internet Routing.
BR-SLX9850-100GX6CQ-M- UPG	6x100G POD SW license to be used with SLX9850-100Gx12CQ-M 100G blade only
XBR-SLX9850-4-S	Extreme SLX9850 Spare 4-slot chassis
XBR-SLX9850-8-S	Extreme SLX9850 Spare 8-slot chassis
BR-SLX9850-MM	Extreme SLX 9850 management module for 4-slot and 8-slot systems, includes 16GB RAM, 2 internal Solid State Drives, 4-Core Intel CPU, 2 USB 3.0 ports, 2 RJ-45 console ports, and 10GbE Services port
BR-SLX9850-4-SFM	Extreme SLX 9850 switch fabric module for 4-slot chassis
BR-SLX9850-8-SFM	Extreme SLX 9850 switch fabric module for 8-slot chassis
XBR-SLX9850-ACPWR-3000	Extreme SLX 9850 AC 3000W power supply for 4- and 8-slot chassis, 90-270V AC input
XBR-SLX9850-DCPWR-3000	Extreme SLX 9850 DC 3000W power supply for 4- and 8-slot chassis
XBR-SLX9850-4-FANM	Extreme SLX 9850 fan module for 4-slot chassis. Fan module has 2 fans
XBR-SLX9850-8-FANM	Extreme SLX 9850 fan module for 8-slot chassis. Fan module has 4 fans
XBR-SLX9850-4-CAB	Extreme SLX 9850 Cable Combo Kit for 4-slot chassis
XBR-SLX9850-8-CAB	Extreme SLX 9850 Cable Combo Kit for 8-slot chassis
XBR-SLX9850-4-SFMPNL	Extreme SLX 9850 switch fabric module blank panel for 4-slot chassis
XBR-SLX9850-8-SFMPNL	Extreme SLX 9850 switch fabric module blank panel for 8-slot chassis
XBR-SLX9850-PWRPNL	Extreme SLX 9850 power supply blank panel for 4-slot and 8-slot chassis
XBR-SLX9850-IMPNL	Extreme SLX 9850 interface module blank panel for 4-slot and 8-slot chassis
XBR-SLX9850-MMPNL	Extreme SLX 9850 management module blank panel for 4-slot and 8-slot chassis
XBR-SLX9850-4-4PRM-KIT	Extreme SLX 9850 four-post rack mounting kit for 4-slot chassis. Include 27-31" flush and recessed mounting
XBR-SLX9850-4-2PRM-KIT	Extreme SLX 9850 two-post rack mounting kit for 4-slot chassis. Include telco flush and midplane mounting
XBR-SLX9850-8-4PRM-KIT	Extreme SLX 9850 four-post rack mounting kit for 8-slot chassis. Include flush and recessed mounting
XBR-SLX9850-8-2PRM-KIT	Extreme SLX 9850 two-post rack mounting kit for 8-slot chassis. Include telco flush and midplane Mounting
BR-SLX-9540-24S-AC-F	Extreme SLX 9540-24S Switch AC with Front to Back airflow. Supports 24x10GE/1GE + 24x1GE ports
DI. 3LA 3370 2437AC-1	LAUGHE 3LA 3340-243 SWILLI AC WILL FLOHE TO BACK ALTHOW. SUPPORTS 24X100E/10E + 24X10E ports

BR-SLX-9540-24S-DC-F	Extreme SLX 9540-48S Switch DC with Front to Back airflow. Supports 48x10GE/1GE + 6x100GE/40GE
BR-SLX-9540-24S-AC-R	Extreme SLX 9540-24S Switch AC with Back to Front airflow. Supports 24x10GE/1GE + 24x1GE ports
BR-SLX-9540-24S-DC-R	Extreme SLX 9540-24S Switch DC with Back to Front airflow. Supports 24x10GE/1GE + 24x1GE ports
BR-SLX-9540-48S-AC-F	Extreme SLX 9540-48S Switch AC with Front to Back airflow. Supports 48x10GE/1GE + 6x100GE/40GE
BR-SLX-9540-48S-DC-F	Extreme SLX 9540-48S Switch DC with Front to Back airflow. Supports 48x10GE/1GE + 6x100GE/40GE
BR-SLX-9540-48S-AC-R	Extreme SLX 9540-48S Switch AC with Back to Front airflow. Supports 48x10GE/1GE + 6x100GE/40GE
BR-SLX-9540-48S-DC-R	Extreme SLX 9540-48S Switch DC with Back to Front airflow. Supports 48x10GE/1GE + 6x100GE/40GE
BR-SLX-9540-24S-COD	Upgrade 24x1GE to 24x10GE/1GE
BR-SLX-9540-2C-POD	Ports on Demand for 2x100GE/40GE Uplinks
BR-SLX-9540-ADV-LIC-P	Advanced Feature License for MPLS, BGP-EVPN, CE2.0, NSX, OptiScale™ Internet Routing (for Extreme
	SLX 9540-24S and 9540-48S)

Supported power supplies

- Extreme SLX 9850 AC 3000W power supply for 4- and 8-slot chassis, 90-270V AC input
- Extreme SLX 9850 DC 3000W power supply for 4- and 8-slot chassis, 48V DC input

Supported optics

Part Number	Description	
10065	10/100/1000BASE-T SFP	
10301	ASSY, SR SFP+ SHIPPING	
10302	ASSY, LR SFP+ SHIPPING	
10303	LRM SFP+ Module	
10304	1m SFP+ Cable	
10305	3m SFP+ Cable	
10306	5m SFP+ Cable	
10310	ZR SFP+ module	
10319	40g QSFP+ SR\$ 850nm	
10338	10Gb SFP+ 10GBASE-T	
10401	100Gb QSFP28 SR4 MMF	
10405	100Gb QSFP28 PSM4	
10504	25G LR SFP28 10km	
10052H	1000BASE-LX SFP, Hi	
10056H	1000BASE-BX-D BiDi SFP, Hi	
10057H	1000BASE-BX-U BiDi SFP, Hi	
10070H	10/100/1000BASE-T SFP, Hi	
100G-4WDM-QSFP10KM	100G 4WDM-10 QSFP28 10km	
100G-4WDM-QSFP20KM	100G 4WDM-20 QSFP28 20km	
100G-4WDM-QSFP40KM	100G 4WDM-40 QSFP28 40km	
100G-AOC-QSFP10M-TA	100G AOC QSFP28 10m TAA	
100G-CWDM4-QSFP2KM	100G CWDM4 QSFP28 2km	
100G-DACP-QSFP1M	100G Passive DAC QSFP28 1m	
100G-DACP-QSFP3M	100G Passive DAC QSFP28 3m	
100G-DACP-QSFP4SFP1M	100G Passive DAC QSFP28 to 4xSFP28 1m	
100G-DACP-QSFP4SFP3M	100G Passive DAC QSFP28 to 4xSFP28 3m	
100G-DACP-QSFP4SFP5M	100G Passive DAC QSFP28 to 4xSFP28 5m	
100G-DACP-QSFP5M	100G Passive DAC QSFP28 5m	
100G-ER4LT-QSFP40KM	100G ER4-lite QSFP28 40km	
100G-ESR4-QSFP300M	100G ESR4 QSFP28 300m	

Part Number	Description
100G-LR4-QSFP10KM	100G LR4 QSFP28 10km
100G-LR4-QSFP2KM	100G LR4 QSFP28 2km
100G-SR4-QSFP100M	100G SR4 QSFP28 100m
100G-SWDM4-QSFP100M	100G SWDM4 QSFP28 100m
10G-AOC-SFP10M	10G AOC SFP+ 10m
10G-AOC-SFP7M	10G AOC SFP+ 7m
10GB-BX10-D	10 GB, SINGLE FIBER SM, -D 10 KM
10GB-BX10-U	10 GB, SINGLE FIBER SM, -U 10 KM
10G-DACA-SFP1M	10G Active DAC SFP+ 1m
10G-DACA-SFP3M	10G Active DAC SFP+ 3m
10G-DACA-SFP5M	10G Active DAC SFP+ 5m
10G-ER-SFP40KM-ET	10G ER SFP+ 40km Ext.Temp
10G-LR-SFP10KM-ET	10G LR SFP+ 10km Ext.Temp
10G-SR-SFP300M-ET	10G SR SFP+ 300m Ext.Temp
10G-USR-SFP100M	10G USR SFP+ 100m Hight Rx Sens
25G-DACP-SFP1M	25G Passive DAC SFP28 1m
25G-DACP-SFP3M	25G Passive DAC SFP28 3m
25G-LR-SFP10KM	25G LR SFP28 10km
40G-AOC-QSFP100M	40G AOC QSFP+ 100m
40G-AOC-QSFP10M	40G AOC QSFP+ 10m
40G-AOC-QSFP20M	40G AOC QSFP+ 20m
40G-AOC-QSFP3M	40G AOC QSFP+ 3m
40G-AOC-QSFP5M	40G AOC QSFP+ 5m
40G-BDSR-QSFP150M	40G BiDi SR QSFP+ 150m
40G-DACA-QSFP1M	40G Active DAC QSFP+ 1m
40G-DACA-QSFP3M	40G Active DAC QSFP+ 3m
40G-DACA-QSFP4SFP1M	40G Active DAC QSFP+ to 4xSFP+ 1m
40G-DACA-QSFP4SFP5M	40G Active DAC QSFP+ to 4xSFP+ 5m
40G-DACA-QSFP5M	40G Active DAC QSFP+ 5m
40G-DACP-QSFP1M	40G Passive DAC QSFP+ 1m
40G-DACP-QSFP3M	40G Passive DAC QSFP+ 3m
40G-DACP-QSFP4SFP1M	40G Passive DAC QSFP+ to 4xSFP+ 1m
40G-DACP-QSFP4SFP2M	40G Passive DAC QSFP+ to 4xSFP+ 2m
40G-DACP-QSFP4SFP3M	40G Passive DAC QSFP+ to 4xSFP+ 3m
40G-DACP-QSFP4SFP5M	40G Passive DAC QSFP+ to 4xSFP+ 5m
40G-DACP-QSFP5M	40G Passive DAC QSFP+ 5m
40G-DACP-QSFPZ5M	40G Passive DAC QSFP+ 0.5m
40G-ESR4-QSFP400M-NT	40G ESR4 QSFP+ 400m 10G-SR interop.
40G-LM4-QSFP160M	40G LM4 QSFP+ 160m 160m MMF. 1km SMF
40G-LR4-QSFP10KM	40G LR4 QSFP+ 10km
40G-SR4-QSFP150M	40G SR4 QSFP+ 150m
MGBIC-LC01-G	1GB SX MM, SFP, TAA

^{*}Optics reference qualified and should be purchased from the respective vendors. Extreme does not sell these directly.

