

# Online Updates to SED Firmware Put Drives in Unusable State



**ALERT!** Under SFA OS 12.0.x, **ONLINE** updates to self-encrypting drive (SED) firmware can put certain drives in an unusable state.

## Issue Summary

Under SFA OS versions 12.0.0 or 12.0.0.1 with encryption enabled, *online* updates to self-encrypting drive (SED) firmware will result in the following on HGST or Hitachi drives:

- The drive firmware is not updated.
- Affected drives go missing and are shown as unusable in `show pd` reports.
- Pools built over the affected drives are shown as suboptimal in `show pool` reports.
- The following error message appears in the event log during the drive firmware update attempt:

```
Attempt to unlock FDP failed -- Authenticate SID Response failed.
```

This issue has been traced to an enhanced unlocking method for online drive firmware updates that was introduced in SFA OS 12.0. The new unlocking method does not function as expected with HGST & Hitachi drives. The new method works as designed with SEDs from other manufacturers.

Data on affected drives remains intact. Access to data is recovered when the missing drives are forced into rediscovery by SFA OS.

## Affected Products

This issue affects SFA OS versions 12.0.0 and 12.0.0.1. Prior versions are not affected.

## Resolution

The issue is will be resolved in SFA OS 12.1.

## Workaround

Until SFA OS 12.1 becomes available, two workarounds exist to update HGST or Hitachi SED drive firmware:

- Perform an *ONLINE* drive firmware update under SFA OS 11.x *prior to upgrading to SFA OS 12.0.x*.
- Perform an *OFFLINE* drive firmware update under SFA OS 12.0.x.

## Recovering Unusable SEDs

SEDs that go missing/unusable during an online drive firmware update can be recovered by restarting the SFA subsystem with the line command:

```
shutdown subsystem restart
```

Alternatively, if it is not desirable to restart the subsystem, you can reseat the affected drives. To do this:

1. Identify and physically remove the affected drives(s) from the enclosure(s).
2. Wait at least one minute to allow SFA OS to recognize the drive(s) as removed.
3. Replace each drive in its original slot.

Please contact DDN Support if you have questions or need assistance.

## Contacting DDN Technical Support

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

### Web

*DDN Community Support Portal*      <https://community.ddn.com/login>  
*Portal Assistance*                      [webportal.support@ddn.com](mailto:webportal.support@ddn.com)

### Email

*Support Email*                              [support@ddn.com](mailto:support@ddn.com)

### Telephone

*DDN Support Worldwide Directory*      <https://www.ddn.com/support/global-services-overview/>

### Bulletins & Notices

*Support Bulletins*                              <http://www.ddn.com/support/technical-support-bulletins>  
*End-of-Life Notices*                          <http://www.ddn.com/support/end-of-life-notices>  
*Release Notes*                                  <https://community.ddn.com/login>  
*TSB Subscription Requests*                  [support-tsb@ddn.com](mailto:support-tsb@ddn.com)