

vSLX v.2.0.0 Release Notes

vSLX 2.0.0 is the first GA release of vSLX. SLX-OS release 18r.1.00a is the supported SLX-OS version. Please note that support for Extreme vSLX varies from support for other Extreme products. Please refer to "Getting Help" section of Extreme vSLX Installation and User Guide, 18r1.00a for details.

Extreme Virtual SLX (vSLX) is a virtual lab that enables you to emulate Extreme Switching SLX 9540 and Extreme Routing SLX 9850 devices. You can also create virtual networks of workstations, SLX devices, tunnels, bridges, and probes.

You can use vSLX for training, configuration buildout and validation, workflow and automation development, and testing. For example:

- Hands-on training of SLX-OS for SLX 9540 and SLX 9850 CLI and programmatic API
- Building and validation of configuration before applying it to a supported device
- Development and testing of automation scripts and software, independent of hardware
- Development and testing Extreme Workflow Composer (EWC) workflows
- Configuration of management plane functionality (CLI and programmatic API) for SLX-OS features

There are two supported installation contexts:

- Host installation: All users share one virtual lab.
- Installation in Linux containers: Every user can have an independent virtual lab.

vSLX Installation

Please refer to *vSLX Installation and User Guide* for required software components and guidelines for installations.

Limitations and Restrictions of vSLX:

- **Use Case Restriction:** vSLXOS is designed for configuration processing and control plane applications for SLX product family. Data plane is supported for verification of control plane deployment using *ping*, *traceroute* etc. *Currently data plane is not designed to carry heavy traffic for data plane service deployment.* Ping and basic data path over L2, L3 and Vxlan based IP-fabric is supported. MPLS/VPLS/VLL control plane and configurations are supported, ping and basic datapath for MPLS/VPLS/VLL are not supported.
- **Supported Platform:** Intel X86 server (tested on Xeon CPU) or laptop (tested on i5/i7 CPUs and SSD recommended) running Ubuntu 16.04 LTS server edition (**Ubuntu released ubuntu-16.04.4-server-amd64.iso**). Please do not upgrade (using `apt-get upgrade` for example. If you upgrade, please select original kernel version from the grub menu during boot up.) The updated kernel version has a patch that breaks SLX9850 boot up. Ubuntu 18.04 LTS server edition is not supported.
- **SLX-9850 Data traffic over backplane:** is not supported. For example, if VLAN ports are distributed over multiple line cards, data traffic will not be forwarded across the line cards over the backplane.
- **Supported Hypervisor:** KVM/QEMU.
- **VM Hosting:** Not Supported. vSLX must be deployed on baremetal host or on LXC on baremetal.
- **Container Support:** vSLX can be deployed in privileged Linux container (lxc). Docker is not supported.
- **GSN3:** Not Supported

Known Issues:

- **Firmware Download Feature:** Supported for virtual SLX-9540. Not supported for virtual SLX-9850.
- **Reload System:** May not work, please power cycle as work around
- **Console Logs reporting missing hardware components:** There are occasional console logs regarding missing CID, temperature sensor etc. These logs are harmless for vSLX platform and have no functional impact.

Guidelines for isolating issues to vSLX:

To isolate issues to vSLX (as opposed to SLX-OS), check if basic IP connectivity (ping) works over the links. Specifically:

- Boot up using simple L2 and L3 configuration and make sure interfaces come up and ping works
- Use vsh commands to make sure relevant nodes are powered on and console connection works
- Links require SLX-OS interface level configuration as well as creation of link in vsh. If links are down check both SLX-OS and vsh to make sure configuration is correct.

If basic connectivity does not work, it is most likely a vSLX issue Otherwise it is most likely SLX-OS issue. This is just a general guideline. For a specific issue there may be other tell-tale indications to isolate the issue.

Test Coverage:

vSLX ver. 2.0.0 supports control plane and basic data plane for L2, L3 and BGP-EVPN VXLAN based IP Fabric supported in SLX-OS 18r.1.00a.

The following IP Fabric control-plane features have been tested for this release.

- IP Fabric control-plane
- L2VNI (VLAN and bridge-domain)
- L3VNI (VLAN and bridge-domain)

The following IP Fabric data-plane features (VXLAN with ping on VXLAN VTEPⁱ) have been tested for this release.

- L2VNI (VLAN and bridge-domain)
- L3VNI (VLAN and bridge-domain)

The following L2 Exchange VPLS and VLL features have been tested.

- VPLS PW bring-up with RSVP and OSPF as IGP
- Deletion and addition of MPLS config, bridge-domain with p2mp config, and tunnel config
- Verification of VPLS PW bring-up in raw, tagged, and raw pass-through modes
- Verification of flapping IGP and RSVP sessions

- VLL PW bring-up with LDP and ISIS as IGP
- Deletion and addition of MPLS config, bridge-domain with p2p config, and tunnel config in VLL
- Verification of VLL PW bring-up in raw, tagged, and raw pass-through modes
- Verification of flapping IGP and LDP sessions

ⁱ Ping with VXLAN logical VTEP is supported as beta, while ping with single VTEP was fully tested.