

QuantaMesh

Ethernet Switch

QNOS2 to QNOS5

Upgrading Guide

LB9



CONTENTS

1. Upgrade Firmware to QNOS5	3
1.1. Backup your existing configuration file	
1.2. Initialization Stage	
1.3. Change to ONIE Environment from Legacy Uboot	
1.4. Install the ONIE Installer	
2. Install the (Demo) License Key	5
About QCT	





1. Upgrade Firmware to QNOS5

Note:

This document only applied to upgrading firmware from v1.4.x.x to v5.4.x.x on T1048-LB9 with part number 1LB9BZZ0000, 1LB9BZZ0001, 1LB9BZZ0STQ, 1LB9BZZ0STR, 1LB9BZZ0006, 1LB9BZZ0STT, please use correct firmware to upgrading.

For part number 1LB9BZZ0000, 1LB9BZZ0001, 1LB9BZZ0006, 1LB9BZZ0STT, should install flash version. And the flash version supports only single image.

For part number 1LB9BZZOSTQ, 1LB9BZZOSTR, please install CF card version.

For BMS (1LB9BZZOSTQ, 1LB9BZZOSTR) without OS installed, please ignore step 1.1 ~ 1.3.

If you upgrade firmware from version 1.4.x.x to QNOS5, system will lost formal license key, please contact Quanta sales to request license key before you upgrade.

1.1. Backup your existing configuration file

The following procedures will destroy your file system. Please backup your current configuration first. Please be aware that there are some command differences between QNOS 2 (v1.4.x.x) and QNOS 5 (v5.4.x.x). Therefore, when you restore back the configuration, you may get failed command prompt.

1.2.Initialization Stage

- 1. Connect MGMT port to your management network. Assume your TFTP and DHCP server are located at this network.
- 2. Prepare one Tftp server (assume IP address is 192.168.2.100) and put the ONIE uboot and installer onto tftp root directory.
- 3. Connect the console cable to the console port, on a terminal emulation program (such as Teraterm or HyperTerm), set the baud rate to 115200 (115200, n, 8, 1).

1.3. Change to ONIE Environment from Legacy Uboot

Note:

If your switch part number is 1LB9BZZOSTQ or 1LB9BZZOSTR (BMS switch), please skip this section and go to 1.4 Install the ONIE Installer since it already have ONIE environment preloaded.

1. Go to uboot by press any key when see "Hit any key to stop autoboot".





```
PCIe1: Bus 00 – 01
In: serial
Out: serial
Err: serial
Net: eTSEC1: PHY is Broadcom BCM5461S (2060c1)
eTSEC1
Hit any key to stop autoboot: 0
WHKNING: adjusting available memory to 30000000
```

- 2. Then run the following under uboot prompt.
 - => setenv ipaddr <switch ip addr>
 - => setenv serverip <server ip addr>
 - => setenv start 0xffb60000
 - => setenv sz.b 0x4a0000
 - => tftp lb9-onie-2015.05-v1.2-665065c.bin

(please change to correct ONIE uboot name)

- => protect off \$start +\${sz.b} && erase \$start +\${sz.b}
- => cp.b \$loadaddr \$start \${sz.b} && protect on \$start +\${sz.b}
- => reset

1.4.Install the ONIE Installer

Note:

If your switch part number is 1LB9BZZOSTQ or 1LB9BZZOSTR (BMS switch), please use CF card version to upgrading, other part numbers please use flash version to upgrading.

If your already installed any vendor OS on switch, please following step 1^2 to enter ONIE rescue mode, in other cases please go to step 3 directly.

- 1. Reboot switch and press any key when see "Hit any key to stop autoboot".
- 2. Run the following command to enter ONIE rescue mode.

run onie_rescue

```
Hit any key to stop autoboot: 0
=>
=> run onie_rescue
Loading Upen Network Install Environment ...
Platform: powerpc-quanta_ly8_p2020-r0
Version : 2014.05.13-8817992
```





3. Reboot the switch and when see the following prompt, press [enter] key.

```
Please press Enter to activate this console. Info: eth0: Checking link... up.
Info. Trying DHCPv4 on interface. eth0

To check the install status inspect /var/log/onie.log.
Try this: tail -f /var/log/onie.log

** Installer Mode Enabled **
ONIE:/ #
```

4. Now you are in linux shell. Use the following command to stop ONIE discovery process.

ONIE: / # onie-discovery-stop

or

ONIE: / # killall discover

5. Manually Set switch IP address (if MGMT port connect to a DHCP server, it will get IP address from DHCP server automatically).