Supported Extreme optics in SLX-OS 18r.1.00d

The following orderable Extreme optics are supported in release SLX-OS 18r.1.00d:

Orderable Optic SKUs	Description
100G-CWDM4-QSFP2KM	100G CWDM4 QSFP28 2km
10301	ASSY, SR SFP+ SHIPPING
10302	ASSY, LR SFP+ SHIPPING
10070H	10/100/1000BASE-T SFP, Hi
10052H	1000BASE-LX SFP, Hi
100G-LR4-QSFP10KM	100G LR4 QSFP28 10km
40G-SR4-QSFP150M	40G SR4 QSFP+ 150m

Software upgrade and downgrade

Image file names

Download the following images from www.extremenetworks.com.

Image file name	Description
SLX-OS_18r.1.00g.tar.gz	SLX-OS 18r.1.00g software
SLX-OS_18r.1.00g _all_mibs.tar.gz	SLX-OS 18r.1.00g MIBS
SLX-OS_18r.1.00g.md5	SLX-OS 18r.1.00g md5 checksum

Upgrade/downgrade considerations using firmware download CLI through fullinstall

The fullinstall CLI option is supported through the firmware download when upgrading from release SLX- OS 17r.1.01a to SLX-OS 17r.2.01. The fullinstall CLI option is NOT supported with USB.

Upgrade and downgrade considerations

- Upgrade from a 32-bit to 32-bit SLX-OS is performed using 'coldboot' option
- Upgrade from a 32-bit to 64-bit SLX-OS is a two-step sequential process as shown below:
 - 1) Upgrade using 'coldboot' to 17r.1.01a
 - 2) Upgrade using 'fullinstall' to 64-bit SLX OS
- Upgrade/Downgrade using 'fullinstall' takes up to 60 minutes for completion as compared to 25 minutes for 'coldboot'
- Upgrade from a 64-bit to 64-bit SLX-OS is performed using 'coldboot' option
- It is recommended to use 7zip or WinRAR to Un-compress the SLXOS tarfile
- When firmware upgrade or downgrade is performed, following matrix can be used as a reference.

To	16r.1.00 17r.1.00 17r.1.01 (32-bit)	17r.1.01b (32-bit)	17r.2.00a (64-bit)	18r.1.00 18r.1.00a 18r.1.00b 18r.1.00c 18r.1.00d 18r.1.00e 18r.1.00f 18r.1.00g (64-bit)
16r.1.00 17r.1.00 17r.1.01 (32-bit)	coldboot	coldboot	Two Step Process: 1. Upgrade to 17r.1.01b 2. Upgrade to 17r.2.00a	Two Step Process: 1. Upgrade to 17r.1.01b 2. Upgrade to 18r.1.00 18r.1.00a 18r.1.00b 18r.1.00c 18r.1.00d 18r.1.00e 18r.1.00f 18r.1.00g
17r.1.01b (32-bit)	coldboot	coldboot	fullinstall	fullinstall
17r.2.00a (64-bit)	Two Step Process: 1. Downgrade to 17r.1.01b 2. coldboot to 16r.1.00	fullinstall	coldboot	coldboot
18r.1.00 18r.1.00a 18r.1.00b 18r.1.00c 18r.1.00d 18r.1.00e 18r.1.00f 18r.1.00g (64-bit)	Two Step Process: 1. Downgrade to 17r.1.01b 2. coldboot to 16r.1.00	fullinstall	coldboot	coldboot

Upgrade Steps from 32-bit to 64-bit SLX-OS

- 1. Make sure the device is running SLXOS 17r.1.01a or later, if not, please see the 17r.1.01 documentation on how to upgrade to that release.
- 2. Upgrade to SLX-OS 18r.1.00 using fullinstall
- 3. Save Configuration

To save the config, run

copy running-config startup-config

4. Firmware download with "fullinstall" option from source directory

device# firmware download fullinstall ftp user releaseuser password releaseuser file release.plist directory <path> host <host_ip>

Notes:

Firmware download with the "fullinstall" option will retain the startup configuration file, and upon auto reboot of the device, it will replay the startup configuration file automatically.

Firmware [download] upgrade support from SLXOS 18r.1.00b [Linux Kernel 2.6] to SLXOS 19.1.0 [Linux Kernel 4.14] is available from SLXOS 18r.1.00b onwards using "fullinstall" additional keyword

Upgrade/downgrade using firmware download CLI through USB:

- Upgrade from SLX-SLX 17r.1.01a to SLX-OS 17r.2.01 is supported via firmware download CLI with "fullinstall" option.
- Upgrade from SLX 17r.1.01b to SLX-OS 17r.2.01a or later is supported via firmware download CLI with "fullinstall" option.
- USB based FWD upgrade from SLX-OS 17r.1.01a (32-bit) to SLX-OS 17r.2.01 (64-bit) or later is supported with "fullinstall" option.
- USB3.0 used for firmware download can be in VFAT or EXT4 format.

Instruction to check and upgrade FPGAs/CPLDs:

Refer to the SLX-OS Upgrade Guide for all variations on upgrading SLX-OS.

FPGA/CPLD versions:

SLX-9850	Release Date
MM sys FPGA	08/25/2016
LC sys FPGA	08/30/2016
SFM sys FPGA	08/04/2016
SLX-9540	Release Date
Sys FPGA	02/09/2017
CPLD 0	02/09/2017

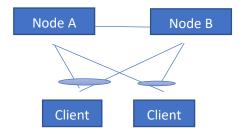
MCT Upgrade Process

This section describes the process to upgrade MCT cluster nodes with minimum traffic loss disruption.

The MCT upgrade process is divided into the following sections:

- 1. MCT upgrade process from SLX-OS 17r.1.01x to SLX-OS 18r.1.00d (32-bit OS to 64-bit OS)
- 2. MCT upgrade process from SLX-OS 18r.1.00 to SLX-OS 18r.1.00d (64-bit OS to 64-bit OS)

The steps in the MCT upgrade process use the following nomenclature for MCT nodes: Node A and Node B.



MCT upgrade process from SLX-OS 17r.1.01x to SLX-OS 18r.1.00d:

This section describes the procedure to upgrade MCT cluster nodes from SLX-OS 17r.1.01x to SLX-OS 18r.1.00d and later releases with minimal traffic loss disruption.

This is a 32-bit OS to 64-bit OS upgrade and hence uses the firmware download command with **fullinstall** option in order to perform the upgrade.

- 1. Configure client isolation mode under the cluster to be loose on Node A and on Node B respectively using the client-isolation loose command. For example:
 - Device(config)# cluster <Name of the cluster> <cluster-id> Device(config-cluster-1)# client-isolation loose
- 2. Isolate Node A from the network using the following steps:
 - a. Disable the MCT client-interfaces on Node A using client-interfaces-shutdown command under cluster configuration section.

```
Device-A(config-cluster-1)# client-interfaces-shutdown
```

- b. Disable the link connected to MCT peer node and uplink to the core network.
 This would result in all CCEP traffic to switch to Node B within 30 seconds depending on scale and other parameters.
- 3. Copy running-configuration to startup-configuration on node A.
- 4. Upgrade Node A to the 18r.1.00d release using the **firmware download fullinstall** command. While the upgrade on node A is in progress, the traffic would continue to pass through node B.
- 5. Verify that once the node comes UP, the member-vlan configuration under the cluster section is removed.
- 6. Create an evpn template and add to the existing configuration on Node A. For example:

Device(config) # evpn <evpn-instance-name> route-target both auto ignore-asrd auto vlan add <NUMBER: 1-4090> (If VLAN config is present) bridge-domain add <NUMBER: 1-4090> (If L2VPN config is present)

- 7. Isolate Node B from the network using the following steps. Please note that there is complete traffic loss at this step.
 - a. Disable the MCT clients from the Node B using **client-interfaces-shutdown** command under cluster configuration section.

```
Device-B(config-cluster-1)# client-interfaces-shutdown
```

b. Disable the link connected to MCT peer node and uplink to the core.

<u>Note:</u> This step is suggested at this stage to avoid traffic duplication if L2VPN configuration is present. If L2VPN config is not present, enter the **no client-interfaces- shutdown** command on Node A before isolating Node B to minimize traffic loss. (Swap Step 7 and 9)

- 8. Copy running-configuration to startup-configuration on Node B.
- 9. Enable the interface towards the peer MCT node (ICL interface) and the uplink to the core network on Node A. (The ICL link would still be down since Node-B is isolated before this step. This is performed so that after Node B gets upgraded, the ICL link will come up once no shut is performed on the ICL link on Node-B.)
- 10. Bring Node A back to the network by entering the **no client-interfaces-shutdown** command under cluster configuration.

```
Device-A(config-cluster-1) # no client-interfaces-shutdown
```

This would result in all CCEP traffic to switch to Node A within 30 seconds depending on scale and other parameters.

- 11. Upgrade Node B to the 18r.1.00d release using the **firmware download fullinstall** command. While the upgrade on node B is in progress, the traffic would continue to passthrough node A.
- 12. Verify that once the Node B comes UP, the member-vlan configuration under the cluster section is removed.
- 13. Create an evpn template and add to the existing configuration on Node B. For example:

```
Device-B(config)# evpn <evpn-instance-name> route-target both auto ignore-as
rd auto
```

```
vlan add <NUMBER: 1-4090> (If VLAN config is present) bridge-domain add <NUMBER: 1-4090> (If L2VPN config is present)
```

- 14. Enable the interface towards the peer MCT node (ICL) and the uplink to the core network on Node B.
- 15. Verify if the BGP session between the MCT peers is established and the cluster is up.
- 16. Bring Node B back to the network by entering the **noclient-interfaces-shutdown command** under cluster configuration.

```
Device-B(config-cluster-1)# no client-interfaces-shutdown
```

17. Copy running-config to startup-config on both the nodes.

Additional upgrade considerations for upgrading SLX9850 from 17r.1.01a or 17r.1.01b to 18r.1.00d

When upgrading a SLX9850 from 17r.1.01a or 17r.1.01b to 18r.1.00d, if TPVM is installed in the system, you must un-install it by running the "tpvm uninstall" command before starting firmware download. Otherwise, it will cause system initialization issue. After the system is upgraded, you can install the TPVM image from 18r.1.00 by running the "tpvm install" command.

