



READ ME FIRST

HP-UX 10.x 5022 HP-PB 100vg Driver Release 1.9

Read This Before You Begin!

Description

This document contains the Application Notes, Installation Procedure, Corrections, and Deficiencies for the Interphase HP-PB 100vg driver for HP 9000 Series 800 computers

Part Numbers:

SM00006-A09 DDS tape distribution
SX00156-A09 media independent image

This release of the 5022 driver is intended for use with HP-UX version 10.01, 10.10, and 10.20. Note, that HP-UX 10.00 is no longer supported within this release.

Before You Start

Note, this driver may be installed over a previous release. It is not necessary to remove the old version of the driver prior to installation.

Installation

Shut down the system in which the board is to be installed.

Install the 5022 100vg board in an empty slot.

Connect cabling to the board. If connecting to a 100vg hub, use the upper port on the back of the board, otherwise use the lower port.

Boot the system under HP-UX 10.x.

Place the driver distribution media into the system tape drive.

Run "Swinstall"

"Source Depot Path" should default to /dev/rmt/0m. If this is not the device node for your tape driver, change "Source Depot Path" to reflect the correct node.

Select "OK"

Note, a message may appear stating that no bundles were found, software will be shown as products. This is normal. Select "OK" if this is the case.

Select the IVG_Driver fileset (this should be the only option available), and mark for install.

After the analysis phase has completed, select "OK". Swinstall will ask to confirm that you want to continue the installation. Select "YES".

A message stating that installation of the fileset will cause a kernel rebuild and

prompt the user if he wishes to continue. Select “YES”.

After the kernel rebuild has completed select “OK”. Swinstall will then prompt for the user for confirmation that for completion of the installation the system must be rebooted. Select “OK”.

The system will be rebooted.

Upon system return, the user should run “lanscan”. There should be a device entry “ivg” listed. Note, the device name will be followed by an instance number i.e. ivg2.

At this point the user should be able to configure the board’s ip address and communicate with other hosts on the subnet.

Media Independent Installation:

To install using the SX000156-A08 media independent image instead of the tape version (i.e. for FTP obtained release), copy the SX000156-A08 image to a local directory and follow the above directions.

Note, that when setting the “Source Depot Path” the <full path name>/SX00156-A08 should be specified where <full path name> is the path to the file i.e. /tmp/SX00156-A08.

5022 Monitoring Utilities:

Included within this distribution package are two utilities: *vgdump* and *vgmon*.

vgmon is a text-based application which allows the monitoring of driver statistics. These statistics are updated at one second intervals. This program can be used to verify transmission and reception of packets by the driver. The following syntax can be used:

Usage: *vgmon* <interface>

where <interface> is the device instance (i.e. ivg1, ivg2, or ivg3)

vgdump is a program which can obtain diagnostic information from the driver and hardware. The following syntax can be used:

Usage: *vgdump* [*ivlirqacd*] interface

- v Dump 100vg registers
- l Dump Lo-Quix registers
- i Dump Lo-Quix resource info
- r Dump receive buffer
- q Dump quads
- a Dump align space
- c Dump DMA chains
- s Dump driver statistics
- d Dump debug ring (if available)

If the driver or hardware seems to have a problem run the following command:

***vgdump -vlirqacs* <device> <capture file>**

where <device> is the interface instance (i.e. ivg1, ivg2, ivg3,) and <capture file> is the name of a file where the user wishes the program to write debug output.

Troubleshooting:

Upon failure following installation:

Check the Board OK LED.

If this LED is off, the board was not recognized by the system.

i. At the unix prompt type “nm /stand/vmunix | grep ivg”. This should list several symbols which begin with ivg. If not then the installation of the driver has failed and “Swinstall” must be performed again.

Secondly, check to ensure that the board was properly seeded within the backplane.

ii. The LED is flashing. This indicates that the card does not have a good link to the hub(100vg or 10baseT). Check the cable.

Attempt a broadcast ping

i. Observe the activity light on the hub blinks(the activity light on the board itself will blink for a very short duration of time for each packet and may be extremely difficult to see). There must be other active (Up) hosts plugged into the hub, or the activity light will not blink.

ii. If the light on the hub does not blink (and there are other active hosts connected to the hub) open another window and run “vgmon”. Attempt the broadcast ping once again. The “Transmitted packets” counter should increment. If this does not occur a probable IP configuration problem exists. If this counter does increment but there is no activity light on the hub, look at the activity light on the board. If the board’s activity light is blinking there is a problem with the hub or the connection between the two. If not contact Interphase, there may exist a problem with the driver or hardware.

iii. If the light on the hub does blink, packets are being sent properly. Failure of the broadcast ping in this situation indicates a probable problem with IP configuration.

Contact Information

Customer Support

United States: Telephone: (214) 654-5555
Fax: (214) 654-5500
E-Mail: intouch@iphase.com

United Kingdom: Telephone: 44 (0) 1869-321222
Fax: 44 (0) 1869-247720

France: Telephone: 33 (0)1 41 15 44 00
Fax: 33 (0)1 41 15 12 13

World Wide Web

<http://www.ipphase.com>

Anonymous FTP Server

<ftp.ipphase.com>