

Lenovo ThinkSystem NE10032 Rackswitch

# Release Notes

For Lenovo Cloud Network Operating System 10.4

**Lenovo**<sup>TM</sup>

**Note:** Before using this information and the product it supports, read the general information in the *Safety information and Environmental Notices* and *User Guide* documents on the *Lenovo Documentation CD* and the *Warranty Information* document that comes with the product.

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## Release Notes

This release supplement provides the latest information regarding Lenovo Cloud Network OS 10.4 for the Lenovo ThinkSystem NE10032 Rackswitch (referred to as NE10032 throughout this document).

This supplement modifies and extends the following Cloud NOS documentation for use with CNOS 10.4:

- *Lenovo Network Application Guide for Lenovo Cloud Network OS 10.4*
- *Lenovo Network Command Reference for Lenovo Cloud Network OS 10.4*
- *Lenovo Network Python Programming Guide for Lenovo Cloud Network Operating System 10.4*
- *Lenovo Network REST API Programming Guide for Lenovo Cloud Network Operating System 10.4*
- *Lenovo ThinkSystem NE10032 RackSwitch Installation Guide*

These publications are available from the following website:

[http://systemx.lenovofiles.com/help/topic/com.lenovo.systemx.common.nav.doc/overview\\_rack\\_switches.html](http://systemx.lenovofiles.com/help/topic/com.lenovo.systemx.common.nav.doc/overview_rack_switches.html)

Please keep these release notes with your product manuals.

**Note:** The Lenovo Cloud Network OS is based on the Embedded Linux Integration Environment (ELIE). To obtain open source code licenses, go to <https://github.com/lenovo/ELIE/tree/master/elic-1.7.1/licenses/>. For details on how to obtain open source code, please contact Lenovo Support.

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## Hardware Support

CNOS 10.4 software is supported on the NE10032 high performance Layer 2-3 network switches.

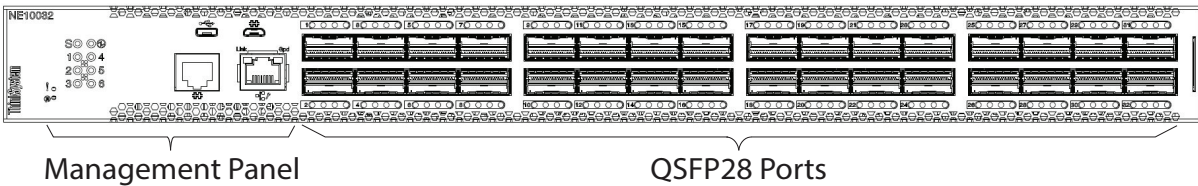
The NE10032 is a 1U GbE switch and it can be mounted horizontally or vertically, depending on your application. Mounting options are available for a variety of rack systems.

For superior reliability, the NE10032 uses redundant, hot-swap power supply modules and six hot-swap fan modules. Module options are available for either front-to-rear airflow, or rear-to-front airflow.

The NE10032 contains the following ethernet ports:

- Thirty-two 100 Gigabit Ethernet (GbE) Quad Small Form Pluggable 28 (QSFP28) ports which also support legacy 100/40 GbE connections

**Figure 1.** NE10032 front panel



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## Supplemental Information

This section provides additional information about configuring and operating the NE10032 and CNOS.

### The BIOS Menu

The Basic Input/Output System (BIOS) menu allows you to have complete system control at boot.

You can interrupt the startup process of the switch and enter the BIOS menu from the serial console port. When the system displays the following message, press **Delete** or **Esc**.

```
Press <DEL> (Terminal Not applicable) or <ESC> to enter setup...
```

The BIOS menu appears.

```
Aptio Setup Utility - Copyright (C) 2017 American Megatrends, Inc.
Main Advanced Event Logs Security Boot Save & Exit
-----
| BIOS Information                                     | Choose the system |
| BIOS Vendor          American Megatrends           | default language  |
| Core Version         5.009                          |                   |
| Compliancy           UEFI 2.3; PI 1.2               |                   |
| Project Version      0ACBZ 0.33 x64                 |                   |
| Build Date and Time  05/10/2017 11:09:14           |                   |
|-----|-----|
| Memory Information                                     |                   |
| Total Memory        8192 MB (DDR3)                  |                   |
|-----|-----|
| OEM Version         ALPHA.05.33.0206B               |                   |
| System Language     [English]                       |                   |
|-----|-----|
| System Date         [Thu 05/11/2017]                |                   |
| System Time         [11:13:37]                      |                   |
|-----|-----|
| Access Level        Administrator                   |                   |
|-----|-----|
|><: Select Screen
|^v: Select Item
|Enter: Select
|+/-: Change Opt.
|F1: General Help
|F2: Previous Values
|F3: Optimized Defaults
|F4: Save & Exit
|ESC: Exit
-----
Version 2.17.1245. Copyright (C) 2017 American Megatrends, Inc.
```

This menu permits the following actions:

- Monitoring system configuration
- Setting user passwords
- Switching to Secure Boot Mode
- Performing key provisioning

## The Grub Menu

The Grub menu allows you to switch the software image. The menu appears on the screen automatically during the switch startup process.

```
GNU GRUB version 2.00
-----
CNOS slot 1
CNOS slot 2
ONIE
-----

Use the ^ and v keys to select which entry is highlighted.
Press enter to boot the selected OS, 'e' to edit the commands
before booting or 'c' for a command-line. ESC to return
previous menu.
```

**Note:** For more information on ONIE, please see the *Lenovo ThinkSystem NE10032 RackSwitch ONIE Quick Start Guide*.

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## Known Issues

This section describes known issues for CNOS 10.4 on the ThinkSystem NE10032 Rackswitch.

### Management Port

These limitations will be fixed in the next firmware release.

- When the NE10032 is connected to another network device through the management port, it automatically negotiates its port speed to 10, 100 or 1,000 Mbps, depending on the configuration of the partner device. The management port always displays its speed as being 1,000 Mbps, regardless of the actual negotiated speed. The switch does not support the manual configuration of the management port speed. (ID: 104923)
- The operational status of the management port is always displayed as connected (up). (ID: 112573)

To verify the status of the management port, do one of the following:

- check the switch management port activity LED
- check LLDP neighbor information on the management port (if the peer switch supports LLDP and the link is actually down, then no neighbors are displayed):

**display lldp neighbors interface mgmt 0**

- check the link on the partner switch to validate the management link status
- reset the statistics of the management interface and then check if they are incrementing, meaning that traffic is transmitted across the link