MCT upgrade process from SLX-OS 18r.1.00 to SLX-OS 18.1.00d:

This section describes the procedure to upgrade MCT cluster nodes from SLX-OS 18r.1.00 or 18r.1.00ax patch or 18r.1.00b patch to SLX-OS 18r.1.00d patch and later releases with minimal traffic loss disruption.

This is a 64-bit OS to 64-bit OS upgrade and hence uses the firmware download command with **coldboot** option to perform the upgrade.

1. Configure client isolation mode under the cluster to be loose on Node A and Node B respectively using the client-isolation loose command. For example:

```
Device(config) # cluster <Name of the cluster> <cluster-id>
Device(config-cluster-1) # client-isolation loose
```

- 2. Isolate Node A from the network using the following steps:
 - a. Disable the MCT client-interfaces on Node A using **client-interfaces-shutdown** command under cluster configuration section.

```
Device-A(config-cluster-1)# client-interfaces-shutdown
```

- b. Interface connected to MCT peer node (ICL interface) must be left in **no shut** state.
- Disable uplink to the core network.
 This causes all CCEP traffic to switch to Node B within 30 seconds depending on the scale and other parameters.
- 3. Copy running-config to startup-config on node A.
- 4. Upgrade Node A using **firmware download** command with **coldboot** option to the 18r.1.00c image. While the upgrade on node A is in progress, the traffic would continue to pass through node B.
- 5. Verify if Node A is back online after the upgrade and has completed initialization.
- 6. Isolate Node B from the network using the following steps.

Note: There is complete traffic loss at this step.

a. Disable the MCT client-interfaces on Node B using client-interfaces-shutdown command under cluster configuration section.

```
Device-B(config-cluster-1)# client-interfaces-shutdown
```

- b. Interface connected to MCT peer node (ICL interface) must be left in **no shut** state.
- c. Disable uplink to the core network.

<u>Note:</u> This step is suggested at this stage in order to avoid traffic duplication if L2VPN configuration is present. If L2VPN configuration is not present, perform **no client- interfaces-shutdown** on Node A before isolating Node B in order to minimize traffic loss. (Swap Step-6 and Step-9)

7. Copy running-configuration to startup-configuration on Node B.

- 8. Enable the uplink to the core network on Node A. (The ICL interface would be up by now since we did not shut it prior to upgrade.)
- 9. Bring Node A back to the network by configuring the **no client-interfaces-shutdown** command under cluster configuration on Node A. This would result in all CCEP traffic to switch to Node A within 30 seconds depending on the scale and other parameters.

```
Device-A(config-cluster-1)# no client-interfaces-shutdown
```

- 10. Upgrade Node B to 18r.1.00d release using the **firmware download** command with **coldboot** option. While the upgrade on node B is in progress, the traffic would continue to pass through node A.
- 11. Verify that once the Node B comes UP, the uplink to the CORE network on Node B is configured to come up.
- 12. Verify if BGP session between MCT peers is established and the cluster is up.
- 13. Bring Node B back to the network by bringing the client-interfaces UP using the following command under cluster configuration.

```
Device-B(config-cluster-1)# no client-interfaces-shutdown
```

14. Copy running-config to startup-config on both the nodes.

Limitations and restrictions

- Raslog and ACL buffered logging as denied packet observed for ACL permit rules when ACL applied or removed for interface.
- QoS flowcontrol tx **on** is not recommended.
- Restricted mac learning observed on remote node with PMS applied for ingress traffic.
- Conform byte size is more than packet byte size in egress RL counters.
- In lag-profile-1, the maximum number of class-maps supported on port-channel is 64 class-maps.
- When a user egress ACL rule is configured with a VLAN keyword, 100% traffic drop is observed.

Egress ACL-based Rate Limiting:

- Support in "layer2-ratelimit" TCAM profile only.
- Support CE ports only (that is, not support for MPLS uplinks).
- Broadcast, multicast and unknown unicast packets not supported.
- Port channel is not supported.
- Rate limit counters (conform/violate) not supported.

Additional Limitations

- Egress RL is designed to support the packet receiving at one physical port but transmitting on the different physical port. If the packets are received and transported on the same physical port, ingress rate-limit should be deployed.
- If multiple VLANs on the same ingress port belong to the same BD, and the egress ACL rate limiting is configured to rate limit one of the VLANs, all VLAN traffic is rate limited. A workaround is to add matching source or destination MAC address along with the VLAN in the ACL.
- Ingress ACL RL and egress ACL RL do not work together on the same flow of traffic.

CLI configuration design considerations for Rate limiting:

SLX 9850 (4 slots)

- 156 class maps per tower if bind to interface (VOQ limitation).
- 2k class maps per system (Supported hardware entry).
- 128 class maps for port-channel in default LAG profile, 128 LAG total (LAG hardware entry).
- 256 class map for port-channel in profile-1 LAG profile, 256 LAG total (LAG hardware entry).
- 1k policy maps per system (Software scaling).
- 32K class-maps per system (Software scaling).

Note: For SLX 9850 (8 slots), the VOQ limitation per tower is cut in half.

SLX 9540

- 64 class maps for port-channel in default LAG profile, 128 LAG total. (Support hardware entry).
- 128 class maps for port-channel in LAG profile-1, 128 LAG total. (Support hardware entry).
- 2k class maps per tower or system (Supported hardware entry).
- 1k policy maps per system (Software scaling).
- 32K class-maps per system (Software scaling).

QOS resource can be running out in following cases:

- 1. Out of resource when user bind the policy to a port or channel, in this case SW shall fail the command with error message.
- 2. Out of resource when user add new class to existing policy. SW shall fail the command to add new class with error message.
- 3. Out of resource when user add a new port to a LAG. In this case SW can't fail the command due to design limitation. Instead, it will send raslog to inform the user (the user need to check raslog and remove the config if resource running out).

sFlow: sFlow packet samples that are collected are inaccurate based on probability and low rate-limit.

L2 ACL: Unintentional traffic leaking can occur in a short period time (within 10 ms) during the adding of an L2 and L3 ACL.

Cos to TC mapping

• "qos map cos-traffic-class cosTC" command has known issue in this release and not taking effect for port channel.

VPLS VC

- In certain situations, VC peer flaps can happen in the VPLS network due to excessive amount of multicast traffic. To protect the control plane protocols, the following configuration is recommended on all ingress interfaces.
- Apply BUM rate limit per interface

```
storm-control ingress broadcast limit-bps <rate in bps> storm-control ingress
multicast limit-bps <rate in bps>
```

```
storm-control ingress unknown-unicast limit-bps <rate in bps>
```

Rate limit values should be calculated based on amount of multicast traffic expected on the interface. Unknown-unicast should be as low as possible.

Apply MCAST rate limit per forwarding ASIC

```
qos rx-queue multicast best-effort-rate <rate in kbps>
```

Command must be configured on one interface per ASIC. Actual rate depends of amount of expected MCAST traffic per forwarding ASIC.

BFD:

- Sessions with less than 300ms timer may flap in scale conditions
- Known issues with BFD when BFD is configured over multi-slot LAG, or multi-hop session over ECMP paths

L3VPN: Known issues with Peer-group, RR-group and Prefix-list ORF FRR facility backup

 VPLS/VLL Bypass traffic will not work when router/untagged VE interfaces configured as MPLS uplink ports

MCT L3 cases are not supported when ICL interface is configured as router/untagged VE it is required for all MPLS uplinks to be tagged interfaces to use FRR bypass for VLL/VPLS/L3VPN applications

Routing over VPLS

- pw-profile must be configured with tagged mode only under the bridge-domain instance for routing with VPLS.
- It is required for all MPLS uplinks to be tagged VE interfaces to support VEoVPLS.

Internet Routes Scaling

- It is recommended that the internet routes scaling features be enabled with internet peering configurations, as qualified by Extreme
- Feature is supported with default VRF only; default VRF and non-default VRF should not be co-existing when default VRF is configured with Internet routes scaling feature

L3VPN jumbo limitation

• The IPMTU value configured in CLI is applicable, if outgoing routing interface is an undelay IP interface (VE or L3 port); the IPMTU value configured in CLI is not applicable if the outgoing interface is uplink for IPOMPLS, L3VPN traffic, or ICL for MCT peers. Jumbo frames over MPLS/L3VPN tunnels can be accepted based the port L2MTU values.

EVPN IP Fabric

• IPv6 Static Anycast Gateway is not supported.

Storm-control

• Counters for Broadcast and Multicast storm-control are not supported in layer2optimized-1 profile.

Increase scale support for class-maps under the service policy

The ACL/VLAN/BD Rate Limiting scale numbers are dependent on tcam profile configured.
 Basically, based on the tcam entries reserved for the feature, user can scale number of policers/stats for appropriate application.

Consider below example with tcam profile "layer2-optimised-1".

- Create 2K Vlan/BD based class-maps and 2K ACL based class-maps associate those with policy-map pmap1.
- Configure 1k distinct policer attributes (cir/cbs/eir/ebs) for all the policy-map/class-map combination and bind the policy-map pmap1 to any interface.
- Now overall there will be 4K policers active for that interface with 4k distinct class-maps (match criteria).
- Note: The 4K policers (class-maps) scale will not be applicable to port-channel. There are only 1,215 policers are reserved for port-channels.
- Based on the requirement user must set the tcam profile and must reboot the box for activating the same.

Defects closed in 18r.1.00g

This section lists software defects with Critical, High, and Medium Technical Severity closed with code changes as of January 2021 in 18r.1.00g.

Note: Parent Defect ID is the customer found Defect ID. The Issue ID is the tracking number uniquely used to check in the fix for each major release.

Parent Defect ID:	SLXOS-55370	Issue ID:	SLXOS-55681	
Severity:	S3 - Medium			
Product:	SLX-OS	Reported in Release:	SLXOS 18r.1.00ch	
Technology Group:	Security	Technology:	MACsec - Media	
			Access Control	
			security	
Symptom:	Few MAC entries may get missed from software MAC table (L2Mgr)			
	"show mac-address-table"after detection of mac move and not gets retrieved once after reception of traffic.			
Condition:	a) Port-security should be enabled on port.			
	b) Send traffic with already learned mac (mac-move detection) and			
	violate port-security mac count configured on port to make default			
	action of port shut.			

