Hewlett Packard
Enterprise

# DL380 Gen10-the BIOS has corrupted hw-PMU resources (MSR 38d is 330)Intel PMU driver

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## Issue

On an HP ProLiant server running Red Hat Enterprise Linux 6 or Red Hat Enterprise Linux 7, the following message is displayed during the in itial startup screen of Red Hat Linux:

[Firmware Bug]: the BIOS has corrupted hw-PMU resources

Additionally, a message similar to the following is posted to the dmesg file:

*CPU0: Intel(R) Xeon(R) CPU X7560 @ 2.27GHz stepping 06*

*Performance Events: PEBS fmt1+, Nehalem events, Broken BIOS detected, complain to your hardware vendor.*

*[Firmware Bug]: the BIOS has corrupted hw-PMU resources (MSR 38d is 330)Intel PMU driver.*

**OR**

*CPU0: Quad-Core AMD Opteron(tm) Processor 2389 stepping 02*

*Performance Events: Broken BIOS detected, complain to your hardware vendor.*

*[Firmware Bug]: the BIOS has corrupted hw-PMU resources*

*(MSR c0010001 is 430076) AMD PMU driver.*

**Alert/Event Code :** MSR 38d is 330
**Event Codes :** MSR 38d is 330

## Environment

Gen10 servers

Red Hat Enterprise Linux 6

Red Hat Enterprise Linux 7

## Cause

RHEL kernel version `2.6.32-131.21.1.el6` (or later) includes a fix which allows the performance events subsystem to load w hen using these servers, but only using the same counter that the BIOS uses.

## Resolution

For Gen9 servers customer can follow article to fix the reported issue https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-c032 65132

In Gen10 servers, Please change the "Processor Monitor/Mwait Support" setting to disable to avoid the reported error during OS boot,

1st change the workload profile to "Custom" by following the below steps

1. From the System Utilities screen, select System Configuration > BIOS/Platform Configuration (RBSU) > Workload Profile.
2. Select Workload Profile as Custom.
3. Save the changes
4. Reboot the server and access to System Utilities again by pressing F9 option at post.
5. Select System Configuration --> BIOS/Platform Configuration (RBSU)

6. Press CTRL + A to enter in service option.
7. Disable the Processor Monitor/Mwait Support option and save the changes
8. Exit from System Utilities and check the OS boot status.