

Dell EMC S3048-ON and S4048-ON Troubleshooting Guide

March 2019

Notes, cautions, and warnings

 **NOTE:** A NOTE indicates important information that helps you make better use of your product.

 **CAUTION:** A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

 **WARNING:** A WARNING indicates a potential for property damage, personal injury, or death.

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About this guide

This guide provides site preparation recommendations, step-by-step procedures for rack mounting and desk mounting your switch, inserting modules, and connecting to a power source.

⚠ CAUTION: To avoid electrostatic discharge (ESD) damage, wear grounding wrist straps when handling this equipment.

⚠ WARNING: Only trained and qualified personnel can install this equipment. Read this guide before you install and power up this equipment. This equipment contains two power cords. Disconnect both power cords before servicing.

⚠ WARNING: This equipment contains optical transceivers, which comply with the limits of Class 1 laser radiation.



Figure 1. Class 1 laser product tag

⚠ WARNING: When no cable is connected, visible and invisible laser radiation may emit from the aperture of the optical transceiver ports. Avoid exposure to laser radiation. Do not stare into open apertures.

ⓘ NOTE: Read this guide before unpacking the Dell EMC Virtual Edge Platform (VEP) 4600.

Topics:

- [Information symbols](#)
- [Related documents](#)

Information symbols

This book uses the following information symbols:

ⓘ NOTE: The Note icon signals important operational information.

⚠ CAUTION: The Caution icon signals information about situations that could result in equipment damage or loss of data.

⚠ WARNING: The Warning icon signals information about hardware handling that could result in injury.

⚠ WARNING: The ESD Warning icon requires that you take electrostatic precautions when handling the device.

Related documents

For more information about the Open Networking (-ON) platforms, see the following documents:

- *OS10 User Guide*
- *Dell EMC OS9 Command Line Reference Guide*
- *Dell EMC OS9 Configuration Guide*

- *Dell EMC Getting Started Guide*
- *Dell EMC Installation Guide*
- *Dell EMC Release Notes*
- *OS10 Release Notes*

 **NOTE:** For the most recent documentation, see Dell EMC support: <https://www.dell.com/support>.

ONIE diagnostics

This chapter describes system diagnostics and troubleshooting. After running the diagnostic tools, your system displays pass or fail test results. If all tests pass, the diagnostic tools exit normally. If a test fails, each diagnostic tool offers a different result.

NOTE: The troubleshooting package includes a README file that lists the tools version and the overall troubleshooting package version. For more information, see this README file.

NOTE: To download the Release Notes, go to <https://www.dell.com/support>.

This system uses the following troubleshooting tools:

- **Power-On Self Test (POST) diagnostic** — Automatically runs during the system startup at the BIOS or U-boot level. This tool tests for catastrophic hardware failures that prevent booting the system. The error code is saved in CMOS for the next boot. There is no physical alarm indication.
- **Extended diagnostic application (EDA)** — Tests the hardware for system failures. This diagnostic tool is on-demand. EDA verifies platform-specific hardware. There are options to perform diagnostics from a Quick Test to a thorough Intrusive test. If a test fails, you can stop or continue boot-up. If you select the `halt-on failure` option, EDA testing does not continue. If you do not select the `halt-on failure` option, EDA testing continues. Test results are saved in a user-defined storage area. There is no physical alarm indication.

NOTE: To test your hardware, Dell EMC strongly recommends using the EDA tool.

NOTE: EDA runs in the ONIE environment, not in the networking operating system. You must be at the ONIE prompt to run EDA.

ONIE expansion

To view all the ONIE commands available, from the ONIE prompt, enter `onie-` and click **<tab>** twice.

ONIE:/ # onie- <TAB><TAB>

```
onie-boot-mode      onie-fwpkg          onie-syseeprom
onie-console        onie-nos-install    onie-sysinfo
onie-discovery-start onie-self-update    onie-uninstaller
onie-discovery-stop onie-support
```

Command-line interface options

Each diagnostic tool has the following options:

Command	Description
<code>-h</code>	Help topics. Use help to find software-specific tools.
<code>test</code>	Tests against the preconfigured test file.

