

Installation Instructions for Linux Mint 10 Julia on HP Elitebook 8560p

Raul Monsalve

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Abstract

This laptop is perfectly suited for people looking for performance and portability in business or academic environments. Windows 7 runs smoothly and can handle everything you throw at it, but the newer Linux distributions are almost as good if not better for some specific purposes. I will describe the steps I followed to install Linux Mint 10 Julia on this computer.

1 Steps

1. It is recommended to install a 2.6.35 kernel version or later, in particular because the LAN driver for Intel 82579LM needs this kernel. After trying many distros including Fedora 14, Ubuntu 10.10 and Linux Mint 10 Julia (amd64), it was clear that Linux Mint Julia was the best option because among other things:
 - The LAN driver comes available by default and you don't need to compile and make it run yourself.
 - Using DSL connections is plug-and-play with eth0, without having to deal with pppoe configurations.
2. After installing Linux Mint, the sound will be totally recognized, as the screen resolution (1600x900), although a video driver for the AMD Radeon HD 6470M is necessary for desktop effects and usage of DisplayPort. This driver (FGLRX) is obtained with the Additional Drivers GNOME applet, and although its performance is not great, it is a necessary component to install in order to make all the video functions work. Another annoyance is that the driver puts a watermark on the lower right corner of the screen (internal and external) that says *AMD Unsupported hardware*, which hopefully disappears in future versions.
3. The WIFI driver for the Intel Centrino Advanced N 6205 card is directly available for SUSE 11 (.rpm files) from HP at

http://h20000.www2.hp.com/bizsupport/TechSupport/SoftwareDescription.jsp?lang=en&cc=us&swItem=ob-92556-1&jumpid=reg_R1002_USEN

This .rpm files need to be transformed to .deb using the **alien** utility, writing in the terminal:

```
sudo alien -d FILENAME.rpm
```

Then you install the resulting .deb file normally and reboot. After restarting, the NetworkManager applet should show you the wireless networks, ready to be used.

4. Finally for now, it is necessary to fix the SUSPEND feature (SUSPEND/WAKE-UP after closing the lid) which does not work out of the box. For me, the solution posted at

<http://thecodecentral.com/2011/01/18/fix-ubuntu-10-10-suspendhibernate-not-working-bug>

worked perfectly. You have to create a file whose name starts with 20_:

```
sudo gedit /etc/pm/sleep.d/20_anything
```

And add the following code:

```
#!/bin/sh

TMPLIST_E=/tmp/ehci-dev-list
TMPLIST_X=/tmp/xhci-dev-list
E_DIR=/sys/bus/pci/drivers/ehci_hcd
X_DIR=/sys/bus/pci/drivers/xhci_hcd
E_BIND=$E_DIR"/bind
E_UNBIND=$E_DIR"/unbind
X_BIND=$X_DIR"/bind
X_UNBIND=$X_DIR"/unbind

#param1 = temp file, param2 = device dir, param3 = unbind
unbindDev (){
#inspired by http://art.ubuntuforums.org/showpost.php?p=9744970&postcount=19
echo -n '' > $1
  for i in `ls $2 | egrep '[0-9a-z]+\:[0-9a-z]+\:.*$'`; do
    echo -n "$i" | tee $3
    echo "$i" >> $1
  done
```

```

}

#param1 = tem file, param2 = bind
bindDev(){
  [ -f $1 ] || return

  for i in `cat $1`; do
    echo -n "$i" | tee $2

  done
  rm $1
}

case "${1}" in
  hibernate|suspend)
    unbindDev $TMPLIST_E $E_DIR $E_UNBIND
    unbindDev $TMPLIST_X $X_DIR $X_UNBIND
    ;;
  resume|thaw)
    bindDev $TMPLIST_E $E_BIND
    bindDev $TMPLIST_X $X_BIND
    ;;
esac

After saving it, make it executable:

sudo chmod 755 /etc/pm/sleep.d/20_anything

and restart.

```