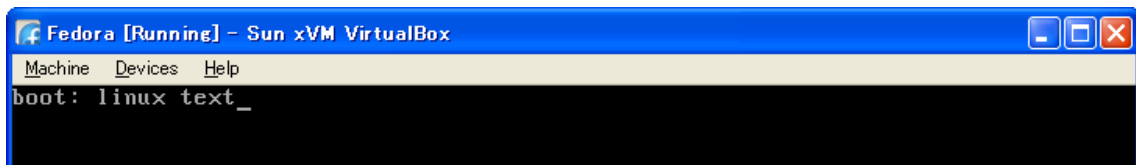# Fedora 10 eBox-3300 Installation Guide

(Images taken from Virtual Box)

The Installation DVD method is recommended because it's faster, and because the latest kernel installed with the Net Install seems buggy.
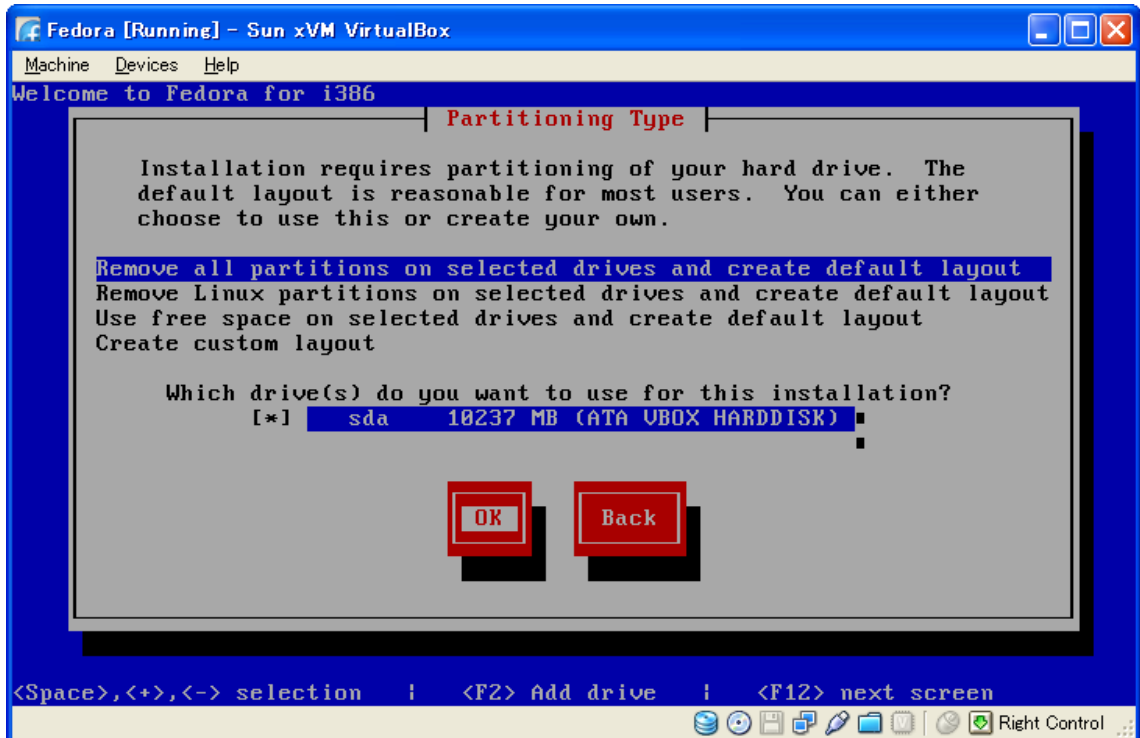
1. In the BIOS, set **IDE Operate Mode to Native (required)** and **PCI IDE Bus Master to Enabled (optional)** *
2. Boot with either a Net Install CD or an Installation DVD. **
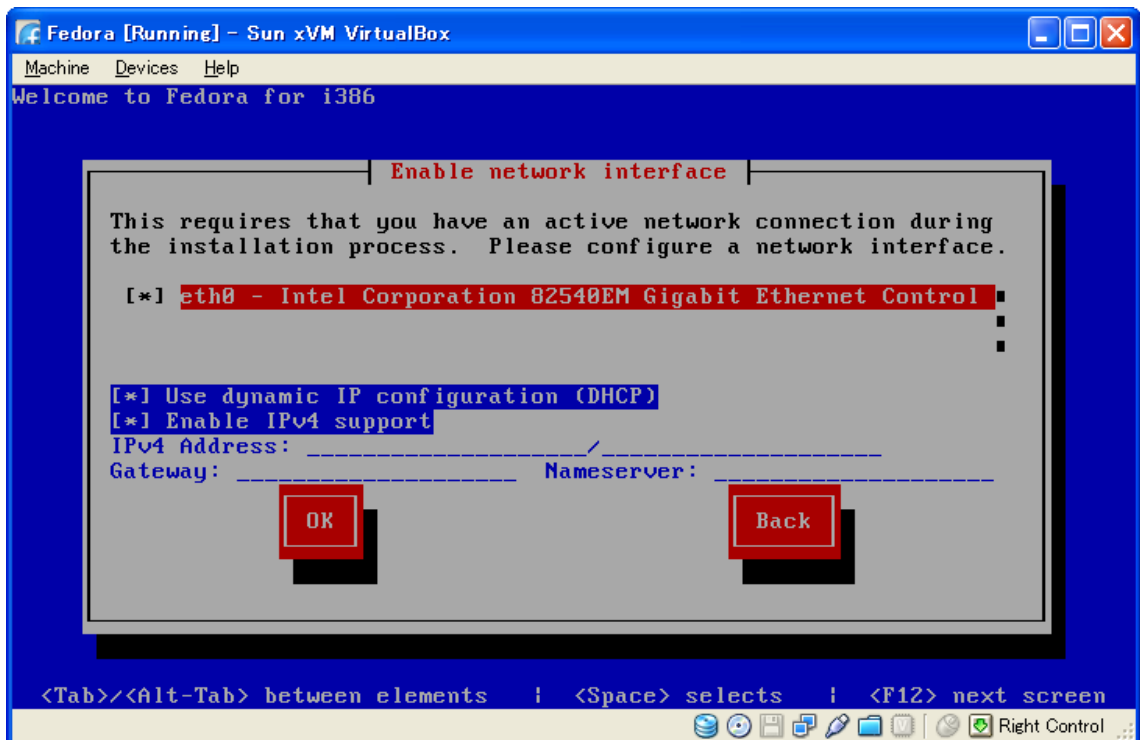3. At Grub Menu, press ESC