Parent Defect ID:	SLXOS-55278	Issue ID:	SLXOS-55748	
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 numb	ers, hence it ignores suc	h responses)	

Parent Defect ID:	SLXOS-55742	Issue ID:	SLXOS-55914
Severity:	S3 - Medium		
Product:	SLX-OS	Reported in Release:	SLXOS 18r.1.00ch
Technology Group:	Layer 2 Switching	Technology:	Other
Symptom:	May notice MAC miss (address not learned) on	"show mac-address-
	table" output once after	er receiving traffic with e	expected(missed) MAC.
Condition:	a) Node should experie	nce multiple mac-move	ments (between two
	interfaces).		
	b) Introduce random m	nanual shut in between r	nac-movement.

Parent Defect ID:	SLXOS-55510	Issue ID:	SLXOS-56060
Severity:	S1 - Critical		
Product:	SLX-OS	Reported in Release:	SLXOS 18r.1.00ca
Technology Group:	Management	Technology:	Software Installation
			& Upgrade
Symptom:	Unexpected reload		
Condition:	There is no specific operation to hit this case as it related to CPU		
	kernel scheduling.		

Defects closed in 18r.1.00f

This section lists software defects with Critical, High, and Medium Technical Severity closed with code changes as of October 2020 in 18r.1.00f.

Note: Parent Defect ID is the customer found Defect ID. The Issue ID is the tracking number uniquely used to check in the fix for each major release.

Parent Defect ID:	SLXOS-42283	Issue ID:	SLXOS-43665
Severity:	S3 - Medium		
Product:	SLX-OS	Reported in Release:	SLXOS 18r.1.00a
Technology Group:	MPLS	Technology:	MPLS VPLS - Virtual
			Private LAN Services
Symptom:	MAC learning may not switchover	be happening after Man	agement Module
Condition:	In the presence of 'spanning-tree shutdown' configuration applied on Bridge Domain interfaces		
Recovery:		he 'spanning-tree shutdo	own' configuration

Parent Defect ID:	SLXOS-45991	Issue ID:	SLXOS-45992
Severity:	S3 - Medium		
Product:	SLX-OS	Reported in Release:	SLXOS 18r.1.00a
Technology Group:	Layer 2 Switching	Technology:	xSTP - Spanning Tree
			Protocols
Symptom:	User will observe that S	User will observe that STP BPDUs are getting flooded on VPLS Bridge	
	domain like normal mu	ılticast traffic, even thou	gh user has enabled
	'bpdu drop' feature usi	ng the CLI	
Condition:	'bpdu drop' configured	on VPLS BD is not behave	ving as expected,
	where the BPDU should	d be dropped instead of	flooding when 'bpdu
	drop ' is enabled on the	e VPLS bridge domain.	
Workaround:	None		

Parent Defect ID:	SLXOS-49410	Issue ID:	SLXOS-49411
Severity:	S3 - Medium		
Product:	SLX-OS	Reported in Release:	SLXOS 17r.1.01aj
Technology Group:	Management	Technology:	High Availability
Symptom:	Standby Management	may not reach Synchron	ized State
Condition:	In the presence of 72x2	LOG Line cards alone, on	a SLX9850 8 slot
	chassis		
Workaround:	Shouldn't be observed	if 36x100G is also presen	nt

Parent Defect ID:	SLXOS-50077	Issue ID:	SLXOS-50078
Severity:	S3 - Medium		
Product:	SLX-OS	Reported in Release:	SLXOS 20.1.1
Technology Group:	Security	Technology:	User Accounts &
		Passwords	
Symptom:	System level command	System level commands are accessible by non-admin users	

Condition:	when we have non-adi	min users	
Parent Defect ID:	SLXOS-50419	Issue ID:	SLXOS-50420
Severity:	S3 - Medium		
Product:	SLX-OS	Reported in Release:	SLXOS 18x.1.00
Technology Group:	Management	Technology:	Other
Symptom:	Unexpected reload		
Condition:	It can happen when th	ere is CPU intensive wor	kload

Parent Defect ID:	SLXOS-50340	Issue ID:	SLXOS-50588
Parent Defect ID.	3LAU3-30340	issue iD.	3LAU3-30366
Severity:	S3 - Medium		
Product:	SLX-OS	Reported in Release:	SLXOS 18r.1.00d
Technology Group:	Layer 3	Technology:	IP Addressing
	Routing/Network		
	Layer		
Symptom:	traceroute command n	nay succeeds for disable	d loopback IP address
	from peer		
Condition:	1) Configure /32 mask IP address for loopback interface.		
	2) Disable loopback int	erface using shut.	

Parent Defect ID:	SLXOS-50515	Issue ID:	SLXOS-50674
Severity:	S2 - High		
Product:	SLX-OS	Reported in Release:	SLXOS 18r.2.00a
Technology Group:	Layer 3	Technology:	IP Addressing
	Routing/Network		
	Layer		
Symptom:	Notices duplicate IP ad	dress message on other	Vendor device with
	SLX connected to it.		
Condition:	1) Back-to-back connection b/w SLX and other Vendor device		
	2) Configuration of IP address with mask /31 on other Vendor device		
	followed by SLX.		

Parent Defect ID:	SLXOS-51201	Issue ID:	SLXOS-51365
Severity:	S2 - High		
Product:	SLX-OS	Reported in Release:	SLXOS 18r.1.00d
Technology Group:	IP Multicast	Technology:	IPv4 Multicast
			Routing
Symptom:	SLX may unexpectedly reload in hslagtd daemon		
Condition:	Requires processing of	the high scale of timed	out (S,G) entries

Parent Defect ID:	SLXOS-51474	Issue ID:	SLXOS-51477
Severity:	S3 - Medium		
Product:	SLX-OS	Reported in Release:	SLXOS 18r.1.00ch
Technology Group:	Layer 2 Switching	Technology:	VLAN - Virtual LAN
Symptom:	Packets may flood on t	Packets may flood on the same port from where it is received	

	Condition:	On reception of packet with ethertype of 0x88e7(PBB)
--	------------	--

Parent Defect ID:	SLXOS-51154	Issue ID:	SLXOS-51497
Severity:	S3 - Medium		
Product:	SLX-OS	Reported in Release:	SLXOS 18r.1.00d
Technology Group:	Management	Technology:	SNMP - Simple
			Network
			Management
			Protocol
Symptom:	IP MTU configuration allows configuring sizes of interface MTU		
	bounds		
Condition:	Configuring the IP MTU from SNMP		

Parent Defect ID:	SLXOS-50793	Issue ID:	SLXOS-52243
Severity:	S3 - Medium	10000 121	357.03 322 13
Product:	SLX-OS	Reported in Release:	SLXOS 18r.1.00ch
Technology Group:	Monitoring	Technology:	OAM - Operations,
			Admin &
			Maintenance
Symptom:	"show media" may display encoding string that doesn't comply with		
	the IEEE standard for certain optics.		
Condition:	When 100G-LR4 QSFP28 optic has encoding value 5		
	Ex:		
	show media interface ethernet x/y		
	Encoding 5 IEEE 8	02.3ab	

Parent Defect ID:	SLXOS-50376	Issue ID:	SLXOS-52597
Severity:	S2 - High		
Product:	SLX-OS	Reported in Release:	SLXOS 18r.1.00ca
Technology Group:	Management	Technology:	Software Installation
			& Upgrade
Symptom:	Very rarely Management Module may fail to come up and enter into rolling reboot with Kernel Panic		
Condition:	Observed during modu	le reset in the presence	of CFM

Parent Defect ID:	SLXOS-51831	Issue ID:	SLXOS-53563
Severity:	S2 - High		
Product:	SLX-OS	Reported in Release:	SLXOS 18r.1.00ca
Technology Group:	MPLS	Technology:	MPLS VPLS - Virtual
			Private LAN Services
Symptom:	SLX fails to learn VPLS MAC from remote PE		
Condition:	MPLS is configured with primary & bypass-path and can be observed		
	with the flaps only in this following sequence		
	(a) Flap on the primary path interface		
	(b) Flap on the bypa	ss-path interface	

Parent Defect ID:	SLXOS-50677	Issue ID:	SLXOS-53737
Severity:	S2 - High		
Product:	SLX-OS	Reported in Release:	SLXOS 18r.1.00e
Technology Group:	Layer 3	Technology:	ARP - Address
	Routing/Network		Resolution Protocol
	Layer		
Symptom:	Duplicate IP address SYSLOG message may be seen on the		
	neighboring device console with no functional impact		
Condition:	When /31 subnet is configured on SLX to other Vendor devices as		
	point-to-point links		

Parent Defect ID:	SLXOS-52104	Issue ID:	SLXOS-53873	
		13346 12.	32/03 330/3	
Severity:	S2 - High			
Product:	SLX-OS	Reported in Release:	SLXOS 18r.1.00e	
Technology Group:	MPLS	Technology:	MPLS VPLS - Virtual	
			Private LAN Services	
Symptom:	Sometimes Line card may reload unexpectedly during the execution			
	of support save			
Condition:	Can be observed in the presence of 180 RSVP signaled LSP with 511			
	cross-connect on VPLS	cross-connect on VPLS service		

Parent Defect ID:	SLXOS-51453	Issue ID:	SLXOS-54229
Severity:	S3 - Medium		
Product:	SLX-OS	Reported in Release:	SLXOS 20.1.1
Technology Group:	Layer 3	Technology:	DHCP - Dynamic Host
	Routing/Network		Configuration
	Layer		Protocol
Symptom:	Unexpected reload	_	_
Condition:	DHCP malformed packet is received		

Parent Defect ID:	SLXOS-47656	Issue ID:	SLXOS-54270
Severity:	S2 - High		
Product:	SLX-OS	Reported in Release:	SLXOS 20.1.1
Technology Group:	Layer 2 Switching	Technology:	VLAN - Virtual LAN
Symptom:	NETCONF configuration	n for bulk Bridge-domain	LIF configuration will
	not succeed		
Condition:	By using NETCONF, user tries to configure multiple LIFs at once, in a		
	single NETCONF reques	st.	
Workaround:	None		

Defects closed in 18r.1.00e

This section lists software defects with Critical, High, and Medium Technical Severity closed with and without a code change as of May 2020 in 18r.1.00e.

Note: Parent Defect ID is the customer found Defect ID. The Issue ID is the tracking number uniquely used to check in the fix for each major release.

Parent Defect ID:	SLXOS-38855	Issue ID:	SLXOS-42469
Severity:	S3 - Medium		
Product:	SLX-OS	Technology Group:	Layer 3
			Routing/Network Layer
Reported in Release:	SLXOS 18r.1.00aa	Technology:	ICMP - Internet Control
			Message Protocol
Symptom:	Not able to ping the Broadcast address.		
Condition:	When pinging the broadcast address from both mgmt-vrf and default-vrf		
	interfaces.		

