

Lenovo RackSwitch G7028/G7052

Release Notes

for Networking OS 8.1

LenovoTM

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.

First Edition (August 2015)

© Copyright Lenovo 2015
Portions © Copyright IBM Corporation 2014.

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.

Release Notes

This release supplement provide the latest information regarding Lenovo Networking OS 8.1 for the RackSwitch G7028/G7052 (referred to as G7028/G7052 throughout this document).

This supplement modifies and extends the following Lenovo N/OS documentation for use with N/OS 8.1:

- *Lenovo RackSwitch G7028/G7052 Application Guide for Networking OS 8.1*
- *Lenovo RackSwitch G7028/G7052 ISCLI Command Reference for Networking OS 8.1*
- *Lenovo RackSwitch G7028 Installation Guide*
- *Lenovo RackSwitch G7052 Installation Guide*

The publications listed above are available from the following website:

<http://publib.boulder.ibm.com/infocenter/systemx/documentation/index.jsp>

Please keep these release notes with your product manuals.

Note: This *Release Notes* is applicable to G7028/G7052 product family. In some places “G7028” is used in examples. Unless explicitly mentioned, all commands and descriptions are applicable to both the G7028 and G7052.

Updating the Switch Software Image

The switch software image is the executable code running on the G7028/G7052. A version of the image comes pre-installed on the device. As new versions of the image are released, you can upgrade the software running on your switch. To get the latest version of software supported for your G7028/G7052, go to the following website:

<http://www.support.lenovo.com>

To determine the software version currently used on the switch, use the following switch command:

```
RS G7028# show version
```

The typical upgrade process for the software image consists of the following steps:

- Load a new software image and boot image onto an FTP or TFTP server on your network.
- Transfer the new images to your switch.
- Specify the new software image as the one which will be loaded into switch memory the next time a switch reset occurs.
- Reset the switch.

For instructions on the typical upgrade process using the ISCLI or BBI, see “Loading New Software to Your Switch” on page 4.



CAUTION:

Although the typical upgrade process is all that is necessary in most cases, upgrading from (or reverting to) some versions of N/OS requires special steps prior to or after the software installation process. Please be sure to follow all applicable instructions in the following sections to ensure that your switch continues to operate as expected after installing new software.

Loading New Software to Your Switch

The G7028/G7052 can store up to two different switch software images (called `image1` and `image2`) as well as special boot software (called `boot`). When you load new software, you must specify where it should be placed: either into `image1`, `image2`, or `boot`.

For example, if your active image is currently loaded into `image1`, you would probably load the new image software into `image2`. This lets you test the new software and reload the original active image (stored in `image1`), if needed.



CAUTION:

When you upgrade the switch software image, always load the new boot image and the new software image before you reset the switch. If you do not load a new boot image, your switch might not boot properly (To recover, see “Recovering from a Failed Upgrade” on page 8).

To load a new software image to your switch, you will need the following:

- The image and boot software loaded on an FTP or TFTP server on your network.

Note: Be sure to download both the new boot file and the new image file.

- The hostname or IP address of the FTP or TFTP server

Note: The DNS parameters must be configured if specifying hostnames.

- The name of the new software image or boot file

When the software requirements are met, use the following procedure to download the new software to your switch.

Loading Software via the ISCLI

1. In Privileged EXEC mode, enter the following command:

```
Router# copy {tftp|ftp} {image1|image2|boot-image}
```

2. Enter the hostname or IP address of the FTP or TFTP server.

```
Address or name of remote host: <name or IP address>
```

3. Enter the name of the new software file on the server.

```
Source file name: <filename>
```

The exact form of the name will vary by server. However, the file location is normally relative to the FTP or TFTP directory (for example, `tftpboot`).

4. If required by the FTP or TFTP server, enter the appropriate username and password.

5. The switch will prompt you to confirm your request.

Once confirmed, the software will begin loading into the switch.

6. When loading is complete, use the following commands to enter Global Configuration mode to select which software image (`image1` or `image2`) you want to run in switch memory for the next reboot:

```
Router# configure terminal
Router(config)# boot image {image1|image2}
```

The system will then verify which image is set to be loaded at the next reset:

```
Next boot will use switch software image1 instead of image2.
```

7. Reboot the switch to run the new software:

```
Router(config)# reload
```

The system prompts you to confirm your request. Once confirmed, the switch will reboot to use the new software.

