SFA OS 11.8.0 Data Miscompare During Drive Rebuild

ALERT!	**UPGRADE TO SFA OS 11.8.1 IS MANDATORY TO PREVENT DATA RISK.** Customers running SFA OS 11.8.0 should contact DDN Support immediately to obtain an upgrade plan.

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, AI400, SFA200NV, and AI200 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 susbsystem 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
DDN Support Worldwide Directory   https://www.ddn.com/support/global-services-overview/

Email
Support Email   support@ddn.com

Bulletins & Notices
Support Bulletins   https://www.ddn.com/support/technical-support-bulletins
End-of-Life Notices   https://www.ddn.com/support/end-of-life-notices
Release Notes   https://community.ddn.com/login
Subscription Requests   support-tsb@ddn.com