



Alert LED turned ON a Shelf without any other observed fault or DC UNDER VOLTAGE messages



https://kb.netapp.com/Advice_and_Troubleshooting/Data_Storage_Software/ONTAP_OS/Alert_LED_tu...

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Applies to

- DS2246
- DS4486
- DS4246
- DS4243
- Data ONTAP

Issue

- Disk Shelf reports error message `DC UNDER VOLTAGE`, the LED is ON without any other indicating LED, or any failure message.
- Depending on the version of Data ONTAP the system behaviour is different.

BUG ID	Symptom Notes	Fixed in
845945	DC Undervoltage No errors reported in EMS	8.2.4 and 8.3.1
935274	DC Undervoltage constant EMS reporting	8.2.4, 8.3.1P1, and
947710	DC Undervoltage EMS report every 6 hrs	8.3.2RC1

- The `storage show fault` output will indicate 'No faults found in storage subsystem'. However, the "`storage show fault -v`" will display the following status:

Power Supplies:

Element	Status	Status Bytes	Status Descriptions
1:	OK	01,00,04,A0	DC UNDER VOLTAGE, RQSTED ON
2:	OK	01,00,00,A0	RQSTED ON

Cause

This is seen after the environmental power issue at the site.

- Power outage
- Power maintenance

Solution

Collect the following details for Cluster systems:

```
cluster::> set d
cluster::*> run -node * -command sasadmin expander_cli
<Channel>.<shelfID>.<moduleA/B> "report_faults"
```

```
cluster::*> run -node * -command sasadmin expander_cli <channel.shelf#>
"pwrmgr_faults"
```

```
cluster::*> run -node * -command storage show fault -v
```

Where <Channel>.<shelfID>.<moduleA/B> would be:

channel where shelf is connected

shelfID is the shelf ID number

module is A (Left/Top) or B (Right/Bottom)

For Data ONTAP 7-Mode systems:

```
7-Mode> storage show fault -v
```

Note:

Snippet from the logs reports the following error message:

```
In sasadmin expander_cli
```

```
=====
```

```
Power Manager faults
```

```
Running in minimal redundant mode
```

```
PSU 1 fault: "DC under Voltage"    Fault LED: OFF,
```

```
In storage show faults
```

```
=====
```

```
Power Supplies:
```

Element	Status	Status Bytes	Status Descriptions
1:	OK	01,00,04,A0	DC UNDER VOLTAGE, RQSTED ON
2:	OK	01,00,00,A0	RQSTED ON

To resolve the issue, PSU that is indicating "DC UNDER VOLTAGE" needs to be re-seated. The PSU needs to be "unplugged" for at least 45 seconds but has to be plugged in before 120 seconds. Data ONTAP will start the shutdown sequence if we do not have redundant PSU/Cooling for more than 2 (120 seconds) minutes.

Note: PSUs in DS2246 have 1+1 redundancy.

Additional Information

