SFA OS

1.4.3 and 1.5.0 Upgrade Requirement

Technical Service Bulletin

Revision C
May 14, 2012
1.0 Overview

If the system has drives with capacity >2 TB, you must ensure that SFA OS is currently at version 1.4.2-8732 or later before upgrading to version 1.4.3-9476 or later. Otherwise, you may run into unexpected or unnecessary errors on drives. Note that when upgrading to 1.4.3 or later for any starting version earlier than 1.4.3, you will see software recovered errors on the other side on the first I/O operation associated with each drive. This is normal and expected as part of the upgrade process.

It is possible that drives can hit the error threshold for software recovered errors, resulting in the drives being kicked out as failed. Any drives that are kicked out may be brought back into the configuration but will require a full rebuild. It is also possible to encounter device init failures with SATA drives using the 6KSSI and 7KSSI interposers which will result in these drives being failed.

2.0 Problem Description

SFA OS Version 1.4.2 adds additional support for devices >2 TB in size by including support for extended (descriptor) drive sense data. Version 1.4.3 takes the additional step of enabling this format for any drive larger than 2 TB. When the firmware upgrade process updates the first controller to 1.4.3 or later, affected drives will report sense data in the new format to the non-upgraded controller. If that controller is running a version prior to 1.4.2, that sense data may be misinterpreted, leading to improper handling of the sense data. Drive and data recovery may not be handled correctly in this case.

3.0 Workaround

To avoid this problem ensure that both controllers are at version 1.4.2 or later prior to starting the upgrade to version 1.4.3 or later.

As a reminder, V1.4.2-8732 is a mandatory upgrade.

Use the show controller local all command to check the firmware version.

```
show controller local all
```

```
*************************
*     Controller(s)     *
*************************

Index:                  1
OID:                    0x38000001
Firmware Version:       1.4.3.1
Release:                1.4.3.1
Source Version:         9604   DDN
Fully Checked In:       Yes

```

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4.0 Support

Please contact DataDirect Networks Support at any time for assistance. Support can be reached by the following methods:

Web:  http://www.ddn.com/request-support
Email:  support@datadirectnet.com
North America:  888-634-2374
International:  818-718-8507