

Fedora Mini Install Howto

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1. Scope

Simple installation guide for Red Hat Fedora Core 14.

2. Download Fedora

Download a Fedora Live CD from <http://www.redhat.com/Fedora/>

Write the ISO file to a small memory stick or a CD:

```
$ su -  
password  
# dd if=Fedora[tab] of=/dev/sdc  
# sync
```

Boot with the memory stick. That usually requires doing battle with the BIOS.

Either install on the whole disk or first defragment Windows and split the disk with *gparted* then install on the empty space.

Once booted, you may want to disable SELinux, by adding *selinux=0* to the relevant kernel entry in */boot/grub/menu.lst* since it tends to get in the way of lab things.

3. Install Kernel Headers

Install development tools and kernel headers. Make sure that you install the same versions, otherwise some programs with strict configuration scripts won't compile.

```
$ su  
passwd  
# uname -a
```

This is best done with the software installer wizard, not with yum:

```
# yum -y install kernel-devel-2.6.35.11-83.i686.fc14 kernel-headers-2.6.35.11-83.i686.fc14
```

and this line is best done with yum and not the software installer wizard:

```
# yum -y groupinstall "Development Tools"
```

Go and get some coffee...

4. RPM Fusion

Fedora is really a server distribution at heart and has no multimedia capabilities by default. You got to enable all the non-Free and restricted repositories yourself. However, this is best done by Fedora Plus described below.

Either go here and click the link:

<http://rpmfusion.org/Configuration>

Or do it manually like this:

```
# yum localinstall --nogpgcheck http://download1.rpmfusion.org/free/fedora/rpmfusion-free-release-stable.noarch.rpm http://download1.rpmfusion.org/nonfree/fedora/rpmfusion-nonfree-release-stable.noarch.rpm
```

That will give you access to most multimedia applications and codecs, but the DVD content scrambler is however still a problem. You can get *libdvdcss* from *atrpms*:

```
$ wget http://www.mjmwired.net/resources/files/atrpms.repo
$ su
password
# cp ./atrpms.repo /etc/yum.repos.d/atrpms.repo
# rpm --import http://packages.atrpms.net/RPM-GPG-KEY.atrpms
# yum --enablerepo=atrpms install libdvdcss
```

5. Fedoraplus

The Fedoraplus application provides a super easy way to install most of the extra multimedia utilities and codecs. It will even enable the RPM Fusion and Atrpms repos:

```
# yum -y --nogpgcheck localinstall http://fedoraplus.com/fedoraplus-1.0-9.fc14.noarch.rpm
```

Run Fedoraplus from the commandline as root:

```
# fedoraplus
```

6. Install Technical Utilities

The following utilities are needed in a lab environment and you can either install them using the wizard as above, or do it on the command line as below:

```
# yum install joe
# yum install telnet
# yum install tcpdump
# yum install wireshark
# yum install minicom
# yum install cutecom
# yum install hexedit
# yum install beesu
```

Cutecom and *Minicom* need to run as root. You can modify the menu entry or make a desktop launcher for it using *beesu*, so you will get a root password prompt:

```
Command: beesu cutecom
```

7. Install Kermit

Well, this is why this whole exercise was started. Go to the Columbia university and download the Kermit source package:

```
$ cd ~/Downloads
$ wget ftp://kermit.columbia.edu/kermit/archives/cku211.tar.gz
```

Put it somewhere and untar it:

```
$ mkdir ~/kermit
$ mv ~/Downloads/cku[tab] ~/kermit/
$ cd ~/kermit
$ tar -zxvf cku[tab]
```

First install ncurses:

```
$ su
```

```
password
# yum install ncurses ncurses-devel
```

```
Build kermit:
$ su
password
# make linux
```

```
Put it in /usr/local/bin:
# cp wermit /usr/local/bin/kermit
```

No, the *wermit* is not a spelling mistake.

Be sure to add the group '*dialout*' to all users that need to access the serial ports.

Now you should be able to run kermit by opening a terminal and typing - you guessed it.

8. Google Chrome

Google Chrome is fast becoming a popular browser. It is actually just a reskinned KDE Konqueror:

```
# yum localinstall https://dl-ssl.google.com/linux/direct/google-chrome-
stable_current_i386.rpm --nogpgcheck
# ln -s /usr/lib/mozilla/plugins /opt/google/chrome/plugins
```