Topics:

- [Boot processes](#)
- [POST](#)
- [EDA, Quick Test Mode](#)
- [Capturing Support Data from ONIE](#)
- [Changing the Default Grub Boot Entry](#)

Boot processes

After the BIOS or U-Boot hardware verifications, POST tests run to verify the CPU and memory prior to booting the system software.

After POST testing, there are three additional types of diagnostic tools you can use for testing your system.

- Manual diagnostic boot process — To run additional testing, manually download and run the EDA tool. The EDA tool reports and logs pass/fail results.
- ONIE with EDA — EDA is installed; you do not have to manually download the tool. Select the diagnostic option at boot-up. You can run this tool without a management interface.
- Autorun EDA — EDA is installed; you do not have to manually download the tool. Select the diagnostic option at boot-up. You can run this tool without a management interface. The system always launches EDA in Quick Test mode to verify the hardware components before loading the software. If there is a failure at boot-up, based on the EDA configuration, the software may or may not continue the boot process.

POST

POST diagnostics verifies system memory before the software loads. Test configuration parameters are saved in CMOS for the next boot-up.

EDA, Quick Test Mode

Quick Test mode runs basic device access tests for the system hardware to verify that the device is active and responding.

In Quick Test mode, the EDA tool quickly tests if the hardware components are accessible. It confirms that the components respond to read access and in some cases, simple write access. Tests are read-only and non-destructive (except the `memtool` command, which does allow read/write operations).

Capturing Support Data from ONIE

To capture support data from ONIE, use the following commands.

- 1 Capture support data to the screen.
ONIE:/ # dmesg
- 2 Capture support data to the `onie-support.tar.bz2` gzip file.
ONIE:/ # onie-support <output_directory>

The ONIE support file includes the following:

- `kernel_cmdline`
- `runtime-export-env`
- `runtime-process`
- `runtime-set-env`
- `log/messages`
- `log/onie.log`

Changing the Default Grub Boot Entry

To view or set the default Grub boot entry, use the following command.

The `onie-boot-mode` command has two options `-l` (the default) and `-o`. The Grub boot default is to show the current default entry.

View or set the default Grub boot entry.

ONIE:/ # onie-boot-mode [-o <onie_mode>]

The `-o` command options include:

- `install` — ONIE OS Installer mode
- `rescue` — ONIE Rescue mode
- `uninstall` — ONIE OS Uninstall mode
- `update` — ONIE Self Update mode
- `embed` — ONIE Self Update mode and Embed ONIE
- `diag` — ONIE Self Update mode and Embed ONIE
- `none` — Uses System Default Boot mode. This mode uses the first ONIE boot menu entry.

The `-l` command option is:

- Lists the current default entry. This is the default.

Dell EMC diagnostics

The following describes the Dell EMC diagnostics. These instructions apply to systems for which the ONIE diagnostics are not available.

ONIE expansion

To view all the ONIE commands available, from the ONIE prompt, enter `onie-` and click **<tab>** twice.

ONIE:/ # onie- <TAB><TAB>

```
onie-boot-mode      onie-fwpkg          onie-syseeprom
onie-console        onie-nos-install    onie-sysinfo
onie-discovery-start onie-self-update    onie-uninstaller
onie-discovery-stop onie-support
```

Topics:

- [S4048–ON or S3048–ON diagnostic package](#)
- [Dell EMC diagnostic test suite](#)
- [System information](#)
- [CPLD versions](#)
- [Factory defaults restore](#)

S4048–ON or S3048–ON diagnostic package

To install the S4048–ON or S3048–ON diagnostic package on your system, follow these steps.

NOTE: Before you begin, go to <http://www.dell.com/support> and download the diagnostic package. You will need your Dell EMC support access account to download the package.

- 1 Boot your system to ONIE.
- 2 Enter the `onie-discovery-stop` command to stop the ONIE discovery mode (`ONIE:/ # onie-discovery-stop`).
- 3 Configure the management interface to download the image using `ONIE:/ # ifconfig eth0 xx.xx.xx.xx/xx up`. Also ping the server/network IP address.