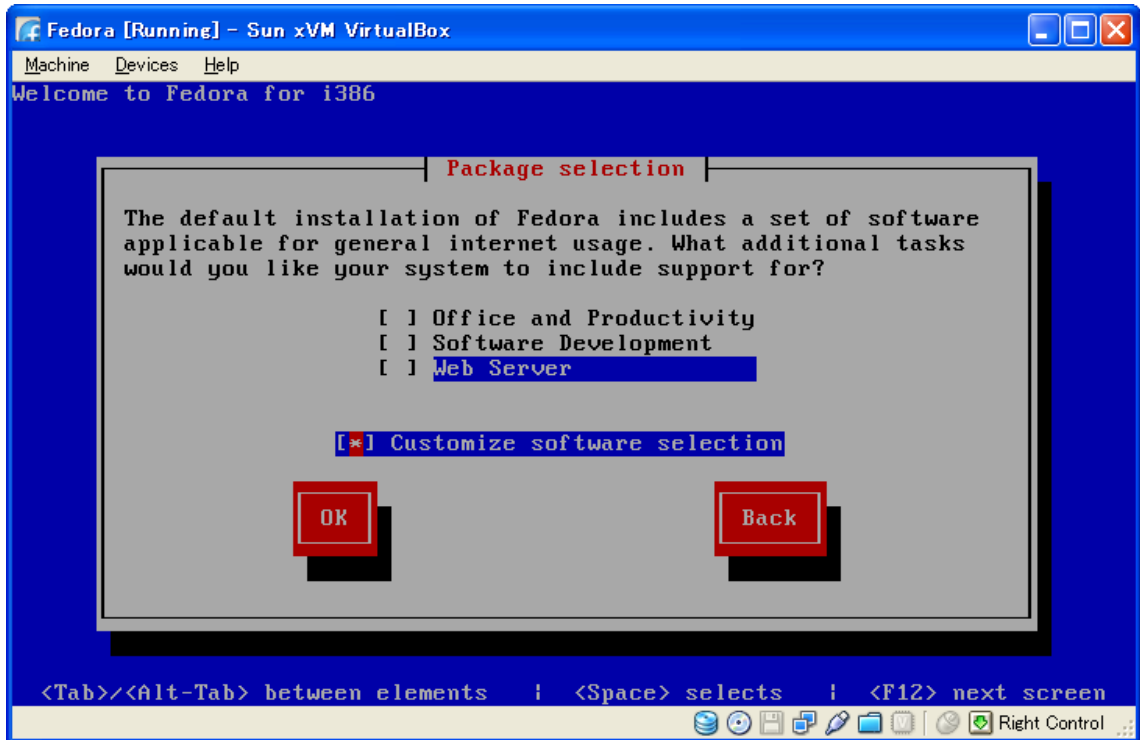4. Type "**linux text**" and press enter to boot

