

# ONIE

## Release Note

### Ver. 1.00

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# Context

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## Revision History

Date	Version	Author	Comment
2017/09/01	1.0	Hans	Initial copy 1. Released the v1.00 version of ONIE image

# 1. What is ONIE

The Open Network Install Environment (ONIE) is an open source initiative that defines an open "install environment" for modern networking hardware. ONIE enables an open networking hardware ecosystem where end users have a choice among different network operating systems.

## 2. Install ONIE by USB Storage

### 2.1 Preparation

1. Prepare a USB storage
2. Burn the ISO file (**onie-recovery-x86\_64-delta\_delta\_XXXXX-r0.iso**) into USB storage, to build a bootable USB STORAGE. Used the below Linux command for building a bootable USB storage.

```
dd if= onie-recovery-x86_64-delta_XXXXX-r0.iso of=/dev/sdx
bs=10M( sdx is your device node)
```

3. Connect PC to DUT device with a console cable, console setting is 115200,8n1
4. Power on device, and get into BIOS boot menu. (**By hitting ESC key**).
5. Select "Boot" → "Boot Option #1" → "UEFI: USB Flash Drive 0.00"

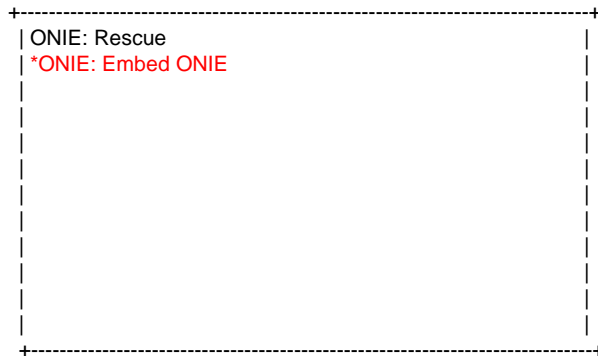
### 2.2 Installation procedure

1. Select item ONIE :Embed ONIE
2. Wait for finished, then the device will auto reboot

### 2.3 Example

.....  
 .....  
 Version 2.17.1245. Copyright (C) 2016 American Megatrends, Inc.  
 BIOS Date: 07/29/2016 15:19:05 Ver: 0ACBZ033 Minor\_Ver:AG9032V1\_V1.02  
 Press <DEL> or <ESC> to enter setup.

GNU GRUB version 2.02~beta2+e4a1fe391



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.

ONIE: Embedding ONIE ...

```
Platform : x86_64-delta_ag9032v1-r0
Version : 2016.01.14-V1.0
Build Date: 2016-06-06T14:07+0800
Info: Mounting kernel filesystems... done.
sed: /proc/mtd: No such file or directory
Info: Mounting ONIE-BOOT on /mnt/onie-boot ...
/etc/rcS.d/S10networking.sh: line 186: arithmetic syntax error
Info: eth0: Checking link... scsi 6:0:0:0: Direct-Access Generic Flash Disk 8.07 PQ: 0 ANSI: 2
sd 6:0:0:0: Attached scsi generic sg1 type 0
sd 6:0:0:0: [sdb] 8270848 512-byte logical blocks: (4.23 GB/3.94 GiB)
sd 6:0:0:0: [sdb] Write Protect is off
sd 6:0:0:0: [sdb] No Caching mode page present
sd 6:0:0:0: [sdb] Assuming drive cache: write through
sd 6:0:0:0: [sdb] No Caching mode page present
sd 6:0:0:0: [sdb] Assuming drive cache: write through
sd 6:0:0:0: [sdb] No Caching mode page present
sd 6:0:0:0: [sdb] Assuming drive cache: write through
sd 6:0:0:0: [sdb] Attached SCSI removable disk
down.
ONIE: eth0: link down. Skipping configuration.
ONIE: Failed to configure eth0 interface
Starting: dropbear ssh daemon... done.
Starting: telnetd... done.
discover: ONIE embed mode detected. Running updater.
Starting: discover... done.
```

Please press Enter to activate this console. Info: eth0: Checking link...  
To check the install status inspect /var/log/onie.log.  
Try this: tail -f /var/log/onie.log

```
** ONIE Update Mode Enabled **
ONIE-RECOVERY:/ # down.
ONIE: eth0: link down. Skipping configuration.
ONIE: Failed to configure eth0 interface
ONIE: Starting ONIE Service Discovery
Info: Found static url: file:///lib/onie/onie-updater
ONIE: Executing installer: file:///lib/onie/onie-updater
Verifying image checksum ... OK.
Preparing image archive ... OK.
ONIE: Version : 2016.01.14-V1.0
ONIE: Architecture : x86_64
ONIE: Machine : delta_ag9032v1
ONIE: Machine Rev : 0
ONIE: Config Version: 1
Installing ONIE on: /dev/sda Rebooting...
discover: ONIE embed mode detected.
Stopping: discover...start-stop-daemon: warning: killing process 735: No such process
done.
Stopping: dropbear ssh daemon... done.
```

```
Stopping: telnetd... done.  
Stopping: syslogd... done.  
Info: Unmounting kernel filesystems  
The system is going down NOW!  
Sent SIGTERM to all processes  
Sent SIGKILL tosd 4:0:0:0: [sda] Synchronizing SCSI cache  
Disabling non-boot CPUs ...  
Restarting system.  
.....  
** Installer Mode Enabled **  
ONIE:/ #  
-----
```

## 3. Update ONIE by USB Storage

### 3.1 Prepare

1. Prepare a USB storage.
2. Put the updated file( onie-updater-x86\_64-delta\_XXXXX-r0 ) to USB storage.
3. Connect PC to DUT device with a console cable, console setting is 115200,8n1
4. Power on device, and get into ONIE menu.

