HPE: Prevent Crash Bug By Patching Our SAS SSDs!

Written by Frederick Douglas 29 November 2019



Hewlett Packard Enterprise (HPE) issues a support bulletin for customers of SAS SSDs from the company warning certain models can permanently fail after 32768 hours (or 3 years, 270 days and 8 hours) of operation unless patched.

As per the bulletin, the bug causes "drive failure and data loss at 32768 hours of operation and require restoration of data from backup in non-fault tolerance, such as RAID 0 and in fault tolerance RAID mode if more drives fail than what is supported by the fault tolerance RAID mode logical drive." HPE adds should the storage device fail, "neither the SSD nor the data can be recovered," and SSDs put in service in a batch can likely fail simultaneously.

The storage devices in question are either sold individually or as part of servers and other products. They include models from the ProLiant, Synergy, Apollo, JBOD D3xxx, D6xxx, D8xxx, MSA, StoreVirtual 4335 and StoreVirtual 3200 lines, all running on drive firmware older than version HPD8. HPE suggests using offline Smart Storage Administrator software to check SSD drive power on hours, and so far only 8 of the 20 affected drives have patches available now. For the rest, patches should drop on the 2nd week of December 2019.

As to why this bug actually happened, we can only speculate. Some experts blieve it could be brought about by integer overflow, since the maximum signed range of integer values that can be stored in 16-bit is 32768, a fact possibly relevant to both the problem and solution in question.

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