

How to install RedHat Linux 9 on an HP pavilion ze5343ea/ ze5300

Please note:

The information provided by this document are without any warranty. If you cause harm or damage to yours or others notebooks, I am not responsible for.

1. What you need:

- Red Hat 9 Installation CDs
- apt-get for RedHat: <http://freshrpms.net/apt/> (optional but very useful!)
- Kernel 2.4.20-20.9 (about 15 megabytes)
- Kernel Sources 2.4.20-20.9 (about 30 megabytes)
- ACPI Patch (acpi-20021118-2.4.20-rc1.diff.gz)
<http://acpi.sourceforge.net/>
- The kernel config file:
(http://www.swendrak.de/linux/kernel-2.4.20-20.9_acpi)
- [hsflinmodem-5.03.27Inxtbeta03042700.tar.gz](http://www.linuxant.com/drivers)
<http://www.linuxant.com/drivers>
- HP pavilion ze5343ea of course ☺

2. How to install RedHat:

Boot the first installation cd and enter: **linux nofirewire** at the boot prompt. Choose your language, disk partition and software packages as suitable for your needs.

Important: Select the (Kernel) Development Tools to install. You will need the automake functions and the compilers, provided through those packages, to compile the kernel, afterwards.

After installation of the packages, the computer will reboot. Press the **i** Button to enter the interactive startup. Otherwise it will crash. Press **y** if questioned except at **kudzu**, **firewire** and **pcmcia**. Kudzu will crash every startup and pcmcia crashes if you try to stop it, unless ACPI is properly configured.

Now, after the machine has rebooted, disable the services kudzu and pcmcia, so that you don't need to enter the interactive startup, every time you reboot. To do this, type **setup** as root in the console or use the gui tool **redhat-config-services**. Sound, Video and Ethernet should be configured properly by RedHat.

Edit the /boot/grub/grub.conf:
*kernel /vmlinuz-2.4.20-8 ro root=LABEL=/ hdc=ide-scsi **nofirewire***

At this point, you should be able to boot the pavilion without any user- action.

3. Configure ACPI/ Compiling the kernel:

As root, install the kernel 2.4.20-20.9 and the kernel sources. I prefer apt-get for this job. To install apt-get just download the rpm- file, go into the directory you stored the file in and type as root ***rpm -i apt<version>.rpm***.

Then type ***apt-get update*** and after that ***apt-get install kernel#2.4.20-20.9*** and finally ***apt-get install kernel-source#2.4.20-20.9***.

If you want, you can reboot now with the new kernel.

Now you're going to compile the kernel. As root go into /usr/src/linux-2.4/ and type ***cp /<wheretheconfigfileis> ./configs/kernel-2.4.20-20.9_acpi***

Then apply the kernel patch ***acpi-20021118-2.4.20-rc1.diff.gz*** to the kernel sources:

gunzip -c <path to acpi-patch>/acpi-<version>.diff.gz | patch -p1

Now type ***make clean ; make mrproper ; make xconfig***.

When the computer finished cleaning, a menu appears. Now use the button "Load configuration from File" and type ***./configs/kernel-2.4.20-20.9_acpi***.

Press the "Save and Exit button" and type:

make dep ; make bzImage ; make modules ; make modules_install

Now get a cup of coffee or a beer or whatever you like.

When the kernel is finished, copy the /usr/src/linux-2.4/arch/i386/boot/bzImage to /boot/kernel-2.4.20-20_acpi.

Then insert the following lines in /boot/grub/grub.conf:

```
title Red Hat Linux (2.4.20-20.9) ACPI
    root (hd0,1)
    kernel /kernel-2.4.20-20.9_acpi ro root=/dev/hda3 hdc=ide-scsi
    initrd /initrd-2.4.20-20.9.img
```

and add ***alias eth1 orinoco_pci*** to /etc/modules.conf

Type ***apt-get install acpid***. This will install the ACPI Daemon.

After the reboot, you can enable the pcmcia service for startup and configure the wavelan card in the gui- tool.

4. Configure the Modem:

Get the driver hsflinmodem-5.03.27Inxtbeta03042700.tar.gz and install it:

```
tar -xvzf hsflinmodem<version>.tar.gz  
cd hsflinmodem<version>  
make install
```

You can configure the Modem in the GUI now.

That's it! ☺

Things, I've not checked yet:

- Firewire
- TV Out

For additional information, criticism, donations and suggestions, please send me an email.