5. Safely skip media check if you like.
6. Give yourself a host name.
7. Set the clock
8. Choose/make your partition layout.

9. Enable ethernet controller (if doing a Net Install).

10. Customize Packages. For our purposes, choose Base, Development Libraries, and Development Tools. This will install about 600 Packages. (Dev packages are only needed for DVD Install)

11. Start Install
12. Reboot/Login
13. Check to ensure Ethernet is correctly configured and you have an IP with "ifconfig eth0"

---NOTES---

* PCI IDE Bust Master is only needed when your CF supports UDMA.

** Net Install ensures that you have all updated packages, which means that everything will basically work out of the box.******* For the DVD installation, you will need to compile a new Ethernet driver module with the latest R6040 driver.

*** When doing a Net Install, it seems the HDD light is always on after boot. This may e an issue with the latest Fedora compiled kernel (**2.6.27.19**).   I think there is something wrong with this version of the **pata_it821x** driver which is the driver used by Fedora to access the CF. Compiling a different version should fix it up.   This file is located <kernelversion>/drivers/ata.   Please see below for some compiling instructions. (**Note**: I suggest using an older driver, because the bug persists in the latest driver.)

<div align="center">

---DRIVER COMPILING INSTRUCTIONS---

</div>

Compiling Ethernet Driver for DVD Installation:

1. Download the latest stable kernel with WGET to the HOME Directory.

wget http://www.kernel.org/pub/linux/kernel/v2.6/linux-2.6.28.7.tar.bz2

2. Unzip the file.

tar xjf linux-2.6.28.7.tar.bz2

3. Copy the driver file you want to compile to the its own directory.

mkdir r6040 && cd linux-2.6.28.7/drivers/net && cp r6040.c ~/r6040/ && cd ~/

4. CD into the r6040 folder, create a Makefile and add the following code.

cd r6040 && nano Makefile

```
obj-m = r6040.o
KVERSION = $(shell uname -r)
all:
        make -C /lib/modules/$(KVERSION)/build M=$(PWD) modules
clean:
        make -C /lib/modules/$(KVERSION)/build M=$(PWD) clean
```

5. Run the 'make' command in the same directory
6. Copy the resulting module file to your installation, overwriting the original.

cp r6040.ko /lib/modules/$(uname -r)/kernel/drivers/net/

7. Reboot

NOTE: The driver used by Fedora to access the HDD (CF in this case) is **pata_it821x.c** and is located at **<kernel version>/drivers/ata**
Please use this file when compiling a new IDE driver.   All the steps above can be repeated for this driver, make changes as needed.