

Installing the VMware vSphere Hypervisor (ESXi) 4.1 Installable Update 1 on an HP Z600 Workstation

Although the HP Z600 includes necessary and sufficient hardware for running vSphere Hypervisor 4.1, VMware does not include it in its HCL (Hardware Compatibility List.) This document outlines the steps needed to successfully install and run vSphere Hypervisor Update 1 on the HP Z600 workstation. For our system, the installation source media is a CD-ROM and the installation destination is a USB flash device.

The HP Z600 requires the following modifications during installation of vSphere Hypervisor 4.1.

1. When installing from the optical drive, the installer fails with errors. The last few alerts taken from the vmkernel log (*to view the log press ALT+F12*) are as follows:

```
ALERT: Util: 1116: Failed trying to get a valid VMKernel MAC
address: Failure. Various vmkernel subsystems will provide lower
quality of service. Please add/configure VMKernel NICs
ALERT: Mod: 4145: Initialization of module vmfs3 failed
```

Work around this issue by following the steps below.

- a. When the installer presents the screen titled: **"welcome to the VMware ESXi 4.1.0 Installation."**, press ALT+F1 to view the tech support console.
- b. Log in with the username **root** and when prompted for the password, just press the Enter key. If successful, you will receive a lengthy message. The first line will read: **You have activated Tech Support Mode.**
- c. Enter the command:
vmkload_mod tg3
If successful, you will receive a message: **Module tg3 loaded successfully**
- d. Press ALT+F2 to return to the installer, and proceed with the install process. Note: The installation may fail with a fatal error due to the CD-ROM not being supported. The message is as follows:
Installation operation Failed!
The installation operation has encountered a fatal error:
Unable to find the system image to install.
This is due to the image not being mounted correctly or the CD-ROM not being supported.

<message continues>

If this is the case, you must perform the install (steps a-d) using a supported optical drive. After testing several external devices (bootable USB flash/optical drives,) we were finally successful using an external optical drive connected via USB. The drive was connected via a BYTECC USB adapter, model BT-300, and the drive was a Toshiba-Samsung IDE CD-RW/DVD drive, model SM-348.

2. When the installer completes, the system will boot into vSphere Hypervisor and issue a message about missing network adapters.
 - a. Press F2 to Customize System
 - b. Login
 - c. Activate the menu option Troubleshooting Options and select Enable Local Tech Support.
 - d. Press ALT+F1 to bring up console.

- e. Login
- f. Enter the following commands:

```
cd /tmp/  
mkdir -p oem/etc/vmware  
cd oem/etc/vmware  
cp /etc/vmware/simple.map simple.map  
cp /etc/vmware/pci.ids pci.ids
```
- g. Add a configuration line to simple.map. Start by launching vi:

```
vi simple.map
```
- h. Enter insert-mode by pressing the i key. Add the following line:

```
14e4:1684 0000:0000 network tg3
```
- i. Press the ESC key to exit insert-mode and type:

```
:wq
```

Press the ENTER key to execute the wq command. This will save the changes and exit vi.
- j. Enter the following commands:

```
cd /tmp/oem  
chown -R 201:201 ./etc  
chmod -R 755 ./etc  
chmod 644 ./etc/vmware/simple.map  
chmod 644 ./etc/vmware/pci.ids  
tar -cvzf oem.tgz etc  
cp oem.tgz /bootbank/oem.tgz  
cd /bootbank/  
chmod 755 oem.tgz
```
- k. Reboot the system

You should now have a successful installation of VMware vSphere Hypervisor 4.1 Update 1 up and running on your HP Z600 workstation.

This document uses information taken from:

<http://communities.vmware.com>

<http://www.vm-help.com/index.html>