### 3.2 Installation procedure

1. Wait to see the GRUB menu
2. Select " ONIE: Update ONIE", and press enter key.
3. Wait for the prompt show up

### 3.3 Example

.....  
 Version 2.17.1245. Copyright (C) 2016 American Megatrends, Inc.  
 BIOS Date: 07/29/2016 15:19:05 Ver: 0ACBZ033 Minor\_Ver:AG9032V1\_V1.02  
 Press <DEL> or <ESC> to enter setup.

GNU GRUB version 2.02~beta2+e4a1fe391

```

+-----+
| ONIE: Install OS                |
| ONIE: Rescue                   |
| ONIE: Uninstall OS             |
| *ONIE: Update ONIE             |
| ONIE: Embed 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.

GRUB loading.

Welcome \_\_\_\_\_ to \_\_\_\_\_ GRUB!

Version : 2016.01.14-V1.0

Build Date: 2016-06-06T14:07+0800

Error: Write failed

....

Building script ....

Info: Mounting kernel filesystems... done.

sed: /proc/mtd: No such file or directory

Info: Mounting ONIE-BOOT on /mnt/onie-boot ...

[ 5.574671] scsi 6:0:0:0: Direct-Access SanDisk Cruzer Blade 1.00 PQ: 0

ANSI: 6

[ 5.585442] sd 6:0:0:0: Attached scsi generic sg1 type 0

[ 5.591877] sd 6:0:0:0: [sdb] 15630336 512-byte logical blocks: (8.00 GB/7.45 GiB)

[ 5.601526] sd 6:0:0:0: [sdb] Write Protect is off

[ 5.607664] sd 6:0:0:0: [sdb] Write cache: disabled, read cache: enabled, doesn't support DPO or FUA

[ 5.628885] sd 6:0:0:0: [sdb] Attached SCSI removable disk

/etc/rcS.d/S10networking.sh: line 222: arithmetic syntax error

Failure: Unable to configure MAC address for eth0

/etc/rcS.d/S10networking.sh: line 222: arithmetic syntax error

Failure: Unable to configure MAC address for eth1

Info: eth0: Checking link... down.

ONIE: eth0: link down. Skipping configuration.

Info: eth1: Checking link... down.

ONIE: eth1: link down. Skipping configuration.

ONIE: Failed to configure eth0 interface

ONIE: Failed to configure eth1 interface

insmod: can't insert '/lib/onie/dca.ko': File exists

insmod: can't insert '/lib/onie/igb.ko': File exists

Building script ....

Starting: dropbear ssh daemon... done.

Starting: telnetd... done.

discover: ONIE update mode detected. Running updater.

Starting: discover... done.

Please press Enter to activate this console. Info: eth0: Checking link... down.

ONIE: eth0: link down. Skipping configuration.

Info: eth1: Checking link... down.

ONIE: eth1: link down. Skipping configuration.

ONIE: Failed to configure eth0 interface

ONIE: Failed to configure eth1 interface

ONIE: Starting ONIE Service Discovery

ONIE: Executing installer: file:///dev/sdb/onie-updater-x86\_64-delta\_ag9032v1-r0

Verifying image checksum ... OK.

Preparing image archive ... OK.

ONIE: Version : 2016.01.14-V1.0

ONIE: Architecture : x86\_64

ONIE: Machine : delta\_ag9032v1

ONIE: Machine Rev : 0

ONIE: Config Version: 1

Installing ONIE on: /dev/sda

Rebooting...

insmod: can't insert '/lib/onie/dca.ko': File exists

insmod: can't insert '/lib/onie/igb.ko': File exists

Building script ....

discover: ONIE update mode detected.

Stopping: discover...start-stop-daemon: warning: killing process 981: No such process done.

Stopping: dropbear ssh daemon... done.

Stopping: telnetd... done.

Stopping: syslogd... done.

Info: Unmounting kernel filesystems

The system is going down NOW!



Sent SIGTERM to all processes  
Sent SIGKILL to all processes  
Requesting system reboot  
[ 77.586714] sd 4:0:0:0: [sda] Synchronizing SCSI cache  
[ 78.913570] Disabling non-boot CPUs ...  
[ 79.020294] Restarting system.  
[ 79.023732] machine restart

## 4. Software Feature support

Specification	Version	Date	Description

## 5. New Features support

Features Description	SKU	Requested by	Available Version	Date	Status	Reference

## 6. Know Bugs

Bug ID/Reporter	Problems	Version	Open Version	Comments
1.				
2.				

## 7. Description of Bug Fixed

Bug ID/Reporter	Problems	Version	Open Version	Comments
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1.					
2.					

## **Support**

Please email to [hans.tseng@delta.com.tw](mailto:hans.tseng@delta.com.tw) or call +886-2-87973250 ext 3046 for DNI support.