



Application Note

RHEL Kernel Panic

Products Affected

HPE® 10Gb 4-port 536FLR-T Adapter
HPE StoreFabric® CN1100R Dual Port Converged Network Adapter
HPE StoreFabric CN1100R-T Converged Network Adapter
HPE FlexFabric® 10Gb 2-port 534M Adapter
HPE FlexFabric 20Gb 2-port 630FLB Adapter
HPE FlexFabric 20Gb 2-port 630M Adapter
HPE FlexFabric 10Gb 2-port 533FLR-T Adapter
HPE FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
HPE FlexFabric 10Gb 2-port 536FLB Adapter
HPE Synergy 2820C 10Gb Converged Network Adapter
HPE Synergy 3820C 10/20Gb Converged Network Adapter

Introduction

This application note describes a situation where a kernel panic occurs after the installation of Red Hat® Enterprise Linux® if configured for hardware iSCSI offload boot, unless the Linux network interface `ifcfg` scripts are modified for certain network adapters.

Scope

This application note affects any HPE server configured with any of the network adapters listed in the Products Affected table.

Description

On an HPE server configured with any of the network adapters listed in the Products Affected table and configured for hardware iSCSI offload boot, Red Hat Enterprise Linux 7 and Red Hat Enterprise Linux 6 will kernel panic instead of boot after the installation.

The kernel panic occurs because the network adapter is configured for hardware offload iSCSI boot and Linux is attempting to boot from the iSCSI LUN.

Workaround

At the end of the Red Hat Enterprise Linux 6 or Red Hat Enterprise Linux 7 installation, perform the following steps:

1. Before clicking the reboot button at the end of installation, go to the shell terminal using the following key combination:
`CTRL+ALT+F2`
2. Type the following command to determine which network interface `ifcfg` scripts need to be modified for the `ONBOOT` and `NM_CONTROLLED` settings:
`iscsiadm -m fw`
3. Edit the network interface `ifcfg` files displayed in `/etc/sysconfig/network-scripts`:
 - a. Set `ONBOOT` to **yes**.
 - b. Set `NM_CONTROLLED` to **no**.
4. Save the changes and reboot the server.

The first boot continues as expected. During the first boot, if `kdump` is configured, the installation may prompt you to reboot. *Do not* reboot; instead, boot to Linux.
5. Perform [Step 1](#) through [Step 3](#) again. Save the changes and reboot the server.

Linux will boot as expected.

Document Revision History
Revision A, June 7, 2017
Revision B, August 17, 2019
Changes
Re-brand to Marvell. No technical changes.



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