Parent Defect ID:	SLXOS-25680	Issue ID:	SLXOS-42650
Severity:	S3 - Medium		
Product:	SLX-OS	Technology Group:	Monitoring
Reported in Release:	SLXOS 17r.1.01b	Technology:	OAM - Operations,
			Admin & Maintenance
Symptom:	100g link with FEC enabled does not come back after a dwdm link switch		
	over between lanes some	etimes	
Condition:	Requiring a fast switchover using an equipment linking a DWDM or fast hand		
	that removes / inserts the	e optic rapidly without dan	naging the cable / optic
Workaround:	Shut/no-shut		

Parent Defect ID:	SLXOS-43173	Issue ID:	SLXOS-43715
Severity:	S3 - Medium		
Product:	SLX-OS	Technology Group:	Monitoring
Reported in Release:	SLXOS 18r.2.00a	Technology:	Hardware Monitoring
Symptom:	"show media optical-monitoring" command is taking close to 1 minute to		
	refresh the smart data values.		
Condition:	Observed after shutdown/no shutdown of physical interfaces.		

Parent Defect ID:	SLXOS-43371	Issue ID:	SLXOS-44088
Severity:	S3 - Medium		
Product:	SLX-OS	Technology Group:	Monitoring
Reported in Release:	SLXOS 18r.1.00ca	Technology:	Sysmon
Symptom:	The output of "show system monitor" is not showing correct values		
	sometimes with respect to the power supplies.		
Condition:	When the number of sensors in SLX9850-8 setup is more than 90		

Parent Defect ID:	SLXOS-44562	Issue ID:	SLXOS-44563
Severity:	S2 - High		
Product:	SLX-OS	Technology Group:	Management
Reported in Release:	SLXOS 18r.1.00c	Technology:	CLI - Command Line
			Interface
Symptom:	High_free memory observed as OKB		

Condition:	In the output of "show process memory"		
Parent Defect ID:	SLXOS-42743	Issue ID:	SLXOS-45017
Severity:	S2 - High		
Product:	SLX-OS	Technology Group:	IP Multicast
Reported in Release:	SLXOS 18r.2.00	Technology:	PIM - Protocol-
			Independent Multicast
Symptom:	Unexpected MM reload		
Condition:	1. When Multicast (PIM) is enabled on multiple ports under single VLAN.		
	2. Any of the port receives the PIM(S,G) prune packet.		

Parent Defect ID:	SLXOS-45433	Issue ID:	SLXOS-45434
Severity:	S2 - High		
Product:	SLX-OS	Technology Group:	IP Multicast
Reported in Release:	SLXOS 18r.1.00c	Technology:	PIM - Protocol-
			Independent Multicast
Symptom:	Unexpected Management Module reload in mcagtd		
Condition:	1. Multicast (PIM) is enabled on multiple ports under same VLAN		
	2. Any of the port receives the PIM(S,G) prune packet		

Parent Defect ID:	SLXOS-45920	Issue ID:	SLXOS-45921
Severity:	S3 - Medium		
Product:	SLX-OS	Technology Group:	Management
Reported in Release:	SLXOS 18r.2.00a	Technology:	SNMP - Simple
			Network Management
			Protocol
Symptom:	Snmpwalk from a linux server works to the first hop router but not beyond		
Condition:	MPLS L3VPN configured on in-band custom Management VRF		

Parent Defect ID:	SLXOS-46308	Issue ID:	SLXOS-46312
Severity:	S3 - Medium		
Product:	SLX-OS	Technology Group:	Monitoring
Reported in Release:	SLXOS 18r.2.00ac	Technology:	OAM - Operations,
			Admin & Maintenance
Symptom:	1G Copper SFP interface becomes link down after reload		
Condition:	When speed 100 is configured on 1G copper SFP and system reload is performed.		
Workaround:	Speed reconfiguration on the ports will recover the issue.		

Parent Defect ID:	SLXOS-46646	Issue ID:	SLXOS-46650
Severity:	S2 - High		
Product:	SLX-OS	Technology Group:	Management
Reported in Release:	SLXOS 18r.2.00ac	Technology:	SNMP - Simple
			Network Management
			Protocol
Symptom:	Unexpected reload.		
Condition:	When SLX has MPLS tunnels configured and snmpbulkwalks are continuously		
	run for ifTable/ifXTable.		

Parent Defect ID:	SLXOS-46770	Issue ID:	SLXOS-46774
Severity:	S3 - Medium		
Product:	SLX-OS	Technology Group:	Management
Reported in Release:	SLXOS 17r.2.01	Technology:	Other
Symptom:	Unexpected reload with reason as Software Fault:Kernel Panic may be		
	observed		
Condition:	It can happen with a long-running process where its low 32-bit of total		
	process utime is '0' in do_div().		

Parent Defect ID:	SLXOS-46855	Issue ID:	SLXOS-46859	
Severity:	S2 - High			
Product:	SLX-OS	Reported in Release:	SLXOS 18r.1.00ca	
Technology Group:	Security	Technology:	ACLs - Access Control	
			Lists	
Symptom:	Unexpected reload.	Unexpected reload.		
Condition:	When raslog logging is enabled globally and log keyword is used in ingress			
	ACL rule			
Workaround:	Remove acl raslog command globally or do not use log keyword in any rule			
	in ingress ACL policy			

Parent Defect ID:	SLXOS-47229	Issue ID:	SLXOS-47232
Severity:	S1 - Critical		
Product:	SLX-OS	Technology Group:	MPLS
Reported in Release:	SLXOS 18r.1.00c	Technology:	LDP - Label Distribution
			Protocol
Symptom:	Few MPLS Targeted LDP peers may stay in Non-existent state.		
Condition:	During multiple fiber flaps on LDP LSP's.		

Parent Defect ID:	SLXOS-47234	Issue ID:	SLXOS-47364	
Severity:	S1 - Critical			
Product:	SLX-OS	Technology Group:	MPLS	
Reported in Release:	SLXOS 18r.1.00d	Technology:	LDP - Label Distribution	
			Protocol	
Symptom:	Few MPLS Targeted LDP peers may stay in non-existent state.			
Condition:	1. Multiple fiber flaps observed on the Targeted-LDP LSP			
	2. With parallel programs	2. With parallel programming enabled in the configuration		

Parent Defect ID:	SLXOS-47538	Issue ID:	SLXOS-47540
Severity:	S3 - Medium		
Product:	SLX-OS	Technology Group:	Management
Reported in Release:	SLXOS 17r.1.01aj	Technology:	Other
Symptom:	REST runcmd operation fails with HTTP status code 406 or 502		
Condition:	Whenever upgrade and HA failover has been performed		

Parent Defect ID:	SLXOS-47629	Issue ID:	SLXOS-47631
Severity:	S3 - Medium		
Product:	SLX-OS	Technology Group:	Monitoring
Reported in Release:	SLXOS 17r.1.01aj	Technology:	Syslog
Symptom:	RASLOG for optical temperature may display alarm even though the values		
	are within boundary		

Condition:	During Port Up events		
Parent Defect ID:	SLXOS-47988	Issue ID:	SLXOS-47989
Severity:	S3 - Medium		
Product:	SLX-OS	Technology Group:	Management
Reported in Release:	SLXOS 18r.1.00ca	Technology:	Other
Symptom:	/fabos/libexec/ethmode may be missed on standby Management Module.		
Condition:	During /fabos/cliexec/ifmodeshow command run from active Management		
	Module.		

Parent Defect ID:	SLXOS-48011	Issue ID:	SLXOS-48012
Severity:	S2 - High		
Product:	SLX-OS	Technology Group:	IP Multicast
Reported in Release:	SLXOS 18r.1.00db	Technology:	PIM - Protocol-
			Independent Multicast
Symptom:	Memory leak and unexpected reload may be observed in mcagtd daemon.		
Condition:	On continuous execution of 'clear ip pim mcache' with multicast data traffic		
	passing through		

Parent Defect ID:	SLXOS-48040	Issue ID:	SLXOS-48040
Severity:	S1 - Critical		
Product:	SLX-OS	Technology Group:	MPLS
Reported in Release:	SLXOS 18r.1.00e	Technology:	LDP - Label Distribution
			Protocol
Symptom:	Few MPLS LDP peers may stay in LDP non-existent state		
Condition:	Occurs very rarely during multiple link flap events		

Parent Defect ID:	SLXOS-48075	Issue ID:	SLXOS-48076	
Severity:	S3 - Medium			
Product:	SLX-OS	Technology Group:	Management	
Reported in Release:	SLXOS 18r.1.00ch	Technology:	Software Installation &	
			Upgrade	
Symptom:	Very rarely Management Module may fail to come up and enter into rolling			
	reboot with Kernel Panic			
Condition:	Observed during bring up	Observed during bring up of new Chassis		

Parent Defect ID:	SLXOS-37572	Issue ID:	SLXOS-48093
Severity:	S1 - Critical		
Product:	SLX-OS	Technology Group:	MPLS
Reported in Release:	SLXOS 18r.2.00	Technology:	IP over MPLS
Symptom:	After an MPLS RSVP LSP fails over to bypass, an MPLS ping initiated for the		
	LSP causes unexpected reload of MPLS daemon		
Condition:	Issue will be seen only when the FRR failover happens for an RSVP LSP. Prior		
	to failover, in protected path, MPLS ping works fine.		
Workaround:	No		

Parent Defect ID:	SLXOS-48501	Issue ID:	SLXOS-48502
Severity:	S3 - Medium		
Product:	SLX-OS	Technology Group:	Security

Reported in Release:	SLXOS 17r.1.00a	Technology:	ACLs - Access Control
			Lists
Symptom:	May traffic gets permitted with hard-drop L2 ACL configured.		
Condition:	During configuration of log option in addition to hard-drop L2 ACLL		

Parent Defect ID:	SLXOS-49209	Issue ID:	SLXOS-49210
Severity:	S3 - Medium		
Product:	SLX-OS	Technology Group:	Monitoring
Reported in Release:	SLXOS 18r.1.00ch	Technology:	Hardware Monitoring
Symptom:	May observe following message in RASLOG for 1G SFP Optics like below:-		
	"Optic inserted is not compatible and laser is disabled"		
Condition:	Observed after Reload wi	th speed configured as 100	00

Parent Defect ID:	SLXOS-49230	Issue ID:	SLXOS-49231
Severity:	S2 - High		
Product:	SLX-OS	Technology Group:	IP Multicast
Reported in Release:	SLXOS 18r.1.00db	Technology:	IGMP - Internet Group
			Management Protocol
Symptom:	Management Module may unexpectedly reload in NSM daemon		
Condition:	While processing high rate of IGMP join and leave messages		
Workaround:	None		

Parent Defect ID:	SLXOS-49149	Issue ID:	SLXOS-50007
Severity:	S3 - Medium		
Product:	SLX-OS	Technology Group:	Security
Reported in Release:	SLXOS 20.1.2	Technology:	User Accounts &
			Passwords
Symptom:	Admin user can get the root privileges		
Condition:	when user try to use start-shell, python, OSCMD from admin login		

Defects closed in 18r.1.00d

This section lists software defects with Critical, High, and Medium Technical Severity closed with and without a code change as of October 2019 in 18r.1.00d.

