

How to install the PROMPT System under Linux

You can get the following from a large bookstore and it has the 2 required CD's to install the operating system: Cost is approximately \$60
Red Hat Linux 9, Publisher's Edition by Michael Jang or download from the Web.

A. Load the Red Hat Linux Operating System

1. Insert the Linux CD disk 1
2. A welcome screen will appear and under it will say boot:
Type **linux text** (if you have a SCSI 3920 type **dd** for driver disk) press **enter**. If you typed dd you will be prompted for the driver diskette that is aic79xx-2.012-i686-rh90.img and available at adaptec.com
3. Language; **English**
4. Keyboard: **us**
5. Mouse selection: **Generic – 3 Button Mouse**
6. Installation Type: **Server**
7. Partitioning: **Auto Partition** (/boot, /usr, /home, /Extended), **but**
If Raid see - How to set up and administer a PROPMT Linux Raid system.
8. Boot Loader: **GRUB**
9. Boot loader configuration: **OK** (no entries)
10. Where do you want to install the boot load? **/dev/hda (MBR)**
11. Boot loader password configuration: none just press ok
12. Configure using DHCP – **No (Remove the check mark)**
13. Activate on Boot – **Yes (Keep the check mark)**
14. Network Configuration: **X** Activate on Boot (The network configuration
IP address: **192.168.1.2** You define (is located at /etc/sysconfig/
Netmask: **255.255.255.0** Fills in automatically (network-scripts/
Network: **192.168.1.0** Fills in automatically (ifcfg-eth0)
Broadcast: **192.168.1.255**
Hostname: **prompt.server**
Gateway: **192.168.1.254** Fills in automatically change to: **192.168.1.1**
Primary DSN: **192.168.1.1** Fills in automatically
Secondary DSN:
Tertiary DSN:
Host name: **Prompt**
15. Security Level: **No Firewall**
16. Default Language: **English USA**
17. Time zone: **Eastern** (or whatever)
18. Pick a root password **mysecret** You define
19. Software package to install:
When in doubt install it, it is okay to do all. However, you can skip KDE Desktop, games, scientific stuff and SQL database server
20. The operating system will now begin automatically installing and the second CD will be requested after a few minutes
21. Create Boot Disk: You should create a boot floppy
22. Graphical Interface: **Skip X Configuration** (Put a check mark)

23. Select Monitor: **OK**
24. Video Card Configuration: Take defaults
25. Default login: **Text** Then follow the instructions to restart using the boot disk

B. After the Operating System loads make these Modifications

1. Log in as follows:
localhost login: **root** (press **enter**)
password: **mysecret** (your password) (press **enter**)
2. Create a user account, set the Group ID and ownership and set up a password. – Call for help if not familiar with vi editor
cd /etc
groupadd -g 300 group
useradd -g group -u 300 edx

```
# passwd edx  
Changing password for user edx  
New password: prompt  
BAD PASSWORD: it is based on a dictionary word  
Retype password: prompt  
Passwd: all authentications tokens updated successfully
```

```
vi passwd the last entry in the file must be  
edx:x:300:300:Prompt:/home/edx:/bin/bash
```

Edit "Prompt" into this line to make Prompt the default system.
Reboot the system without the boot floppy and login as root

3. If you plan to use an IDE tape drive make this change in /etc (before touch)
vi rc.local
modprobe ide-scsi # or insmod ide-dcsi
hdparm -d0 /dev/hdd # (your tape drive hdc or hdd)
mt -f /dev/st0 stoptions no-blklimits
4. Set up a link to the tape drive if tape is used
ln -s /dev/st0 /dev/tape (the first letter is L)
5. If using IDE CD ROM for backup
vi rc.local
modprobe -a ide-scsi
6. Also, for IDE CD ROM backup
vi modules.conf
add this line: **options ide-cd ignore=hdc**

And, go to /etc and edit fstab changing /dev/cdrom to /dev/scd0 and take the udf off the line

