

HP Integrity BL860c Server Blade Errata



Additional HP-UX 11i v2 (B.11.23) and 11i v3 (B.11.31) Drivers and Patches

Introduction

For full support of the HP Integrity BL860c Blade Server, HP recommends the installation of the following:

- For HP-UX 11i v2, please install the HP-UX 11i v2 OE Update Release for June 2007 (or later)
- For HP-UX 11i v3, please install the HP-UX 11i v3 OE Update Release for September 2007 (or later)

Earlier OE releases will require the addition of key HP-UX components from the above listed OE releases for minimal HP-UX support with new hardware:

- HWEnable11i patch bundle (with changes in HP-UX commands and kernel)
- OnlineDiags and SysFaultMgmt bundles (with HW monitors and diagnostics)
- I/O driver bundles (for new I/O adapters and storage devices)
- Ignite-UX product (with install kernel and backup support)

New servers may need the latest version of other HP-UX applications from the current OE release for hardware support with updated manageability and configuration tools. This new server also requires HP-UX patches and I/O driver bundles that are documented in the below sections.

Additional Driver Bundles and Ignite-UX product updates that are recommended (*)

The following IO Driver Bundles and Ignite-UX products are available for download from <http://software.hp.com>. These updated bundles and products will also be included in the HP-UX 11i v2 & v3 Applications DVD (Dec 2007 or later). Details on installing products from the Applications DVD are found in the HP-UX Installation and Update Guide.

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|--------------------|---------------|-------------------------|---------------------------------|
| • HP-UX 11i v2: | SerialSCSI-00 | B.11.23.0712 (or later) | PCI-X/PCI-E SerialSCSI (“sasd”) |
| • HP-UX 11i v3: | SerialSCSI-00 | B.11.31.0712 (or later) | PCI-X/PCI-E SerialSCSI (“sasd”) |
| • HP-UX 11i v2/v3: | Ignite-UX | C.7.4.157 (or later) | |
| • HP-UX 11i v2: | IEther-00 | B.11.23.0712 (or later) | |
| • HP-UX 11i v3: | IEther-00 | B.11.31.0712 (or later) | |

(*) For more detailed information on why these SAS IO Driver Bundles and Ignite-UX product updates are recommended, please refer to the customer advisory (DocID # c01271844) that can be obtained at the HP IT Resource Center (ITRC) web site: <http://itrc.hp.com>

TITLE: FIRMWARE UPGRADE REQUIRED to Avoid Potential and Rare I/O Write Errors Observed During Intensive I/O Load on HP Servers with Dual-Enclosure SAS Configurations When One Enclosure Is Repeatedly Powered Off or Drives Are Randomly Hot-Removed

For more detailed information on managing PCI-X SAS controller firmware, please refer to the customer advisory (DocID # c01243311) that can be obtained at the HP IT Resource Center (ITRC) web site at: <http://itrc.hp.com>

NC364m EFI on Integrity Notice:

NC364m 4-port Gigabit Ethernet cards with EFI driver version 3.2.03 in Integrity blade servers such as the BL860c cause a harmless message “EFI_ASSERT_ERROR” to be printed to the console during bootup. This affects Integrity blade servers such as the BL860c when an NC364m mezzanine card is present in the system. This message is harmless. No actual card failure has occurred. The message does not occur during a LAN boot. This message does not occur when the card is in ProLiant servers.

To prevent the EFI error message from appearing, update the NC364m card's EFI driver version 3.2.03 to the 3.2.10 or later EFI driver. If you want to make the EFI error message disappear during boot-up, update the EFI driver; otherwise, nothing specific needs to be done. HP recommends updating the EFI driver.

To get the update utility, instructions, and recommended EFI driver download, proceed as follows:

1. Go to: <http://www.hp.com/>
2. Click the Software and Driver Downloads link.
3. Choose Download drivers and software (and firmware) and enter the product order number (447883-B21) or the product name (NC364m) in the search box, and click the search button >>, or press your Enter key.
4. Under "Select operating system" click the Cross operating system (BIOS, Firmware, Diagnostics, etc.) link.
5. Select the EFI update utility (lanutil64) and click the Download button.

