



PRIMERGY CUSTOMER INFORMATION BULLETIN

Number/Revision

PY-CIB069-00

Issue Date

May 13, 2021

Title

RX4770 M4-M5 stops due to temperature abnormality of the CPU or RAID Card

Applies to

PRIMERGY RX4770 M4
PRIMERGY RX4770 M5

Effective Duration

Permanent

Summary

RX4770 M4-M5 stops due to temperature abnormality of the CPU or RAID Card

Actions

Apply iRMC Firmware Version 2.63P or later

Symptoms

- All server fans stop running during operation and the server will power off.
- The iRMC stops functioning and cannot be accessed via browser, ssh and etc.
- Once iRMC is active and accessible the SEL records the following:

'CPUx Thermal Status' : temperature is above critical temperature point*

**:x is CPU number (1~4)*



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If the RAID card temperature reaches the upper limit before power off, the below messages will be recorded in the log of RAID card and IO will be stopped. Although IO stops, CPU temperature will continue to increase until power off.

Log entry for PRAID EP400i

MegaRAID Solution will shut down due to maximum temperature threshold exception. This may indicate inadequate system cooling

Before reaching the threshold, the system records the logs as below.

OS log (for RHEL)

kernel: CPUx: Package temperature above threshold, cpu clock throttled

ServerViewRAID log

Adapter PRAID EP400i (1): Temperature threshold exceeded for the adapter.

This may indicate inadequate cooling in the system chassis.

Adapter has switched to lower performance mode

Occurrence Conditions

Symptom may occur if all below conditions are met.

- System is a PRIMERGY RX4770 M4 or M5
- Installed iRMC Firmware is:
 - RX4770 M4 : 2.49P or earlier
 - RX4770 M5 : 2.60P or earlier

Cause

When performing an iRMC restart, the initialization of the FAN control process fails due to a firmware bug.

Proactive countermeasure

Apply iRMC Firmware 2.63P or later version to correct this issue.



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How to recover after trouble occurrence

Restore the system by performing a full system reset by removing the AC power cords.

Note

There is no need to replace or reapply the CPU and thermal grease, as the chipset is designed to prevent deterioration or damage of the chipset if the detected temperature exceeds the CPU temperature limit.

Revision History:

REVISION	DATE	CHANGE SUMMARY
000	May 13, 2021	Initial Release