ONIE:/ # ifconfig eth0 xx.xx.xx.xx/xx up

ONIE:/ # ping -c4 xx.xx.xx.xx

```
PING xx.xx.xx.xx (xx.xx.xx.xx): 56 data bytes
64 bytes from xx.xx.xx.xx: seq=0 ttl=64 time=0.446 ms
64 bytes from xx.xx.xx.xx: seq=1 ttl=64 time=0.198 ms
64 bytes from xx.xx.xx.xx: seq=2 ttl=64 time=0.183 ms
64 bytes from xx.xx.xx.xx: seq=3 ttl=64 time=0.163 ms

--- xx.xx.xx.xx ping statistics ---
4 packets transmitted, 4 packets received, 0% packet loss
round-trip min/avg/max = 0.163/0.247/0.446 ms
ONIE:/ #
```

- 4 Install the image using the `onie-nos-install` command.

ONIE:/ # onie-nos-install tftp://xx.xx.xx.xx/INSTALLER-DND-SK-x.x.x.xx.bin

Stopping: discover... done.

ONIE: Executing installer: ./INSTALLER-DND-SK-x.x.x.x.BIN ...

```
INSTALLER-DND-SK-1.0  3% |*          | 878k  0:00:29 ETA
INSTALLER-DND-SK-1.0 12% |***       | 3477k 0:00:13 ETA
```

```

INSTALLER-DND-SK-1.0 22% |*****| 6050k 0:00:10 ETA
INSTALLER-DND-SK-1.0 31% |*****| 8625k 0:00:08 ETA
INSTALLER-DND-SK-1.0 40% |*****| 10986k 0:00:07 ETA
INSTALLER-DND-SK-1.0 48% |*****| 13062k 0:00:06 ETA
INSTALLER-DND-SK-1.0 56% |*****| 15268k 0:00:05 ETA
INSTALLER-DND-SK-1.0 66% |*****| 18026k 0:00:04 ETA
INSTALLER-DND-SK-1.0 75% |*****| 20535k 0:00:02 ETA
INSTALLER-DND-SK-1.0 84% |*****| 22803k 0:00:01 ETA
INSTALLER-DND-SK-1.0 92% |*****| 25063k 0:00:00 ETA
INSTALLER-DND-SK-1.0 100% |*****| 27115k 0:00:00 ETA

```

```

ONIE: Executing installer: tftp://xxx.xx.x.xxx/INSTALLER-DND-SK-x.x.x.x.bin
Verifying image checksum ... OK.
Preparing image archive from /installer ... Done.
Mounting /dev/sda3...Done.
Copying Images ...Done.
Installing Menu Entry ...Done
All Done

```

ONIE:/ # umount: can't remount rootfs read-only

The system is going down NOW!

Sent SIGTERM to all processes

```

Sent SIGKILL tosd 4:0:0:0: [sda] Synchronizing SCSI cache
Restarting system.
machine restart

```

- 5 After installing the diagnostic image, a new entry (DELL EMC DIAG) is added to the ONIE boot menu.
- 6 Select the DELL EMC DIAG option to boot the Diagnostics image.

NOTE: When you update ONIE, the DELL EMC DIAG option is removed. To recreate the DELL EMC DIAG option in the menu, you must install the Dell Diag Entry updater, as shown in the following example.

```

ONIE:/ #
ONIE:/ # onie-nos-install tftp://xx.xx.xxx.xx/DND-SK-DELL-DIAG-ENTRY-UPDATER
Stopping: discover... done.
Info: Fetching tftp://xx.xx.xxx.xx/DND-SK-DELL-DIAG-ENTRY-UPDATER ...
DND-SK-DELL-DIAG-ENT 100% |*****| 15371 0:00:00 ETA
ONIE: Executing installer: tftp://xx.xx.xxx.xx/DND-SK-DELL-DIAG-ENTRY-UPDATER
Verifying image checksum ... OK.
Preparing image archive from /installer ... Done.
Installing Menu Entry ...Done.
ONIE:/ # umount: can't remount rootfs read-only
The system is going down NOW!
Sent SIGTERM to all processes
Sent SIGKILL tosd 4:0:0:0: [sda] Synchronizing SCSI cache
Restarting system.
machine restart

```

Dell EMC diagnostic test suite

To run the Dell EMC diagnostic test suite, use the following command.

