# Linux Installation on an Acer LapTop HOWTO

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# Linux Installation on an Acer LapTop HOWTO


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*This document describes how to install Linux on a Acer LapTop and Various issues related to this. The reader is expected to have some knowledge about Linux Installation.*


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# 1. Introduction

## 1.1 Preface

This is version 1.0 of this document. We faced a lot of problems while installing Linux on a Acer LapTop. We thought this information might be useful to the Linux community.

This information is intended for Linux on the Intel platform. Much of this information may be applicable to Linux on other processors, but We have no first−hand experience or information about this.

This document may be outdated or some other document on this topic may be available. Please check the the Linux Documentation Project homepage to see if any other documents are available on this.

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You are strongly recommended to take a backup of your system before major installation and backups at regular intervals.

## 1.4 Feedback

We welcome any feedback, good or bad, on the content of this document. We have done our best to ensure that the instructions and information herein are accurate and reliable. Please let us know if you find any errors or omissions.

Send comments, corrections and questions to the author at harish.thampi@wipro.com.

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# 2. The Procedure

## 2.1 Introduction

This document for installing Linux on a LapTop (Acer TravelMate 345T) It comprises of the general difficulties you can run into while trying an install on an Acer TravelMate 345T. I have a hand on experience only on Acer TravelMate 345T. This may be applicable to other Models also.

This document assumes some basic familiarity with concepts of Linux system administration. For example, you should know about directories and filesystems.

## 2.2 Preparing the Disk

The document specifically tells about the installation of Linux on a Laptop along with Windows 98.

First you should partition the disk according to your choice. You may face problems when you want a dual boot machine. That is you have Windows on `/dev/hda1` and Linux '/' on `/dev/hda2`

I faced some strange problem here. Initially I had a 5.3 GB disk on which Windows 98 was installed and drive c: constituted the entire 5.3GB.

I wanted to repartition the disk to put Linux on to it. So I booted with a RedHat CD and partitioned the disk as follows.

```
/dev/hda1   3 GB    For Windows 98
/dev/hda2   200 MB  For Linux /
/dev/hda3   128 MB  For Swap
/dev/hda4   2 GB    Extended
/dev/hda5   1GB     /usr
/dev/hda6   1GB     /home1
```

After installation of Linux, I found that Windows 98 was still running fine on `/dev/hda1`. Even more interesting fact is that Windows is able to see that entire 5.3 GB of the disk. I doubted that this could lead to corruption of data and had no other way except formatting and start again. Any feedback on this issue is welcome. Any links or references are also welcome.

**Note:** When you list the partitions with a dos fdisk, the extended partition made with Linux fdisk is shown as an EXT DOS partition. Later I changed the type of Extended partition to Extended Linux. Still Windows was able to see the entire 5.3 GB of the disk.

I have put `/dev/hda2` as the '/' partition and put `/dev/hda5` as '/usr'. This approach will help in separating the files that change frequently from those that doesn't. This is also useful for backup purposes.

## 2.3 Installation

Installation of RedHat Linux on a Laptop is pretty easy. This is almost like installing Linux on a PC. The only problem we faced was that it was not possible to install Linux from the RedHat CD in any mode other than 'text mode'. Trying to install Linux on any other mode other than 'text' will cause the installation to hang.

## 2.4 Booting the Machine

The Acer LapTop had some PCMICA devices. While booting the LapTop, the machine would hang looking for more pcmcia devices. If you face this problem, you need to reboot the machine with the boot floppy and edit the file `/etc/sysconfig/pcmcia` and set `PCIC_OPTS="do_scan=0"`. The next time you reboot the machine, it should boot up with the newly installed Linux.

## 2.5 Configuring X

This is problem for which I was not able to find an answer. After booting up the machine, I tried to configure X using xf86config.

The Acer LapTop had an 800x600 LCD panel. I had selected S−VGA and 800x600 resolution. When I tried starting X, I found that the mode is being taken as 320x200. The boot message says that it is the built−in mode. Any Pointers to this are welcome. The output of SuperProbe was:

```
First video: Super-VGA
      Chipset: Trident (chipset unknown) (PCI Probed)
              Signature data: 95251023 (please report)
      Memory:  2048 Kbytes
      RAMDAC:  Sierra SC1148{2,3,4} 15-bit or SC1148{5,7,9} 15/16-bit HiColor
               (with 6-bit wide lookup tables (or in 6-bit mode))
```

## 2.6 Linmodem Source

The Laptop had a softmodem (Linmodem). The driver for this modem is not given in the RedHat distribution. Lucent is providing the driver for this modem in 'object' form. The source for this driver is not available. It will be good if the Linux community can provide the source for the Linmodem. The difficulty with the Lucent Linmodem driver is that, the driver is written for Linux 2.2.12 Kernel. This is one of the reason why the source code for Linmodem would be considered a great contribution. I have listed some links that could proove to be useful in this venture.

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# 3. Conclusion

This document has covered the problems faced during the installation of Linux on a Laptop. The document may not be complete any feedback or contribution towards this will be appreciated. The main area on which the Linux community can work is in solving out problems in configuring X and getting the source code for the Linmodem driver.

Please mail your contributions for this document to harish.thampi@wipro.com so that I can come up with the next version of this document.

## 3.1 Useful Links

- http://www.linuxworld.com/linuxworld/lw−1999−08/lw−08−linmodem.html
- http://www.linmodems.org/
- http://www.close.u−net.com/
- http://linuxdoc.org/HOWTO/