

**IEther-00 (iether) and GigEther-01 (igelan)  
Gigabit Ethernet Drivers  
for HP-UX 11i v2 and 11i v1  
of June 2006  
Release Notes**

**IEther-00 Software Versions B.11.23.0606.01 and B.11.11.11  
GigEther-01 Software Versions B.11.23.06.06 and B.11.11.23**



**Manufacturing Part Number : 5991-5389  
E0606**

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# IEther-00 (iether) and GigEther-01 (igelan) Gigabit Ethernet Drivers for HP-UX 11i v2 and 11i v1 of June 2006 Release Notes

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## What's in this Version

The following information describes the updates made to two HP-UX-based Gigabit Ethernet drivers. The IEther-00 software bundle, which is built into the OE, contains the driver called iether. The GigEther-01 software bundle, which is also built into the OE, contains the driver called igelan. These two Gigabit Ethernet Drivers run on either HP-UX 11i v2 or 11i v1.

You can check to see if each driver is present on your system by running the commands described in “How to Verify that the Correct Driver is in the Kernel” in this document.

- **Checksum Offload Changes for the iether and igelan Gigabit Ethernet Drivers.**

The default for transmit side *Checksum Offload (CKO)* will be *OFF (disabled)*. This matches the default for *receive* side CKO which has also been set to OFF (disabled) since the May 2005 release. This gives you the flexibility of setting the CKO performance feature as you want.

### Setting the driver CKO options:

Recommended: To set the CKO options permanently (so they're saved across reboots), edit the following values in the `/etc/rc.config.d/hp<driver>conf` file (where <driver> can be iether or igelan):

IEther example:

```
HP_IETHER_SEND_CKO and  
HP_IETHER_RECV_CKO and set them to ON or OFF
```

Igelan example:

```
HP_IGELAN_SEND_CKO and  
HP_IGELAN_RECV_CKO and set them to ON or OFF
```

To determine the current CKO settings, enter the following command:

```
lanadmin -x cko ppa
```

Optional: If desired, you can also use the `lanadmin -X` command to temporarily set these values; but if you use the `lanadmin` command, your settings will not be saved across a reboot. The exact `lanadmin` commands are as follows (note that the -X is capitalized in these commands):

```
lanadmin -X send_cko_on ppa  
lanadmin -X recv_cko_on ppa
```

Please refer to the `lanadmin` man page for details of these CKO options.

- **PCI-X Error Handling improvements.**

The PCI-X Error Handling feature provides a system with improved fault-tolerance. PCI-X Error Handling allows an HP-UX system to avoid a Machine Check Abort (MCA) or a High Priority Machine Check (HPMC), if a PCI-X error occurs (for example, a parity error).

Without the PCI-X Error Handling feature installed, PCI-X slots are set in hardfail mode. If a PCI-X error occurs when a slot is in hardfail mode, an MCA or HPMC will occur, then the system will crash.

When the PCI-X Error Handling feature is installed, the PCI-X slots containing I/O cards that support PCI-X Error Handling will be set in softfail mode. If a PCI-X error occurs when a slot is in softfail mode, the slot will be isolated from further I/O, the corresponding device driver will report the error, and the driver will be suspended. The `olrad` command and the Attention Button can be used to online recover, restoring the slot, card, and driver to a usable state.

As of June 2006, the `iether` and `igelan` Gigabit Ethernet drivers on both HP-UX 11i v2 and 11i v1 support PCI-X Error Handling when the prerequisite `PCIErrrorHandling-00` bundle is also installed on the system. The PCI-X Error Handling-00 bundle is NOT part of the Operating Environment and is an enhancement or extra functionality that needs to be added even if you've already loaded the June 2006 OE media. The PCI-X Error Handling-00 bundle is a selectable feature that is located on the SPK (software pack) DVD.

- HP-UX 11i v1 -based `iether` and `igelan` Gigabit Ethernet drivers are enhanced in June 2006 to support 64-bit MIB statistics, but prerequisite patch `PHNE_33704` (or later) must also be installed. Core LAN patch `PHNE_33704` is available for downloading on the HP Information Technology Resource Center (ITRC) at: <http://www.itrc.hp.com>. Select "patch database," and search for the needed patch number. If not already registered, you can register for free on the ITRC home page.

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## Overview of Software Installation Process

The Gigabit Ethernet driver updates for HP-UX 11i v2 of June 2006 are part of the Operating Environment (OE) located on two DVDs. You can either load the entire OE or just select the parts you want. For HP-UX 11i v1, in June 2006, the driver updates are located on the Application DVDs. There are also media for a software pack (SPK) and diagnostics.

To install the Operating Environment, see the instructions in the *Installation and Update Guide HP-UX 11i Version 2*. The operating environment version should show as B.11.23 for HP-UX 11i v2 or B.11.11 for HP-UX 11i v1 when you type: `uname -a` at the system prompt.

For instructions on how to install and configure your network card's hardware and software, refer to the installation guide for your card and driver available on the web at <http://docs.hp.com/en/netcom.html> under "Gigabit Ethernet." If the network card was factory installed (ordered on product option 0D1) or is the "built-in" or "core" LAN, the LAN driver for this card will already be on your system disk.

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## How to Verify that the Correct Driver is in the Kernel

The Gigabit Ethernet drivers updated in June of 2006 work on HP-UX 11i v2 and 11i v1. To verify that the driver was loaded in the kernel, execute the following command:

```
what /stand/vmunix |grep drivervname
```

where `drivervname` is `igelan` (for the GigEther-01 bundled Gigabit Ethernet) or `iether` for the IEther-00 bundle.

You should see a response like:

igelan\_ilan Version: 1 May 18 2006  
igelan Revision: B.11.23.05 May18 2006

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## List of Related Documentation

Following is a list of documents related to this product. They are available on the web at <http://docs.hp.com> under “I/O Cards and Networking Software.” Scroll down to 1000Base-T and 1000Base-SX (Gigabit Ethernet).

- *HP-UX Ethernet Driver Support Matrix, Edition 2 (for Releases of Sept 2004 and Later)*  
Provides the most current list of Gigabit Ethernet cards that each driver supports.
- *Ethernet Support Guide*  
Provides information on advanced features and detailed information on troubleshooting the Gigabit Ethernet cards. The Support Guide is also available on the Instant Information DVD if you have an HP support contract.
- *Installation and Update Guide HP-UX 11i Version 2*  
Provides information on installing the Operating Environment whether on a new or existing system.

