FUJITSU

SERVICE FACTS

SB-PRI-21010

DATA ACCESS IS UNAVAILABLE AFTER 7 YEARS 11 MONTHS SINCE SSD OPERATION LAUNCH

Affected Product(s):	PRIMERGY BX920 S3/S4, BX924 S3/S4, BX2560 M1/M2
	PRIMERGY CX250 S2, CX270 S2, CX2550 M2, CX2570 M2
	PRIMERGY RX200 S7/S8, RX300 S7/S8, RX350 S7/S8, RX500 S7, RX600 S6
	PRIMERGY RX2530 M1/M2, RX2540 M1/M2, RX2560 M1/M2, RX4770 M1/M2/M3
	PRIMERGY TX200 S7, TX300 S7/S8, TX2560 M1/M2
	ETERNUS JX40 S2
Affected Operating System(s):	OS independent
Affected Version(s):	N/A
Attachment(s):	N/A
Reference:	FJJ TC11003-04
Related Support Bulletin(s):	N/A
Document History:	V1.0: Initial release
	V2.0: Additional handling description for PRIMERGY BX92x S3/S4 and PRIMERGY CX400 M1 (CiB version)

Document Target Audience and Security Classification:

Target Audience: Customer & Service Partner & Fujitsu - Document Classification: Unclassified

PROBLEM / QUESTION

The SSDs used in several legacy PRIMERGY systems and ETERNUS JX storage enclosures become unresponsive after 7 years and 11 months of use. Please check whether the components described below are used and check the time of usage to offer the countermeasure firmware.

REASON / CAUSE

Affected SSD firmware hourly processes a log record as well as read/write operations on the SSDs data domain. It can only record up to 70,000 hours (70,000 hours is nearly equivalent to 7 years 11 months).

EXPLANATION

For PRIMERGY servers and ETERNUS JX enclosures in which the affected SSDs are used, the disks stop operating. **No access to the SSD's data is possible after turning power off/on of the server!** This will occur when SSD operation time is more than total 70,000 hours (approximately 7 years 11 months) which is years after the standard end of support of 5 years .

Several SSDs might simultaneously stop although used in a RAID configuration, data access remains unavailable.
In February 2022 the 7 years and 11 months will have passed since the first sales launch. So the following months after this date will be in risk of the symptoms.

Affected SSDs:

Product	Vendor	Model	Firmware
200GB installed solid state drive	Toshiba (KIOXIA)	PX02SMF020	5202 - 5204
400GB installed solid state drive	Toshiba (KIOXIA)	PX02SMF040	5202 - 5204
800GB installed solid state drive	Toshiba (KIOXIA)	PX02SMF080	5202 - 5204
1.6TB installed solid state drive	Toshiba (KIOXIA)	PX02SMB160	5202 - 5204

SOLUTION

A new SSDs internal firmware is available which will correct the record log. It still allows access to the SSDs internal data after updating the SSD firmware by using the procedure described below.

If multiple target SSDs are installed, all these SSDs will be automatically updated. **Please back up user data before updating the firmware**!

If the symptom is identified (SSD already stopped working)
- **The data can't be recovered with the firmware update!**
- It is necessary to restore data from back up after replacing the SSD(s) with spare part(s)!

If you need advice/support on this symptom, we will handle it as incident.

1. For all PRIMERGY servers (**besides** server models mentioned at number 2 below)

   Please download the new SSD firmware version and a detailed description how it is to be executed under the following link as a .zip file:

   PRIMERGY SSD Firmware update tool for PM2

   This .zip file contains:
   - *PRIMERGY_SSD_Firmware_update_Instructions.pdf*
   - *FIXdisk-4.36_PM2.iso*

   Note:
   For updating **PRIMERGY CX400 M1 Cluster-in-a-box (CiB)** systems with server nodes PRIMERGY CX2550 M2 please **shut down all cluster nodes** and execute the SSD firmware update **on one node only**!

2. For PRIMERGY BX920 S3/S4 and PRIMERGY BX924 S3/S4 only

   Please download the new SSD firmware version and a detailed description how it is to be executed under the following link as a .zip file:

   FIX-disk for Phoenix-M2 ISO Tool Version 4.36.3

   This .zip file contains:
   - *PRIMERGY BX_SSD_Firmware_update_Instructions.pdf*
   - *FIXdisk-4.36.3_PM2.zip*