Use the following step after the system boots up.

- 1 To run the Dell EMC diagnostic test suite, select the DELL EMC DIAG option.

NOTE: Use the up and down arrow keys to select which entry is highlighted. Press Enter to select an operating software-selected OS or enter e to edit the commands before booting. Enter c for a command line. The highlighted entry (*) executes automatically in the operating system.

You will see a “Welcome to Grub” message at the beginning of the process and the `DCLI->` prompt at the end of the process.

```
GNU GRUB version 2.02~beta2+e4a1fe391
+-----+
|ONIE: Install OS          |
|ONIE: Rescue             |
|ONIE: Uninstall OS      |
|ONIE: Update ONIE       |
|ONIE: Embed ONIE        |
|*DELL EMC DIAG          |
|                         |
|                         |
|                         |
```

NOTE: The following commands are available at the DCLI prompt.

2 At the `DCLI>` prompt, enter the `testall` command to run all the Dell EMC diagnostics.

You can enter any of the following commands to run a specific type of diagnostic. To run a specific test, use the `testall testlevel=<n>` command, where $n = 0, 1, \text{ or } 2$. The `testall` command runs all the Level tests.

- `testall` — Runs all levels of tests (Level0, Level1, and Level2).
 - Level0 — tests the presences of the devices.
 - Level1 — tests the read/write access of the devices.
 - Level2 — runs Loopback tests.

NOTE: For all the S4048–ON tests to be successful, you must connect the following to your system:

- a USB-A device connected in the USB port.
- b Forty-eight 10 Gbps ports for small form-factor pluggable plus (SFP+) transceiver connections (back to back). For example, PORT1–>PORT2, PORT3–>PORT4, ... PORT47–>PORT48.
- c Six 40 Gbps ports for quad small form-factor pluggable plus (QSFP+) transceiver connections (back to back). For example, PORT49–>PORT50, PORT51–>PORT52, PORT53–>PORT54.

For all the S3048–ON tests to be successful, you must connect the following to your system:

- a USB 2.0 device connected in the USB port.
- b Forty-eight 10/100/1000Base-T RJ-45 ports. For example, PORT1–>PORT2, PORT3–>PORT4, ... PORT47–>PORT48.
- c Four 10 Gbps ports for small form-factor pluggable plus (SFP+) transceiver connections (back to back). For example, PORT49–>PORT50, PORT51–>PORT52, PORT53–>PORT54.

The following is an S4048–ON output example.

```
DCLI-> testall

Dell EMC Networking OS S4048-ON BOARD DIAGNOSTIC [0]

PPId                : CN08YWFG282983AQ0026
PPId Revision       : A00
Board Service Tag   : 64X8VS1
System Cpld Rev     : xx.x
Master Cpld Rev     : xx
Slave Cpld Rev      : x
Image Build Version : x.x(x.xx)

Available free memory: 1752698880 bytes

LEVEL 0 DIAGNOSTIC

Starting test: BIOSVersionTest .....
```