Note: Parent Defect ID is the customer found Defect ID. The Issue ID is the tracking number uniquely used to check in the fix for each major release.

Parent Defect ID:	SLXOS-39952	Issue ID:	SLXOS-39952
Severity:	S3 - Medium		
Product:	SLX-OS	Technology Group:	Management
Reported in Release:	SLXOS 18r.1.00c	Technology:	SNMP - Simple
			Network
			Management
			Protocol
Symptom:	SNMP config fails when it tries to map the community-map to		
	context.		
Condition:	When used CLI "snmp-server mib community-map <map-name></map-name>		
	context < context-name	2>"	

Parent Defect ID:	SLXOS-22414	Issue ID:	SLXOS-41496
Severity:	S2 - High		
Product:	SLX-OS	Technology Group:	Security
Reported in Release:	SLXOS 18r.2.00	Technology:	User Accounts &
			Passwords
Symptom:	Unexpected reload		
Condition:	When REST query is send with username same as role name		

Parent Defect ID:	SLXOS-40610	Issue ID:	SLXOS-41804
Severity:	S3 - Medium		
Product:	SLX-OS	Technology Group:	Management
Reported in Release:	SLXOS 18r.1.00b	Technology:	SNMP - Simple
			Network
			Management
			Protocol
Symptom:	SNMP walk output is not showing for OID		
	1.3.6.1.4.1.1588.2.1.2.1.7.1.1 for active MM index on 18r.1 release,		
	but works on 17r.2x and 18r.2x.		
Condition:	When SNMP query is hit for OID 1.3.6.1.4.1.1588.2.1.2.1.7.1.1 the		
	output doesn't contain	result for active MM inc	dex.

Parent Defect ID:	SLXOS-39522	Issue ID:	SLXOS-41962
Severity:	S3 - Medium		
Product:	SLX-OS	Technology Group:	IP Multicast
Reported in Release:	SLXOS 18r.2.00	Technology:	PIM - Protocol-
			Independent
			Multicast
Symptom:	Unexpected reload		
Condition:	When PIM debug (ip pim packet)enable and shut/no shut on some		
	interfaces		

Parent Defect ID:	SLXOS-41629	Issue ID:	SLXOS-41987
Severity:	S3 - Medium		
Product:	SLX-OS	Technology Group:	Security
Reported in Release:	SLXOS 18r.1.00a	Technology:	User Accounts &
			Passwords
Symptom:	Unexpected reload		
Condition:	When REST query is send with username same as role name		

Parent Defect ID:	SLXOS-42310	Issue ID:	SLXOS-42472
Severity:	S2 - High		
Product:	SLX-OS	Technology Group:	Layer 2 Switching
Reported in Release:	SLXOS 18r.2.00	Technology:	MCT - Multi-Chassis
			Trunking
Symptom:	Unexpected reload of device		
Condition:	When "cluster <>" config is done followed by 'undeploy' and peer IP		
	change without SRC IP and then 'deploy'.		

Parent Defect ID:	SLXOS-39856	Issue ID:	SLXOS-42500
Severity:	S3 - Medium		
Product:	SLX-OS	Technology Group:	Layer 3
			Routing/Network
			Layer
Reported in Release:	SLXOS 18r.1.00a	Technology:	Static Routing (IPv4)
Symptom:	Route is not withdrawn on interface shut post HA failover		
Condition:	Ha failover performed and interface which is a next hop for the static		
	route is shut		

Parent Defect ID:	SLXOS-42342	Issue ID:	SLXOS-42585
Severity:	S3 - Medium		
Product:	SLX-OS	Technology Group:	Layer 3
			Routing/Network
			Layer
Reported in Release:	SLXOS 18r.2.00a	Technology:	BGP4 - IPv4 Border
			Gateway Protocol
Symptom:	BGP peering may go down, when 'no router mpls' is issued, and when		
	there are following routes under VRF:		
	a) when learnt route is not selected		
	b) when learnt route is re originated with network command		
Condition:	When learnt route is not selected or when learnt route is re-		
	originated with 'network' command and when 'no router mpls' is		
	issued.		
Workaround:	1) Shutdown BGP neighbors under VRF, remove network command.		
	2) Remove 'router mpls'.		
	3) Issue 'no shutdown' of BGP neighbors under VRF and add		
	'network' command.		

Parent Defect ID:	SLXOS-42673	Issue ID:	SLXOS-42676
Severity:	S2 - High		
Product:	SLX-OS	Technology Group:	Layer 2 Switching
Reported in Release:	SLXOS 18x.1.00a	Technology:	MCT - Multi-Chassis
			Trunking
Symptom:	Unexpected reload		
Condition:	When the management cluster is down.		

Parent Defect ID:	SLXOS-42503	Issue ID:	SLXOS-42686
Severity:	S3 - Medium		
Product:	SLX-OS	Technology Group:	Management
Reported in Release:	SLXOS 18r.1.00b	Technology:	Software Installation
			& Upgrade
Symptom:	1. Sysfpga image upgrading on SFM failed, sometimes.		
	2. FPGA image version checking and printing is too frequently.		
Condition:	SLX9850 platform		

Parent Defect ID:	SLXOS-42282	Issue ID:	SLXOS-42707
Severity:	S2 - High		
Product:	SLX-OS	Technology Group:	Layer 3 Routing/Network Layer
Reported in Release:	SLXOS 17r.1.01_CVR	Technology:	ARP - Address Resolution Protocol

Symptom:	Intermittent ping loss between the hosts via MCT cluster node.
Condition:	When the MCT networks is seeing excessive MAC movement on the
	cluster node

Parent Defect ID:	SLXOS-42441	Issue ID:	SLXOS-42762
Severity:	S3 - Medium		
Product:	SLX-OS	Technology Group:	Management
Reported in Release:	SLXOS 18r.2.00a	Technology:	CLI - Command Line
			Interface
Symptom:	"continue 100" under route-map does not persists after reload.		
Condition:	When "continue 100" is configured under route-map		

Parent Defect ID:	SLXOS-41226	Issue ID:	SLXOS-42782	
Severity:	S3 - Medium			
Product:	SLX-OS	Technology Group:	Traffic Management	
Reported in Release:	SLXOS 18r.1.00aa	Technology:	QoS - Quality of	
			Service	
Symptom:	NetConf/REST response payload was returning with unsupported			
	value 4.			
	So that payload was not able to use for Netconf/REST request.			
Condition:	If Traffic-class to CoS mapping configured without DP value,			
	Netconf/REST query returning with unsupported DP value 4.			
	It fails in the Netconf/REST config with same payload.			
Workaround:	To make the same con	To make the same configuration through Netconf/REST,		
	Make separate request	s for each Dp values (0-3	3)	

Parent Defect ID:	SLXOS-42225	Issue ID:	SLXOS-42785	
Severity:	S2 - High			
Product:	SLX-OS	Technology Group:	Layer 3	
			Routing/Network	
			Layer	
Reported in Release:	SLXOS 18r.2.00	Technology:	BGP4 - IPv4 Border	
			Gateway Protocol	
Symptom:	Unexpected reload of the device			
Condition:	When "no cluster <>" MCT config is executed			
Workaround:	None	None		

Parent Defect ID:	SLXOS-42728	Issue ID:	SLXOS-42844
Severity:	S3 - Medium		
Product:	SLX-OS	Technology Group:	Management
Reported in Release:	SLXOS 18r.1.00c	Technology:	CLI - Command Line
			Interface
Symptom:	"show vlan brief" and '	show vlan <n>" display</n>	member interfaces in
	random order.		

Condition:	When we use the "show vlan brief" and "show vlan <n>" command in</n>		
	CLI.		

Parent Defect ID:	SLXOS-41137	Issue ID:	SLXOS-43000		
Severity:	S3 - Medium				
Product:	SLX-OS	Technology Group:	MPLS		
Reported in Release:	SLXOS 18r.1.00b	Technology:	LDP - Label		
			Distribution Protocol		
Symptom:	LDP session was stuck because of an incorrect state.				
Condition:	LDP sessions flapping and being re-established. This state made it				
	seem that the expected connection had already been established;				
	causing the new conne	ction setup to fail.	causing the new connection setup to fail.		

Parent Defect ID:	SLXOS-42874	Issue ID:	SLXOS-43181
Severity:	S3 - Medium		
Product:	SLX-OS	Technology Group:	Layer 2 Switching
Reported in Release:	SLXOS 18r.1.00b	Technology:	VLAN - Virtual LAN
Symptom:	When traffic is flowing between two endpoint tracking enabled port ,		
	unauthenticated traffic is not dropped.		
Condition:	When traffic is flowing	between two endpoint	tracking enabled port.

Parent Defect ID:	SLXOS-43195	Issue ID:	SLXOS-43299
Severity:	S1 - Critical		
Product:	SLX-OS	Technology Group:	Layer 2 Switching
Reported in Release:	SLXOS 18r.1.00c	Technology:	MCT - Multi-Chassis
			Trunking
Symptom:	Unexpected LC reload		
Condition:	When MCT MAC CCR to CCL conversion		
Workaround:	None		

Parent Defect ID:	SLXOS-42649	Issue ID:	SLXOS-43308
Severity:	S3 - Medium		
Product:	SLX-OS	Technology Group:	Layer 2 Switching
Reported in Release:	SLXOS 17r.1.00	Technology:	VLAN - Virtual LAN
Symptom:	Vlan name is not properly displayed .It is a cosmetic issue.		
Condition:	When VLAN with no ro	When VLAN with no router interface configured .	