7. Modify the VGA display by going to /etc/sysconfig

```
vi i18n
```

```
change: SYSFONT='latarcyrheb-sun16'
```

```
to be: SYSFONT="lat0-16" (the number after t is zero)
```

```
and, change: LANG="en-US.UTF-8"
```

```
to be: LANG="C"
```

8. Create edx directory and set up link

```
cd /
```

```
mkdir /usr/edx
```

```
chown edx /usr/edx
```

```
chgrp group /usr/edx
```

```
ln -s /usr/edx /edx ( the first letter on this line is a lower case L)
```

9. Define ownership and permissions if you will use a direct attach parallel printer port. Use the same approach for direct attached serial printers, for example /dev/ttyS3, and add **chmod a+x**

```
cd /dev
```

```
chmod a+rw /dev/lp0
```

```
chown edx /dev/lp0
```

```
chgrp group /dev/lp0
```

10. Define, then enter, the start up script

```
cd /etc/init.d
```

```
vi edx
```

```
cd /edx
```

```
./edxsport
```

```
sleep 3
```

```
su edx -c /edx/bin/ipledx
```

11. After saving the file set the ownership and permissions

```
chmod a+rw edx
```

```
chmod a+x edx
```

12. Create links to start up and shutdown

```
ln -s ../init.d/edx /etc/rc.d/rc0.d/K98edx
```

```
ln -s ../init.d/edx /etc/rc.d/rc1.d/K98edx
```

```
ln -s ../init.d/edx /etc/rc.d/rc2.d/S98edx
```

```
ln -s ../init.d/edx /etc/rc.d/rc3.d/S98edx
```

```
ln -s ../init.d/edx /etc/rc.d/rc5.d/S98edx (do this if using GUI)
```

13. Set #SYSLOG to auto start and set VGA colors

```
cd /etc
```

```
vi inittab
```

Change line 1 under "Run gettys in standard run level" to read as follows:

```
1:2345:respawn:/sbin/mygetty1 tty1
```

Also, comment out line 2 by placing an # at the beginning as shown:

```
#2:2345:respawn:/sbin/mingetty tty2
```

To complete this auto start for tty2 go to /dev and change ownership:

```
chown edx /dev/tty2
```

```
chgrp tty /dev/tty2
```

14. Next, go to /sbin and enter this file:

```
vi mygetty1
```

```
#!/bin/sh
```

```
setterm -background red -store > /dev/tty1
```

```
setterm -background blue -store > /dev/tty2
```

```
exec /sbin/mingetty tty1
```

15. After saving the file set the ownership and permissions

```
chmod a+x mygetty1
```

16. Setup Auto tape backup, if used

```
cd /usr/bin
```

```
vi prbackup
```

```
tar cf /dev/st0 /usr/edx*
```

17. Setup Auto CD ROM backup, if used

```
cd /usr/bin
```

```
vi prbackup
```

```
cd /
```

```
rm -f prompt.tgz
```

```
cd /edx
```

```
rm -f dump
```

```
tar czf /prompt.tgz .
```

```
cd /
```

```
mkisofs -J -r -T -o newcd.iso /prompt.tgz
```

```
chmod a+rw newcd.iso
```

```
mount -t iso9660 -o loop newcd.iso /mnt/cdrom
```

```
cdrecord -v dev=0,0,0 blank=fast
```

```
cdrecord -v dev=0,0,0 newcd.iso
```

18. After saving the file set the ownership and permissions

```
chmod a+rw prbackup  
chmod a+x prbackup  
chown edx prbackup  
chgrp group prbackup
```

19. Tell crontab about the auto backup

```
cd /etc
```

```
vi crontab
```

Change MAIL TO=root to MAIL TO=edx

Add a new line before 02 4 * * * root run-parts /etc/cron.daily

```
02 0 * * * root prbackup /etc/cron.daily
```

20. Edit the path in .bash_profile (/home/edx) by adding as below:

```
PATH=$PATH:$HOME/bin:./:edx/bin
```

Then make the following as the last line in this file:

```
edx -s -l rollon -p 10 ( after the -s is - lower case L)
```