The Booted Bios Version : x.xx.x.x

```
BIOSVersionTest ..... PASS
Starting test: BoardRevisionTest .....
System CPLD: Board Stage: 0x2, Cpld Rev: 0x7
BoardRevisionTest ..... PASS
CpldAccessTest ..... PASS
CpuSdramPresenceTest ..... PASS
CpuTypeDetectTest ..... PASS
FanAirFlowTypeTest ..... PASS
FanStatusMonitorTest ..... PASS
FanTrayPresenceTest ..... PASS
Starting test: I2cAccessTest .....
I2C Devices Scanned - 16
I2C Device PASS Count - 16
I2cAccessTest ..... PASS
MgmtPhyAccessTest ..... PASS
MgmtPhyPresenceTest ..... PASS
PowerRailStatusTest ..... PASS
PsuFanAirFlowTypeTest ..... PASS
Starting test: PsuFanSpeedMonitorTest .....
PsuFanSpeedMonitorTest ..... PASS
PsuFanStatusMonitorTest ..... PASS
PsuPresenceTest ..... PASS
PsuSourceTypeTest ..... PASS
PsuStatusMonitorTest ..... PASS
QsfpPlusModulePresenceTest ..... PASS
QsfpPlusPhyAccessTest ..... PASS
RtcPresenceTest ..... PASS
sfpPlusModulePresenceTest ..... PASS
sfpPlusPhyAccessTest ..... PASS
Starting test: ShowTemperatureTest .....temperature monitor 0: current= 51.4, peak= 53.1
temperature monitor 1: current= 54.1, peak= 55.2
temperature monitor 2: current= 54.1, peak= 55.2
temperature monitor 3: current= 50.3, peak= 52.0
temperature monitor 4: current= 50.9, peak= 52.0
temperature monitor 5: current= 52.0, peak= 53.1
temperature monitor 6: current= 51.4, peak= 52.5
temperature monitor 7: current= 52.0, peak= 53.6
temperature monitor 8: current= 50.9, peak= 52.0
average current temperature is 51.9
maximum peak temperature is 55.2
ShowTemperatureTest ..... PASS
SsdPresenceTest ..... PASS
UsbAAccessTest ..... PASS
UsbHostControllerAccessTest ..... PASS
```

LEVEL 1 DIAGNOSTIC

```
Starting test: DDR3MemTest .....
DDR3MemTest ..... PASS
Starting test: dimmCacheMemoryTest .....
dimmCacheMemoryTest ..... PASS
FanCntlrAccessTest ..... PASS
FanCntlrSpeedTest ..... PASS
FanTrayEepromAccessTest ..... PASS
HotSwapControllerAccessTest ..... PASS
I2cStressTest ..... PASS
MainBoardEepromAccessTest ..... PASS
PsuEepromAccessTest ..... PASS
QsfpPlusEepromAccessTest ..... PASS
QsfpPlusPhyExtLinkTest ..... PASS
QsfpPlusPhyLnkSpeedTest ..... PASS
RtcFunctionTest ..... PASS
RtcRolloverTest ..... PASS
sfpPlusPhyExtLinkTest ..... PASS
```

```
sfpPlusPhyLnkSpeedTest ..... PASS
SsdFileCopyTest ..... PASS
Trident2AccessTest ..... PASS
TSensorAccessTest ..... PASS
UsbFileCopyTest ..... PASS
```

LEVEL 2 DIAGNOSTIC

```
CpuSnakeQsfpPlusExtLpbkTest ..... PASS
CpuSnakeQsfpPlusMacLpbkTest ..... PASS
CpuSnakeQsfpPlusPhyLpbkTest ..... PASS
CpuSnakeSfpPlusExtLpbkTest ..... PASS
CpuSnakeSfpPlusMacLpbkTest ..... PASS
CpuSnakeSfpPlusPhyLpbkTest ..... PASS
MgmtPortMacLoopbackTest ..... PASS
MgmtPortPhyLoopbackTest ..... PASS
```

----- Group Test Statistics -----

```
Total      : 55
Passed     : 55
Failed     : 0
Not Appl   : 0
Elapsed time : 00H:06M:41S
Stop reason  : after completion
```

The following is an S3048-ON output example.

```
DCLI-> testall
```

```
Dell EMC Networking OS S3048-ON BOARD DIAGNOSTIC [0]
```

```
PPId                : CN123456DELLI2158989
PPId Revision       : A00
Board Service Tag   : SERVTAG
MMC Rev             : XxX
SMC Rev             : XxX
Image Build Version : x-x(x-x)
```

```
Available free memory: 1716424704 bytes
```

