

**Lenovo CNOS Quick Start Guide** 

This switch comes pre-loaded with Lenovo Cloud Network Operating System (CNOS).

CNOS provides a reliable, open, and programmable network infrastructure designed to scale for your business needs. Its intelligent, cloud-scale performance delivers a software-defined Ethernet solution that is simple to manage and easy to deploy using common management tools. CNOS is based on industry standards for better interoperability within the data center by enabling support of automation and orchestration applications for tight integration into the data center ecosystem.

On platforms that also support Lenovo Enterprise NOS (ENOS), you can switch from CNOS to ENOS. For more details, see "Switching to Lenovo ENOS" in this guide.

#### **Connect to Your Switch**

Follow these instructions to connect to your switch via the management port:

1. If you are using the default IP address that comes with the switch (192.168.50.50), skip to Step 2. Otherwise, use a console connection to configure a static IP address:

```
Switch> enable
Switch# configure device
Switch(config)#
Switch(config)# interface mgmt 0
Switch(config-if)# ip address <IPv4 address>/<IPv4 network mask length>
Switch(config-if)# exit
Switch(config)# vrf context management
Switch(config-vrf)# ip route 0.0.0.0 0.0.0.0 <default gateway IPv4 address>
Switch(config-vrf)# exit
```

- 2. Connect a cable from the management port of your switch to your network.
- 3. Using ssh, log into the switch as the default user (admin/admin).

# **Upgrade CNOS Firmware**

**Note:** This section is optional but recommended.

Follow these steps to upgrade to the latest version of CNOS on your switch:

- 1. Download the latest firmware from support.lenovo.com to your TFTP server.
- 2. Use TFTP to install the CNOS firmware onto your switch:

```
Switch> enable
Switch# ping <target IPv4 address> vrf management
Switch# cp tftp://<TFTP server address>/Switch-CNOS-10.3.1.0.imgs system-image all vrf management
```

3. Reboot the switch:

```
Switch# reload
reboot system? (y/n) y
```

4. When the switch finishes rebooting, log in as the default user and check the version number to verify that the correct image is running:

```
Switch> enable
Switch# display boot
```

## Switching to Lenovo ENOS

Installing Lenovo ENOS is only supported on the following switches:

- Rackswitch G8272
- Rackswitch G8296
- Rackswitch G8332

Table 1 at https://lenovopress.com/tips1267-lenovo-rackswitch-g8272 compares the features of CNOS and ENOS on all switches that support both. If you need any features that are only supported on ENOS, follow these instructions to install ENOS instead of the existing CNOS firmware:

- 1. Download the appropriate version of the ENOS image from support.lenovo.com to your TFTP server.
- 2. In CNOS, connect to your switch via the console or SSh to the default IP address (192.168.50.50) and log in as the default user (admin/admin).
- 3. Download the ENOS system and boot images from the TFTP server:

```
Switch> enable
Switch# cp tftp tftp://<tftp server IP>/<switch_model>-8.4.1.0_OS.imgs system-image os vrf management
Confirm download operation? (y/n) [n] y
```

```
Switch# cp tftp://<tftp server IP>/<switch_model>-8.4.1.0_Boot.imgs system-image boot vrf management Confirm download operation? (y/n) [n] y
```

4. Reboot the switch:

```
Switch# reload reboot system? (y/n) y
```

**Note:** Once the switch reboots with ENOS, the CNOS configuration disappears.

5. After the switch reboots, log in as admin/admin and check the version number to verify that the switch is running the ENOS 8.x image.

```
Switch> enable
Switch# show boot
```

## **Additional Information**

More detailed information about your switch is available in the following guides:

• Installation Guide

- Application Guide
- Command Reference Guide

- Python Programming Guide
- REST API Programming Guide
- Release Notes

You can find these manuals, specific to your switch, online at:

http://systemx.lenovofiles.com/help/topic/com.lenovo.systemx.common.nav.doc/overview\_rack\_switches.html

#### **Trademarks**

LIMITED AND RESTRICTED RIGHTS NOTICE: If data or software is delivered pursuant a General Services Administration "GSA" contract, use, reproduction, or disclosure is subject to restrictions set forth in Contract No. GS-35F-05925.

Lenovo and the Lenovo logo are trademarks of Lenovo in the United States, other countries, or both.

Other company, product, or service names may be trademarks or service marks of others.

First Edition (March 2017)

© Copyright Lenovo 2017.