Virtual Connect Fibre Channel support in HP-UX 11i v2 requires updated FibrChan1-01 Bundle

The Virtual Connect Fibre Channel modules are not compatible with the HP-UX 11i v2 OE Update Release for June 2007 or earlier. You must have FCD driver version B.11.23.08.01 or later. The B.11.23.08.01 version can be found at the following location:

<http://h20000.www2.hp.com/bizsupport/TechSupport/SoftwareIndex.jsp?lang=en&cc=us&prodNameId=1844105&prodTypeId=329290&prodSeriesId=1844104&swLang=13&taskId=135&swEnvOID=7>

Boot support of Virtual Connect Fibre Channel was included in the HP-UX 11i v2 OE Update Release Media for December 2007.

For further information, please refer to the Fibre Channel driver documentation at: <http://docs.hp.com/en/netcom.html>

Power Management Patches for HP-UX 11i v3 (B.11.31) patches

The following patches add support for power management on HP-UX 11i v3. These patches can be found on the HP IT Resource Center (ITRC) web site at <http://itrc.hp.com> :

- HP-UX 11i v3: PHKL_36654 Power Mgmt enablement for pwr module
- HP-UX 11i v3: PHKL_36477 11.31 acpi cumulative patch (in HWEEnable11i for Sept 2007)
- HP-UX 11i v3: PHKL_36478 11.31 acpica cumulative patch (in HWEEnable11i for Sept 2007)
- HP-UX 11i v3: PHKL_37031 Power Mgmt enablement for cec_hp module
- HP-UX 11i v3: PHKL_37032 Power Mgmt enablement for cec_gen module

HP Insight Power Manager (IPM) is an integrated power monitoring and management ****application**** that provides centralized control of server power consumption and thermal output at the datacenter level. See the following web site for more information:

www.hp.com/go/ipm

Configuring a USB mass storage device into the kernel (HP-UX 11i v2)

If no USB mass storage device is attached to a system at the time it is installed, the USB mass storage driver will not be configured into the kernel. If a USB mass storage device is subsequently attached to the system, HP-UX will not be able to communicate with it because the driver has not been configured.

Even though the driver is not configured into the kernel, the software is likely installed on the system. To verify this, execute

```
swlist -lproduct USB-00 | grep BLKONLY-MS
```

If you find this module is not installed for some reason, execute 'swinstall USB-00' using your install media. Once it is installed, you can configure it into the kernel using the kernel configuration tools as follows:

```
kcmodule -s UsbBulkOnlyMS=static UsbScsiAdaptor=static
```

You have to reboot the system before any changes take effect.

Note: If the installation scripts indicate that the product was not installed because the legacy USB driver was disabled, run 'kcmodule -s hcd=static hid=static hub=static' and reinstall USB-00.

Configuring a USB mass storage device into the kernel (HP-UX 11i v3)

If no USB mass storage device is attached to a system at the time it is installed, the USB mass storage driver will not be configured into the kernel. If a USB mass storage device is subsequently attached to the system, HP-UX will not be able to communicate with it because the driver has not been configured.

Even though the driver is not configured into the kernel, the software is likely installed on the system. To verify this, execute

```
swlist -lproduct USB-00 | grep BLKONLY-MS
```

If you find this module is not installed for some reason, execute 'swinstall USB-00' using your install media. Once it is installed, you can configure it into the kernel using the kernel configuration tools as follows:

```
kcmodule -s UsbBulkOnlyMS=static UsbIomega=static
```

You have to reboot the system before any changes take effect.

Note: If the installation scripts indicate that the product was not installed because the legacy USB driver was disabled, run 'kcmodule -s hcd=static hid=static hub=static' and reinstall USB-00.

For further information, including documentation and software updates, please visit:

HP Technical Documentation Web site: <http://docs.hp.com>
HP Software Depot Web site : <http://software.hp.com>
HP IT Resource Center (ITRC) Web site: <http://itrc.hp.com>

Virtual Keyboard Mouse only supported by Windows

iLO 2 introduces the new Java-free Integrated Remote Console for environments with Microsoft Windows host and client operating systems. Integrated Remote Console provides access to Virtual KVM (Keyboard, Video and Mouse) in all modes of server operation, for Microsoft Windows. Operating environments other than Windows host and client are not supported; such environments may use the Remote Serial Console (RSC) to accomplish similar functions.