LEVEL 0 DIAGNOSTIC

```
B50282PhyAccessTest ..... PASS
Starting test: BiosVerGet .....
The Booted Bios Version : x.xx.x.x-xx
BiosVerGet ..... PASS
CpuSdramPresenceTest ..... PASS
CpuSdramSizeTest ..... PASS
CpuTypeDetectTest ..... PASS
FanAirFlowTypeTest ..... PASS
FanCntlAccessTest ..... PASS
FanStatusMonitorTest ..... PASS
FanTrayPresenceTest ..... PASS
Helix4AccessTest ..... PASS
Starting test: I2cAccessTest .....
I2C Devices Scanned - 10
I2C Device PASS Count - 10
I2cAccessTest ..... PASS
MgmtPhyAccessTest ..... PASS
MgmtPhyPresenceTest ..... PASS
MmcBoardRevisionTest ..... PASS
PsuFanAirFlowTypeTest ..... PASS
PsuFanSpeedMonitorTest ..... PASS
```

```

PsuFanStatusMonitorTest ..... PASS
PsuPresenceTest ..... PASS
PsuSourceTypeTest ..... PASS
PsuStatusMonitorTest ..... PASS
RtcPresenceTest ..... PASS
SfpPlusModulePresenceTest ..... PASS
ShowTemperatureTest ..... PASS
SmcBoardRevisionTest ..... PASS
SsdPresenceTest ..... PASS
UsbAAccessTest ..... PASS
UsbHostControllerAccessTest ..... PASS

```

LEVEL 1 DIAGNOSTIC

```

B50282PhyExternalLinkTest ..... PASS
B50282PhyLinkSpeedTest ..... PASS
DDR3MemTest ..... PASS
FanCntlrSpeedTest ..... PASS
FanTrayEepromAccessTest ..... PASS
I2cStressTest ..... PASS
MainBoardEepromAccessTest ..... PASS
PsuEepromAccessTest ..... PASS
RtcFunctionTest ..... PASS
RtcRolloverTest ..... PASS
SfpPlusEepromAccessTest ..... PASS
Starting test: SsdFileCopyTest .....
ERROR:Dir /f10/slot0 already present on MS-DOS partition
SsdFileCopyTest ..... PASS
TSensorAccessTest ..... PASS
UsbFileCopyTest ..... PASS

```

LEVEL 2 DIAGNOSTIC

```

CpuSnakeIlgMacLpbkTest ..... PASS
CpuSnakeIlgPhyLpbkTest ..... PASS
CpuSnakeSfpPlusMacLpbkTest ..... PASS
CpuSnakeSfpPlusPhyLpbkTest ..... PASS
MgmtPortMacLoopbackTest ..... PASS
MgmtPortPhyLoopbackTest ..... PASS

```

```

----- Group Test Statistics -----
Total      : 47
Passed     : 47
Failed     : 0
Not Appl   : 0
Elapsed time : 00H:07M:27S
Stop reason : after completion

```

DCLI->

NOTE: Entering the `reload` command at the DCLI prompt reloads the ONIE or OS installed on the system. It does not reload the Diagnostic tools.

System information

To view your S4048-ON or S3048-ON system information; for example, the model, part number, serial number, and service tag, follow these steps.

- 1 Boot into ONIE.
- 2 Enter the `onie-syseeprom` command.

ONIE:/ # onie-syseeprom

Example of the onie-syseeprom Command

```
TlvInfo Header:
  Id String:   TlvInfo
  Version:    1
  Total Length: 78
TLV Name      Code Len Value
-----
MAC Addresses 0x2A  2 129
Base MAC Address 0x24  6 00:05:33:6A:BF:4D
Vendor Name   0x2D  4 Dell
Product Name  0x21  8 <platform>
Part Number   0x22  6 08YWFG
Serial Number 0x23 12 DLCN13980015
Label Revision 0x27  3 A00
Manufacturer  0x2B  1 1
Service Tag   0x2F  2 ABC1AB2
Loader Version 0x29  8 x.xx.x.x
CRC-32       0xFE  4 0xC1EB87D1
Checksum is valid.
```

CPLD versions

To view CPLD data, including the fan status, PSU status, current programmed version, and image packed version, use the `showSystemInfo` command at the DCLI prompt.