Parent Defect ID:	SLXOS-38488	Issue ID:	SLXOS-43448
Severity:	S2 - High		
Product:	SLX-OS	Technology Group:	Layer 2 Switching
Reported in Release:	SLXOS 18r.1.00aa	Technology:	MCT - Multi-Chassis
			Trunking
Symptom:	MCT Convergence will take more time (around 26 sec)		

Condition:	One of the MCT pair goes down
------------	-------------------------------

Parent Defect ID:	SLXOS-42655	Issue ID:	SLXOS-43521
Severity:	S3 - Medium		
Product:	SLX-OS	Technology Group:	Management
Reported in Release:	SLXOS 18r.2.00a	Technology:	CLI - Command Line
			Interface
Symptom:	The 'reload system' and 'firmware download' CLI's succeeds without		
	confirming with 'Y/Yes' option.		
Condition:	When user hit ENTER without any input, the system proceeds to		
	reboot and firmware d	ownload CLI's.	

Defects closed in 18r.1.00c

This section lists software defects with Critical, High, and Medium Technical Severity closed with and without a code change as of **6/19/2019** in 18r.1.00c.

Note: Parent Defect ID is the customer found Defect ID. The Issue ID is the tracking number uniquely used to check in the fix for each major release.

Parent Defect ID:	SLXOS-22514	Issue ID:	SLXOS-30535
Severity:	S2 - High		
Product:	SLX-OS	Technology Group:	Traffic Management
Reported in Release:	SLXOS 17r.1.01a	Technology:	Rate Limiting and
			Shaping
Symptom:	100G interfaces on SLX 9850 may not achieve line rate egress throughput.		
Condition:	On a L2VPN network 100G interfaces on SLX 9850 may not achieve		
	line rate of egress through put.		
Workaround:	Augment performance	with additional interfac	es as required.

Parent Defect ID:	SLXOS-37463	Issue ID:	SLXOS-37463
Severity:	S3 - Medium		
Product:	SLX-OS	Technology Group:	Layer 3
			Routing/Network
			Layer
Reported in Release:	SLXOS 18r.1.00a	Technology:	BGP4 - IPv4 Border
			Gateway Protocol
Symptom:	A warning is seen on console as follows. "No. of prefix received from		
	BGP Peer 2000:31:1:8::153: exceeds warning limit 0"		
Condition:	When the maximum prefix config is at the IPv6 neighbor level and the		
	ipv6 address-family activate cmd at the peer-group level and the		
	device is reloaded with that saved config.		
Workaround:	Remove maximum pre	fix config at the neighbo	r and re-config.

Parent Defect ID:	SLXOS-38394	Issue ID:	SLXOS-38394
Severity:	S2 - High		
Product:	SLX-OS	Technology Group:	Security
Reported in Release:	SLXOS 18r.1.00b	Technology:	HTTP/HTTPS
Symptom:	Enabling or disabling HTTP(S) service on Virtual Routing and Forwarding(VRF) name other than management VRF("mgmt-vrf") may not succeed.		
Condition:	Enabling or disabling HTTP(S) service fails on chassis based devices		
Workaround:	None		

Parent Defect ID: SLXOS-38	406 Issue ID:	SLXOS-38406
----------------------------	---------------	-------------

Severity:	S3 - Medium		
Product:	SLX-OS	Technology Group:	Traffic Management
Reported in Release:	SLXOS 18r.1.00b	Technology:	Rate Limiting and
			Shaping
Symptom:	When egress Rate-limiter is applied on port-channel, and system is		
	rebooted, then egress Rate-Limiter was not working.		
Condition:	When system was rebooted with Egress RL applied on port-channel		
Workaround:	After reboot, reapply e	gress RL.	

Parent Defect ID:	SLXOS-38447	Issue ID:	SLXOS-38447
Severity:	S2 - High		
Product:	SLX-OS	Technology Group:	Layer 3
			Routing/Network
			Layer
Reported in Release:	SLXOS 18r.1.00b	Technology:	BGP4 - IPv4 Border
			Gateway Protocol
Symptom:	L3VPN traffic may not be forwarded.		
Condition:	The VRFs are configured first in an order and then L3VPN config		
	(route-target, route-distinguisher etc.) is done in a different order to		
	those VRFs, so that the label allocation to VRFs does not happen in		
	the order of creation of VRFs. Now if HA fail over is done, L3 VPN		
	traffic may not be forw	rarded.	

Parent Defect ID:	SLXOS-27981	Issue ID:	SLXOS-38496
Severity:	S3 - Medium		
Product:	SLX-OS	Technology Group:	Management
Reported in Release:	SLXOS 17r.1.01ah	Technology:	CLI - Command Line
			Interface
Symptom:	If user changes the star	rtup config file to let mai	nagement IP and
	default gateway in a di	fferent subnet from the	management IP and
	default gateway that currently configured on SLX, and perform "copy		
	tftp startup-config", then reload, SLX will keep the previously		
	configured management IP and gateway after reload		
Condition:	User changes the startup config file to have management IP and		
	gateway address in a different subset from the management IP and		
	gateway that currently configured on SLX		
Workaround:	Before reload the system, remove the management IP and default		
	gateway		
	from system using CLI		

Parent Defect ID:	SLXOS-20017	Issue ID:	SLXOS-38877
Severity:	S3 - Medium		
Product:	SLX-OS	Technology Group:	Management
Reported in Release:	SLXOS 17r.1.00a	Technology:	SNMP - Simple
			Network
			Management
			Protocol
Symptom:	Unexpected behavior with SLX		
Condition:	While trying to write port alias using SNMP application.		
Workaround:	None		

Parent Defect ID:	SLXOS-38980	Issue ID:	SLXOS-38980
Severity:	S2 - High		
Product:	SLX-OS	Technology Group:	Management
Reported in Release:	SLXOS 18r.1.00b	Technology:	SNMP - Simple
			Network
			Management
			Protocol
Symptom:	Snmp daemon terminates and restarts on HA failover.		
Condition:	Occurs only when there is an SNMP host configured with source-		
	interface as management mm-ip.		
Workaround:	Keep source-interface	configuration as default	

Parent Defect ID:	SLXOS-38299	Issue ID:	SLXOS-39007
Severity:	S2 - High		
Product:	SLX-OS	Technology Group:	Other
Reported in Release:	SLXOS 18x.1.00a	Technology:	Other
Symptom:	Sometimes, a panic dump may be seen while rebooting the setup.		
Condition:	This is a rare condition which may be seen while device is rebooting or when sending high rate traffic to CPU.		
Workaround:	N/A		

Parent Defect ID:	SLXOS-39185	Issue ID:	SLXOS-39185
Severity:	S2 - High		
Product:	SLX-OS	Technology Group:	Traffic Management
Reported in Release:	SLXOS 18r.1.00b	Technology:	Rate Limiting and
			Shaping
Symptom:	rate limiting clear command is not working		
Condition:	execute show command and clear command, data still shows even		
	after clear command		

Parent Defect ID:	SLXOS-39214	Issue ID:	SLXOS-39214

Severity:	S2 - High		
Product:	SLX-OS	Technology Group:	MPLS
Reported in Release:	SLXOS 18r.1.00b	Technology:	LDP - Label
			Distribution Protocol
Symptom:	LDP sessions stay down despite ping functioning between the peers.		
Condition:	socket supporting LDP session is terminated by HA failover or route change. Note that the problem very rarely happens.		

Parent Defect ID:	SLXOS-39319	Issue ID:	SLXOS-39319
Severity:	S2 - High		
Product:	SLX-OS	Technology Group:	Other
Reported in Release:	SLXOS 18r.1.00c	Technology:	Other
Symptom:	On the serial console, user observes output overwritten and		
	becoming unreadable.		
Condition:	On the serial console, user changes window size and observe output overwritten and becoming unreadable.		

Parent Defect ID:	SLXOS-39220	Issue ID:	SLXOS-39349
Severity:	S1 - Critical		
Product:	SLX-OS	Technology Group:	Management
Reported in Release:	SLXOS 18s.1.01a	Technology:	SNMP - Simple
			Network
			Management
			Protocol
Symptom:	LLDP-MIB::lldpLocPortI	ld value is not correct (ap	ppears corrupted)
	when queried via SNM	P GET operation.	
Condition:	Issue occurs only for SN	NMP GET operation (on I	LLDP-
	MIB::lldpLocPortId). SNMP GET-NEXT and snmpwalk returns correct values.		
Workaround:	Use SNMP GET-NEXT or snmpwalk instead of SNMP GET when		
	querying LLDP-MIB::lldpLocPortId via SNMP.		
		•	
	2. Use CLI to query (LLI	OP-MIB::lldpLocPortId) ir	nstead of SNMP, if it's
	feasible.		

Parent Defect ID:	SLXOS-38901	Issue ID:	SLXOS-39427
Severity:	S3 - Medium		
Product:	SLX-OS	Technology Group:	Network Automation
			and Orchestration
Reported in Release:	SLXOS 18r.1.00aa	Technology:	NETCONF - Network
			Configuration
			Protocol
Symptom:	Seeing error while using rpc to get port channel config.		
Condition:	If Insight enable mmId	1 command is enabled.	

Parent Defect ID:	SLXOS-39445	Issue ID:	SLXOS-39445
Severity:	S2 - High		
Product:	SLX-OS	Technology Group:	Security
Reported in Release:	SLXOS 18r.1.00c	Technology:	TACACS & TACACS+
Symptom:	DCM daemon termination will be observed while executing any CLI		
Condition:	When AAA Command Authorization is enabled and the configured		
	tacacs+ server are not reachable.		
Workaround:	Make the configured T	acacs+ server reachable.	

Parent Defect ID:	SLXOS-38336	Issue ID:	SLXOS-39626
Severity:	S2 - High		
Product:	SLX-OS	Technology Group:	Management
Reported in Release:	SLXOS 18x.1.00a	Technology:	CLI - Command Line
			Interface
Symptom:	Overlay-gateway configuration doesn't show up in running-config.		
Condition:	Overlay-gateway configuration doesn't show up in running-config		
	after firmware upgrade with ZTP (Zero touch provisioning),		
Workaround:	none		

Parent Defect ID:	SLXOS-38493	Issue ID:	SLXOS-39702
Severity:	S2 - High		
Product:	SLX-OS	Technology Group:	Other
Reported in Release:	SLXOS 18r.1.00aa	Technology:	Other
Symptom:	file transfer may be affected if destination port is udp 646 and pkt has fragment offset.		
Condition:	During file transfer if destination port is udp 646 between source and destination without "mpls ldp" being enabled on the box. UDP packet with destination port 646 is trapped to cpu even without mpls being enabled on the box.		

