Nexus 9300v and 9500v Lite NX-OS Image

About Nexus 9300v and 9500v Lite NX-OS Image

An additional image, NX-OS lite (nxos64-cs-lite.10.2.2.75.F.bin), is introduced in Cisco NX-OS Release 10.2(3)F. This has a reduced memory footprint, resulting in a much smaller image size than the earlier images for Cisco Nexus 9300v and 9500v. This image can be installed during the boot-up time, and the image bring up is faster than the earlier images. However, before loading the lite image, perform a write-erase-reload, as some of the configurations may not be valid.

Note   This image contains only base RPMs, which are needed to support deployment scenarios such as VXLAN EVPN, no F+L, with IPv4/Ipv6 underlay (OSPF/IS-IS), and M-site functionality including vPC on BL, PC/vPC, LACP, and DME/YANG/telemetry. Rest of the RPMs are omitted from the lite NX-OS image.

Resource Requirements

The following table displays the resource requirements for Nexus 9300v and 9500v Lite:

Resource	Specification
Minimum RAM	10 G (basic bootup)
Recommended RAM	10 G (depending on the number of features)
Minimum vCPUs	2
Recommended vCPUs	4
Minimum vNICs	1
Maximum vNICs	65

Virtual Artifacts

The following table displays the virtual artifact(s) for Nexus 9300v and 9500v Lite:

VM Type	Hypervisor	Virtual Artifact	Description
N9300v Lite	ESXI 8.0	nexus9300v64-lite.10.2.2.75.F.ova	Contains virtual disk, machine definition, and NXOS image.
N9300v Lite	KVM/QEMU 4.2.0	nexus9300v64-lite.10.2.2.75.F.qcow2	Contains virtual disk and NXOS image on bootflash.
N9300v Lite	Vagrant 2.3.7	nexus9300v64-lite.10.2.2.75.F.box	Contains a preinstalled NXOS image on a virtual disk along with a machine definition.
N9500v Lite	ESXI 8.0	nexus9500v64-lite.10.2.2.75.F.ova	Contains virtual disk, machine definition, and NXOS image.
N9500v Lite	KVM/QEMU 4.2.0	nexus9500v64-lite.10.2.2.75.F.qcow2	Contains virtual disk and NXOS image on bootflash.

Features Supported

The following sections provide information about the various categories of features supported by Nexus 9300v Lite and 9500v Lite platforms:

- Layer 2 Features
- Layer 3 Features
- Programmability Features

Layer 2 Features

The following table lists layer 2 feature support for the Nexus 9300v Lite and Nexus 9500v Lite platforms.

Feature	Nexus 9300v Lite Support	Nexus 9500v Lite Support
802.1AB LLDP	Yes	Yes
802.1Q VLANs/Trunk	Yes	Yes
802.1s RST	Yes	Yes
802.3ad LACP	Yes	Yes
L2 Multicast	Yes (as broadcast)	Yes (as broadcast)

Feature	Nexus 9300v Lite Support	Nexus 9500v Lite Support
MLAG	Yes	Yes
Port Channel	Yes	Yes
VLANs	Yes	Yes
VXLAN EVPN	Yes	Yes
No F+L with IPv4/Ipv6 underlay (OSPF/IS-IS)	Yes	Yes
Multi-Site functionality with non-vPC on BGW	Yes	Yes

Layer 3 Features

The following table lists layer 3 feature support for the Nexus 9300v Lite and Nexus 9500v Lite platforms.

Feature	Nexus 9300v Lite Support	Nexus 9500v Lite Support
OSPF	Yes	Yes
OSPFv3	Yes	Yes
BGP	Yes	Yes
MP-BGP	Yes	Yes
IS-IS	Yes (as broadcast)	Yes (as broadcast)
Equal Cost Multipath Routing (ECMP)	Yes	Yes
PIM-SM	Yes	Yes
MPLS	Yes	Yes
CDP	Yes	Yes
L3 SVI	Yes	Yes
Sub Interfaces	Yes	Yes
IPsec	No	No

Programmability Features

The following table lists programmability feature support for the Nexus 9300v Lite and Nexus 9500v Lite platforms.

Feature	Nexus 9300v Lite Support	Nexus 9500v Lite Support
Bash shell access and scripting	Yes	Yes

Feature	Nexus 9300v Lite Support	Nexus 9500v Lite Support
RPM support	Yes	Yes
Programmatic access to system state (Python)	Yes	Yes
Docker within OS	Yes	Yes
NXAPI	Yes	Yes
DME	Yes	Yes
RESTCONF	Yes	Yes
NETCONF	Yes	Yes
YANG Models	Yes	Yes
Telemetry	Yes	Yes
GNMI	Yes	Yes
NxSDK	Yes	Yes

Nexus 9300v Lite and 9500v Lite NX-OS Image Deployment

For more information about the deployment procedures for KVM/QEMU, ESXi, and Vagrant, see the following:

- Nexus 9000v Deployment Workflow for ESXi
- Nexus 9000v Deployment Workflow for KVM/QEMU
- Nexus 9000v Deployment Workflow for Vagrant

Note   9500v Lite is not supported on Vagrant. Additionally, ISSU is not supported for 9300v Lite and 9500v Lite. For more information, see Image Upgrade Workflow.