Supplemental Information

This section provides additional information about configuring and operating the G7028/G7052 and N/OS.

The Boot Management Menu

The Boot Management menu allows you to switch the software image, reset the switch to factory defaults, or to recover from a failed software download.

You can interrupt the boot process and enter the Boot Management menu from the serial console port. When the system displays Memory Test, press **<Shift B>**. The Boot Management menu appears.

```
Resetting the System ...
Memory Test .....

Boot Management Menu
1 - Change booting image
2 - Change configuration block
3 - Boot in recovery mode (tftp and xmodem download of images to recover
switch)
4 - Xmodem download (for boot image only - use recovery mode for
application images)
5 - Reboot
6 - Exit

Please choose your menu option: 1
Current boot image is 1. Enter image to boot: 1 or 2: 2
Booting from image 2
```

The Boot Management menu allows you to perform the following actions:

- To change the booting image, press 1 and follow the screen prompts.
- To change the configuration block, press 2 and follow the screen prompts.
- To boot in recovery mode, press 3 and follow the screen prompts.
- To perform an Xmodem download, press 4 and follow the screen prompts.
- To reboot the system, press 5.
- To exit the Boot Management menu, press 6. The booting process continues.

Recovering from a Failed Upgrade

Use the following procedure to recover from a failed software upgrade.

1. Connect a PC to the serial port of the switch.
2. Open a terminal emulator program that supports XModem Download (for example, HyperTerminal, SecureCRT, PuTTY) and select the following serial port characteristics:
 - o Speed: 9600 bps
 - o Data Bits: 8
 - o Stop Bits: 1
 - o Parity: None
 - o Flow Control: None
3. Boot the switch and access the Boot Management menu by pressing **<Shift B>** while the Memory Test is in progress and the dots are being displayed.
4. Select **4** for **Xmodem download**. When you see the following message, change the Serial Port characteristics to 115200 bps:

```
## Switch baudrate to 115200 bps and press ENTER ...
```

5. Press **<Enter>** to set the system into download accept mode. When the readiness meter displays (a series of "C" characters), start XModem on your terminal emulator.

6. Select the Boot Image to download. The XModem initiates the file transfer. When the download is complete, a message similar to the following is displayed:

```
CxyzModem - CRC mode, 63330(SOH)/0(STX)/0(CAN) packets, 1 retries

Extracting images ... Do *NOT* power cycle the switch.
**** RAMDISK ****
Un-Protected 39 sectors
Erasing Flash...
..... done
Erased 39 sectors
Writing to Flash...9....8....7....6....5....4....3....2....1....done
Protected 39 sectors
**** KERNEL ****
Un-Protected 20 sectors
Erasing Flash...
..... done
Erased 20 sectors
Writing to Flash...9....8....7....6....5....4....3....2....1....done
Protected 20 sectors
**** DEVICE TREE ****
Un-Protected 1 sectors
Erasing Flash...
. done
Erased 1 sectors
Writing to Flash...9....8....7....6....5....4....3....2....1....done
Protected 1 sectors
**** BOOT CODE ****
Un-Protected 4 sectors
Erasing Flash...
.... done
Erased 4 sectors
Writing to Flash...9....8....7....6....5....4....3....2....1....done
Protected 4 sectors
```

7. When you see the following message, change the Serial Port characteristics to 9600 bps:

```
## Switch baudrate to 9600 bps and press ESC ...
```

8. Press the Escape key (<Esc>) to re-display the Boot Management menu.

9. Select **3** to start a new **XModem Download**. When you see the following message, change the Serial Port characteristics to 115200 bps:

```
## Switch baudrate to 115200 bps and press ENTER ...
```

10. Press <Enter> to continue the download.

11. Select the OS Image to download. The XModem or TFTP initiates the file transfer. When the download is complete, a message similar to the following is displayed:

```
Extracting images ... Do *NOT* power cycle the switch.
Installing Application: Install image as image 1 or 2 (hit return to
just boot image):
```

12. Select the image number to load the new image (1 or 2). It is recommended that you select 1. A message similar to the following is displayed:

```
Installing image as image1: 100%
```

13. When you see the following message, change the Serial Port characteristics to 9600 bps:

```
## Switch baudrate to 9600 bps and press ESC ...
```

14. Press the Escape key (<**Esc**>) to re-display the Boot Management menu.
15. Select **6** to exit and boot the new image.