ONIE: / # ifconfig eth0 192.168.2.1

6. Manually specify the download URL.

ONIE:/#install_url tftp://<server ip addr>/<file name>

```
ONTE:/ #
ONIE:/ # onie-discovery-stop
discover: installer mode detected.
Stopping: discover...start-stop-daemon: warning: killing process 298: No such process
done.
DNIE:/ # ifconfig eth0 192.168.2.1
DNIE:/ # install_url tftp://192.168.2.100/onie-installer-quanta lb9 gc8541
discover: installer mode detected.
```

2. Install the (Demo) License Key

Note:

If you upgrade firmware from version 1.4.x.x to QNOS5, system will lost formal license key, please contact Quanta sales to request license key.

If you evaluate the QNOS5, please install the Demo license.

- 1. Put (demo) license key on the tftp root directory.
- 2. Boot the switch to the normal mode, when prompted for the username and password, input "admin" for the username and leave the password empty.
- 3. Set the service port IP address (in the example below, the service port IP address is set to 192.168.2.1):

configure





serviceport protocol none
serviceport ip 192.168.2.1 255.255.255.0
exit

4. Use the following command to download the license key.

copy tftp://<server ip addr>/<license key file name> license-key

```
      (Switch) #

      (Switch) #copy tftp://192.168.2.100/license-trial-2m.dat
      license-key

      Mode.
      IFTP

      Set Server IP.
      192.168.2.100

      Path.
      /

      Filename.
      license-trial-2m.dat

      Data Type.
      license

      Management access will be blocked for the duration of the transfer

      Are you sure you want to start? (y/n) y
```

5. Reload the switch.

reload





About QCT

QCT (Quanta Cloud Technology) is a global datacenter solution provider extending the power of hyperscale datacenter design in standard and open SKUs to all datacenter customers.

Product lines include servers, storage, network switches, integrated rack systems and cloud solutions, all delivering hyperscale efficiency, scalability, reliability, manageability, serviceability and optimized performance for each workload.

QCT offers a full spectrum of datacenter products and services from engineering, integration and optimization to global supply chain support, all under one roof.

The parent of QCT is Quanta Computer Inc., a Fortune Global 500 technology engineering and manufacturing company.

http://www.QuantaQCT.com

United States QCT LLC., Silicon Valley office 1010 Rincon Circle, San Jose, CA 95131 TOLL-FREE: 1-855-QCT-MUST TEL: +1-510-270-6111 FAX: +1-510-270-6161 Support: +1-510-270-6216

> QCT LLC., Seattle office 13810 SE Eastgate Way, Suite 190, Building 1, Bellevue, WA 98005 TEL: +1-425-633-1620 FAX: +1-425-633-1621

China 云达科技, 北京办公室(Quanta Cloud Technology)

北京市朝阳区东三环中路 1 号·环球金融中心东楼 1508 室 Room 1508, East Tower 15F, World Financial Center

No.1, East 3rd Ring Zhong Rd., Chaoyang District, Beijing, China

TEL: +86-10-5920-7600 FAX: +86-10-5981-7958

云达科技, 杭州办公室 (Quanta Cloud Technology) 浙江省杭州市西湖区古墩路浙商财富中心 4 号楼 303 室

Room 303 · Building No.4 · ZheShang Wealth Center No. 83 GuDun Road, Xihu District, Hangzhou, Zhejiang, China TEL: +86-571-2819-8660

Japan Quanta Cloud Technology Japan 株式会社

日本国東京都港区芝大門二丁目五番八号

牧田ビル3階

Makita Building 3F, 2-5-8, Shibadaimon , Minato-ku, Tokyo 105-0012, Japan

TEL: +81-3-5777-0818 FAX: +81-3-5777-0819

Taiwan 雲達科技 (Quanta Cloud Technology)

桃園市龜山區文化二路 211 號 1 樓 1F, No. 211 Wenhua 2nd Rd., Guishan Dist., Taoyuan City 33377, Taiwan

TEL: +886-3-286-0707 FAX: +886-3-327-0001

Other regions Quanta Cloud Technology

No. 211 Wenhua 2nd Rd., Guishan Dist.,

Taoyuan City 33377, Taiwan TEL: +886-3-327-2345 FAX: +886-3-397-4770