Onboard Administrator (OA) version 1.3 is required

OA version 1.0 through 1.2 are not supported for the BL860c. The BL860c will not function or boot with OA version 1.0 and will have limited functionality with OA versions 1.1 and 1.2. BL860c is only supported with OA version 1.3 or later.

Go to “Software and Driver downloads” at www.hp.com.

Onboard Administrator (OA) reports dual core CPU when single core installed

When a single core CPU is installed, the OA displays incorrectly that a dual processor is installed. A future OA version is expected to fix this problem. For details on the OA, see; <http://h18004.www1.hp.com/products/blades/components/onboard/index.html>

Additional Linux Drivers and Patches

Gb Ethernet Pass-Thru Module (406740-B21)

Linux Notes:

In order to use the pass-thru module, you will have to download and install the HP supported TG3 driver from:

<http://h20000.www2.hp.com/bizsupport/TechSupport/DriverDownload.jsp?&lang=en&cc=us&pnameOID=3331045&taskId=135&prodTypeId=15351&prodSeriesId=3331044&lang=en&cc=us>

Additional information can be found in a White Paper at <http://www.docs.hp.com/en/5991-8659/index.html>

A future Linux distribution should contain this driver.

Long Link Times:

On rare occasions the LAN link auto-negotiation time of the Gb Ethernet pass-thru interconnect takes longer than expected. Linux is susceptible to this, as the Ethernet port may not successfully link at startup. A reboot to the system should resolve this condition.

TFTP:

At EFI the tftp startup link time can take longer than expected. Once the link is established, it works without issues. The reason for the delay is that the autoneg delay is just in the threshold of a wait loop within tftp where the system increments the wait time exponentially. There is no workaround for this, but once the link is established, it works without issues.

A future Interconnect Module version is expected to fix these issues.

Wrong driver Loaded for 403619-B21 4 Gb/s Fibre-channel HBA during RedHat R 4 update 4 installation resulting in a non-functioning HBA

Due to a bug in the RedHat Enterprise Linux release 4 update 4 installation routines, the wrong driver is loaded for the 403619-B21 QLogic 4 Gb/s fibre channel HBA. This bug results in a non-functioning HBA during and after installation, and thus Boot from SAN cannot be performed. For additional details, see the Support Notes for Red Hat Enterprise Linux ES v.4 Update 4 for HP Integrity Servers at: <http://docs.hp.com/en/linuxredhat.html#Support%20Notes> and in the Red Hat Knowledgebase at: http://kbase.redhat.com/faq/FAQ_42_9204.shtm

System panics may occur on Integrity servers running Linux directly connected to FC storage arrays

The system may panic claiming it cannot find any logical volumes. There is currently no workaround or resolution for this issue. Direct connect (i.e. no FC switch or FC switch module in the configuration) between FC arrays and Integrity servers running Linux is not currently supported. To connect FC storage to their Integrity rack mount servers running Linux, you must connect through a FC switch. For additional details, see the Support Notes for Red Hat Enterprise Linux ES v.4 Update 4 for HP Integrity Servers at: <http://docs.hp.com/en/linuxredhat.html#Support%20Notes>

Booting with PCI Expansion Blade may give misleading warning

When booting to EFI with a PCI Expansion blade installed, you may get a misleading warning from the console that reads "WARNING[3]: Failed I/O slot(s) deconfigured". It also shows a warning in the system event log with the description "CC_IODISC_LBA_LINK_TRAIN_ERR". This message only reflects an actual failure when using the PCI expansion blade with both slots populated with PCIe I/O HBAs.

If you are using the PCI expansion blade with either one of the following:

- None, one, or both slots with PCI-X I/O HBAs, or;
- None, or one slot with PCIe I/O HBAs,

then you can ignore the message.

Regards,
Hewlett-Packard Company