Parent Defect ID:	SLXOS-34817	Issue ID:	SLXOS-39748	
Severity:	S2 - High			
Product:	SLX-OS	Technology Group:	Layer 2 Switching	
Reported in Release:	SLXOS 18r.2.00	Technology:	VRP - VLAN	
			Registration Protocol	
Symptom:	User will observe that	User will observe that the REST API response for mvrp interface		
	related operational GET command fetches the value from the global			
	bucket for non-MVRP interfaces.			
Condition:	Issue was seen only when trying to fetch MVRP information using			
	REST API infrastructure for interfaces where MVRP was not			
	configured.			
Workaround:	No			

Parent Defect ID:	SLXOS-39783	Issue ID:	SLXOS-39784
Severity:	S2 - High		
Product:	SLX-OS	Technology Group:	Monitoring
Reported in Release:	SLXOS 18r.1.00a	Technology:	OAM - Operations,
			Admin &
			Maintenance
Symptom:	nf_conntrack feature in Linux kernel track all IP packets coming to		
	CPU. It can cause nf_conntrack table full issue & fragmented packet		
	drop issue.		
Condition:	There is no specific condition trigger this, by default the service is up and running.		

Parent Defect ID:	SLXOS-29369	Issue ID:	SLXOS-39838
Severity:	S3 - Medium		
Product:	SLX-OS	Technology Group:	Monitoring
Reported in Release:	SLXOS 18r.2.00	Technology:	Port Mirroring
Symptom:	MTU of a destination mirror port may be a non-default MTU.		
Condition:	1. When Global MTU is configured on the device,		
	2. A port is configured as a destination-mirror port		

Parent Defect ID:	SLXOS-25731	Issue ID:	SLXOS-39974
Severity:	S2 - High		
Product:	SLX-OS	Technology Group:	Layer 2 Switching
Reported in Release:	SLXOS 17s.1.02b	Technology:	MCT - Multi-Chassis
			Trunking
Symptom:	MCT daemon termination followed by switch reload		
Condition:	MCT daemon terminates when client server sends the LACP oper key		
	as 0.		
Workaround:	Remove 'esi auto lacp' config		

Parent Defect ID:	SLXOS-39618	Issue ID:	SLXOS-40059
Severity:	S3 - Medium		
Product:	SLX-OS	Technology Group:	MPLS
Reported in Release:	SLXOS 18r.1.00aa	Technology:	MPLS VPLS - Virtual
			Private LAN Services
Symptom:	Peers MPLS interface VE MAC learned as remote VPLS mac.		
Condition:	Issue seen in egress PE node, when receiving VPLS packet has inner payload DA MAC as 0100.5e00.xxxx		

Parent Defect ID:	SLXOS-40076	Issue ID:	SLXOS-40076
Severity:	S2 - High		
Product:	SLX-OS	Technology Group:	SDN
Reported in Release:	SLXOS 18r.1.00c	Technology:	OpenFlow
Symptom:	Openflow flows are not pushed in Openflow profile 3 (Tcam profile)		
Condition:	Issue will be seen in openflow-profile-3 tcam while pushing openflow		
	flows		

Parent Defect ID:	SLXOS-40143	Issue ID:	SLXOS-40143
Severity:	S3 - Medium		
Product:	SLX-OS	Technology Group:	Security
Reported in Release:	SLXOS 18r.1.00c	Technology:	RADIUS
Symptom:	On console following error message will be seen - "Dcmd[3617]:		
	pam_radius_auth: Could not open configuration file		
	/etc/raddb/server: No such file or directory"		
Condition:	When REST/RESTCONF	query is given	

Parent Defect ID:	SLXOS-40087	Issue ID:	SLXOS-40367
Severity:	S2 - High		
Product:	SLX-OS	Technology Group:	Management
Reported in Release:	SLXOS 18r.2.00	Technology:	High Availability
Symptom:	hasmd hang which was killed by SWD and switch reloaded in external		
	login attach.		
Condition:	the issue may happen in brutal force login attack.		
Workaround:	None		

Parent Defect ID:	SLXOS-24384	Issue ID:	SLXOS-40383
Severity:	S3 - Medium		
Product:	SLX-OS	Technology Group:	Management
Reported in Release:	SLXOS 17r.2.01	Technology:	CLI - Command Line Interface
Symptom:	ha chassisreboot command from ha inline help is not needed.		
Condition:	ha chassisreboot should have been obsoleted.		
Workaround:	Please use reload system command.		

Parent Defect ID:	SLXOS-24114	Issue ID:	SLXOS-40435	
Severity:	S2 - High			
Product:	SLX-OS	Technology Group:	Monitoring	
Reported in Release:	SLXOS 17r.2.00	Technology:	OAM - Operations,	
			Admin &	
			Maintenance	
Symptom:	After the devices boots up, the user will see the dcmd.sh, ccmd.sh, and netstat defunct processes.			
Condition:	The defunct processes will show up when the user runs the "ps aux"			
	command.			
Workaround:	None. They are not har	None. They are not harmful and so the user can just ignore them.		

Parent Defect ID:	SLXOS-39058	Issue ID:	SLXOS-40466
Severity:	S2 - High		
Product:	SLX-OS	Technology Group:	Other
Reported in Release:	SLXOS 18r.1.00a	Technology:	Other
Symptom:	Switch reloaded with panic dump, impacting the data traffic		
	forwarding.		
Condition:	High rate of software assisted layer 3 forwarding of traffic, causing connection tracking table to fill up.		
Workaround:	NA		

Parent Defect ID:	SLXOS-40476	Issue ID:	SLXOS-40477
Severity:	S2 - High		
Product:	SLX-OS	Technology Group:	Management
Reported in Release:	SLXOS 18r.2.00	Technology:	High Availability
Symptom:	During DOS attacks,flood of disable pam_unix log messages are seen		
	on console		
Condition:	DOS attacks on system		
Workaround:	Configure syslog server to redirect these messages		

Parent Defect ID:	SLXOS-38229	Issue ID:	SLXOS-40484
Severity:	S3 - Medium		
Product:	SLX-OS	Technology Group:	Management
Reported in Release:	SLXOS 18r.1.00ab	Technology:	LLDP - Link Layer
			Discovery Protocol
Symptom:	NOS CLI "show lldp neighbors" command failed to fetch the neighbor		
	details.		
Condition:	LLDP must be configured on the SLX device.		
Workaround:	CMSH "show lldp neighbors"command can be used to fetch the LLDP		
	neighbor details		

Parent Defect ID:	SLXOS-38762	Issue ID:	SLXOS-40532	
Severity:	S3 - Medium			
Product:	SLX-OS	Technology Group:	Other	
Reported in Release:	SLXOS 18r.1.00aa Technology: Other			
Symptom:	JSON output of REST bridge-domain config has duplicated URN part way through the output.			
Condition:	For vlans configured more than 100, REST bridge-domain config has duplicated URN part way through the output.			
Workaround:	No			

Parent Defect ID:	SLXOS-40884	Issue ID:	SLXOS-40884
Severity:	S2 - High		
Product:	SLX-OS	Technology Group:	Management
Reported in Release:	SLXOS 18r.1.00c	Technology:	Software Installation & Upgrade
Symptom:	Firmwaredownload may fail with dpkg confd error messages on console.		
Condition:	While upgrade/downgrade using normal firmwaredownload /fullinstall.		

Parent Defect ID:	SLXOS-39462	Issue ID:	SLXOS-40929
Severity:	S3 - Medium		
Product:	SLX-OS	Technology Group:	Layer 2 Switching
Reported in Release:	SLXOS 18r.1.00ac	Technology:	MCT - Multi-Chassis
			Trunking
Symptom:	MAC is not being updated with the new ifindex on the remote LC.		
Condition:	MAC move from one client interface to another client interface when		
	same mac changes from CCR to CCL at the same time on remote LC.		

Parent Defect ID:	SLXOS-40994	Issue ID:	SLXOS-40994
Severity:	S2 - High		

Product:	SLX-OS	Technology Group:	Other
Reported in Release:	SLXOS 18r.1.00c	Technology:	Other
Symptom:	/var/run directory not present at bootup so /var/run/racoon2 was not created.		
Condition:	/var/run and /var/run/racoon2 should be present at bootup time		
Workaround:	add mkdir /var/run and -p option for create /var/run/racoon2 in sysinit script		

Parent Defect ID:	SLXOS-39963	Issue ID:	SLXOS-41019
Severity:	S3 - Medium		
Product:	SLX-OS	Technology Group:	Monitoring
Reported in Release:	SLXOS 18r.1.00b	Technology:	sFlow
Symptom:	SFLOW controller failed to capture few flows on bi-directional traffic.		
Condition:	SFLOW configuration enabled on interface.		

Parent Defect ID:	SLXOS-39538	Issue ID:	SLXOS-41117
Severity:	S2 - High		
Product:	SLX-OS	Technology Group:	Security
Reported in Release:	SLXOS 18r.1.00aa	Technology:	AAA - Authentication,
			Authorization, and
			Accounting
Symptom:	Unexpected reload		
Condition:	When TACACS authorization fails on re-try		
Workaround:	Make sure we have the proper network connectivity to avoid TACACS		
	authorization fails at first attempt.		

Parent Defect ID:	SLXOS-41166	Issue ID:	SLXOS-41168
Severity:	S2 - High		
Product:	SLX-OS	Technology Group:	Management
Reported in Release:	SLXOS 18r.1.00b	Technology:	CLI - Command Line Interface
Symptom:	Unexpected reload of t	the device.	
Condition:	Protocol lldp has dot1-tlv/dot3-tlv config and when "show lldp neighbors detail" command is issued.		
Workaround:	None		

Parent Defect ID:	SLXOS-40759	Issue ID:	SLXOS-41327
Severity:	S1 - Critical		
Product:	SLX-OS	Technology Group:	MPLS
Reported in Release:	SLXOS 18r.1.00aa	Technology:	MPLS VPLS - Virtual
			Private LAN Services
Symptom:	Not able to program MPLS tunnel		
Condition:s	Power-off/on line card on PE routerss		

Parent Defect ID:	SLXOS-40826	Issue ID:	SLXOS-41816
Severity:	S2 - High		
Product:	SLX-OS	Technology Group:	Other
Reported in Release:	SLXOS 18r.1.00aa	Technology:	Other
Symptom:	SLX device experience unexpected sudden reload.		
Condition:	FWD daemon termination cause the sudden reload.		