SFA OS 11.8.0 Data Miscompare During Drive Rebuild

**Issue Summary**

In SFA OS 11.8.0, if two or more drives are rebuilding simultaneously within a single pool, a possible silent data miscompare can cause the rebuild to fail on some or many blocks without detection. There are no alerts when this occurs. If this issue is encountered:

- Read operations do not detect the error.
- A subsequent partial-stripe write operation to the damaged stripe may lock in the error and make it uncorrectable.
- A full-stripe write operation to the damaged stripe corrects the error.
- A background verify operation on the affected stripe repairs the error.

The rebuild miscompare occurs due to improper handling of simultaneous rebuilds of more than one member within the same pool. **THIS ISSUE PUTS DATA AT RISK.**

**Products Affected**

Only SFA OS 11.8.0 is affected by this issue.

SFA OS 11.8.0 may be running on storage platforms in the SFA18K, SFA14K, SFA7990, SFA400NV, Al400, SFA200NV, and Al200 product families.

**Resolution**

This issue is addressed in SFA OS 11.8.1 by disabling the simultaneous rebuild feature. **UPGRADE TO SFA OS 11.8.1 IS MANDATORY FOR ALL CUSTOMERS RUNNING SFA OS 11.8.0.** Please contact DDN Support immediately to obtain an upgrade plan.

**Workaround**

Until you upgrade to SFA OS 11.8.1, the following actions will **SOMewhat reduce** your exposure to data risk.
• Replace and rebuild drives one at a time. Allow each rebuild on a replaced drive to complete before replacing another drive.
• Change the sparing policy to MANUAL on all storage pools with a minimum rebuild (MR) setting of 0. (Applies to SSDs only.)
• Take the subsystem offline immediately following any multi-drive failure and run a background verify on affected pools.
• Contact DDN Support immediately following any multi-drive failure.

**ALERT!** These actions reduce, but do **not** eliminate, the risk to data from this issue. **UPGRADE TO SFA OS 11.8.1 IS THE ONLY ACTION THAT ELIMINATES THE RISK TO DATA.** Please contact DDN Support immediately to obtain an upgrade plan.

**Contacting DDN Technical Support**

Please contact DDN Technical Support at any time if you have questions or need assistance. Support can be reached by phone, by email, or on the web as listed below.

**Web**
DDN Community Support Portal  https://community.ddn.com/login
Portal Assistance  webportal.support@ddn.com

**Telephone**

**Email**
Support Email  support@ddn.com

**Bulletins & Notices**
Support Bulletins  https://www.ddn.com/support/technical-support-bulletins
Release Notes  https://community.ddn.com/login
Subscription Requests  support-tsb@ddn.com