- Enter the `showSystemInfo` command to view the CPLD information.

```
DCLI-> showSystemInfo

***** S40480N SYSTEM INFO *****

Software Info:
  SW Name           : Dell Networking OS
  SW Version        : x.x(x.xx)

Board Info:
  Board Revision    : 0x2
  Board Service Tag : 66D7VS1

CPLD Info:
  System CPLD Version: xx.x
  Master CPLD Version: xx
  Slave CPLD Version : x

Packed CPLD image Info:
  Packed System CPLD Version : xx.x
  Packed Master CPLD Version : xx
  Packed Slave CPLD Version  : x

PPId Info:
  PPId              : TW0J09D32829849Q0001
  PPId Revision     : X01

SysEeprom Info:
  Base MAC Address  : 34:17:eb:f2:23:c4
  Country Code      : TW
  Part Number       : 0J09D3
  Manufacturer      : 28298
  Manufacture Date  : 10/02/2014 18:49:28
  Product Name      : S40000N

Power Supply Info:
  Power Supply      : 1
  AirFlow Direction : NORMAL
  Part Number       : 0T9FNW
```

```

Serial Number      : TW0T9FNW2829849Q0041
Sevice Tag        : AEIOU##

Fantray Info:
FanTray[1]
  AirFlow Direction : NORMAL
  Part Number       : 0MGDH8
  Serial Number     : TW0MGDH82829849Q0002
  Sevice Tag        : AEIOU##
FanTray[2]
  AirFlow Direction : NORMAL
  Part Number       : 0MGDH8
  Serial Number     : TW0MGDH82829849Q0003
  Sevice Tag        : AEIOU##
FanTray[3]
  AirFlow Direction : NORMAL
  Part Number       : 0MGDH8
  Serial Number     : TW0MGDH82829849Q0001
  Sevice Tag        : AEIOU##

```

Factory defaults restore

If you need to restore the S4048-ON or S3048-ON factory defaults, reboot the system to ONIE Rescue mode.

If it is not possible to do this with the operating system you installed, reboot the system and from Grub and select ONIE: Rescue.

⚠ CAUTION: Restoring factory defaults erases any installed operating system and requires a long time to erase storage.

ONIE Rescue bypasses the installed operating system and boots the system into ONIE until you reboot the system. After ONIE Rescue completes, the system resets and boots to the ONIE console.

- 1 Restore the S4048-ON or S3048-ON factory defaults from Grub using the ONIE: Rescue command.

Use the up and down arrow keys to select which entry is highlighted. Press Enter to select an operating software-selected OS or enter e to edit the commands before booting. Enter c for a command line. The highlighted entry (*) executes automatically in the operating system.

```
GNU GRUB  version 2.02~beta2+e4a1fe391
```

```

+-----+
| ONIE: Install OS          |
| *ONIE: Rescue            |
| ONIE: Uninstall OS      |
| ONIE: Update ONIE       |
| ONIE: Embed ONIE        |
| DELL EMC DIAG           |
|                           |
|                           |
|                           |
|                           |
+-----+

```

- 2 Press ENTER to activate the console.
- 3 You can also use the onie-uninstaller command to return to the default ONIE settings.

ONIE:/ # onie-uninstaller

```
Erasing unused NOR flash region Erasing 128 Kibyte @ 20000 - 100% complete. Erasing internal
mass storage device: /dev/mmcb1k0 (7832MB) Percent complete: 100%
```


Dell EMC support

The Dell EMC support site provides documents and tools to help you effectively use Dell EMC equipment and mitigate network outages. Through the support site you can obtain technical information, access software upgrades and patches, download available management software, and manage your open cases. The Dell EMC support site provides integrated, secure access to these services.

To access the Dell EMC support site, go to www.dell.com/support/. To display information in your language, scroll down to the bottom of the web page and select your country from the drop-down menu.

- To obtain product-specific information, enter the 7-character service tag, known as a luggage tag, or 11-digit express service code of your switch and click **Submit**.
To view the chassis service tag or express service code, pull out the tag or enter the `show chassis` command from the CLI.
- To receive more technical support, click **Contact Us**. On the Contact Information web page, click **Technical Support**.

To access switch documentation, go to www.dell.com/manuals/.

To search for drivers and downloads, go to www.dell.com/drivers/.

To participate in Dell EMC community blogs and forums, go to www.dell.com/community.