C. Install HylaFAX – To support PROMPT automatic fax

1. Copy the HylaFAX installation files shown below into /root
hylafax-4.1.7-1rh9.i386.rpm
public_key.asc

2. To mount the CD Rom the commands are:

```
mount /dev/cdrom
```

If this does not work use:

```
mount /dev/scd0 /mnt/cdrom
```

Once mounted copy the files with these commands:

```
cd /mnt/cdrom
```

```
cp * /root
```

To unmount do this:

```
cd /root
```

```
umount /mnt/cdrom
```

3. To install HylaFax use this command:

```
rpm -ivh -- nodeps hylafax*rpm (after -ivh are two minus signs)
```

4. We use the Actiontec External 56K/V92 Modem and install it on Serial port 1 that is ttyS0 to Linux. Have the modem connected at this time because it is needed for the setup we are about to do.
5. Next, run **faxsetup** and when it completes it will automatically go into **faxaddmodem** however, each can be run independently later if needed. A long number of questions will be ask and the correct answers are automatically tendered. But you will have to specify the serial port as: **ttyS0** (assuming you use serial port 1) and to prevent the fax from answering the phone set the number of rings to **0**. Also, you will have to enter the fax phone number as the “phone number of the fax modem” and also as the “local identification string”.(don’t confuse this with dialing rules).
6. After set up configuration you have to edit the configuration file for hardware flow control in /var/spool/hylafax/etc as follows:
vi config.ttyS0 (or the serial port you used if not ttyS0)

Page down until you find Class1Cmd:

Just after this line you will create a new line to read:

Class1HFLOCmd: FLOW_RTSETS # command to set hardware flow control

7. Finally go to /etc and edit inittab to include this line just after
si in # System initialization
mo:2345:respawn:/usr/sbin/faxgetty ttyS0 (if you used S0)
8. Go to /etc/rc.local insert this line
stty -F /dev/ttyS0 crtscts
9. Run ntsysv and make sure the HylaFax service is being started.
FYI the cover page is at /var/spool/hylafax/etc/cover.templ

D. Install MIME-Lite – To support PROMPT Automatic email & set backtab

1. Copy the MIME-Lite installation file shown below into /root
MIME-Lite-2.117.tgz
2. Execute this command to extract the appropriate files for installation and create the MIME-Lite2.117 directory
tar zxvf MIME-Lite-2.117.tgz
3. To install execute these instructions:
cd MIME-Lite-2.117
perl Makefile.PL
make test
make install

4. Change sendmail to masquerade the domain name of your real email
su -
cd /etc/mail
vi sendmail.mc

You will find the following on the first page of this file:

```
dnl define('SMART_HOST',`smtp.your.provider')  
IF you wish to send emails using your ISP smtp server eliminate the "dnl"  
and change "your.provider" to be the server name given to you by your  
ISP.
```

Next, find the following lines (appx 5 pages down) and change as shown
LOCAL_DOMAIN(`localhost.localdomain')dnl
Change to: **'Prompt.bellsouth.net'** substuting the domain name of your
email service for bellsouth.net
dnl MASQUERADE_AS ('your_domain.com')dnl
Change to **'bellsouth.net'** substuting the domain name of your email
service for bellsouth.net and remove the text "dnl "
before"MASQUARADE"
dnl (FEATURE(masquarade_envelope)dnl
Remove the text "dnl " before "FEATURE"

5. After saving the above file run this command:
m4 /etc/mail/sendmail.mc > /etc/mail/sendmail.cf
6. Also, be sure that /etc/resolv.conf has the DNS address of the ISP that provides the email service, (for example - nameserver 216.24.27.3) and in /etc/mail edit the file local-host-names to include bellsouth.net substuting
bellsouth.net with the domain name of your email service then, Sendmail must be restarted.
7. Remember to edit /edx/edxdocpb.sys to change the response phone number and the sending email address.

E. Install Broadcom NIC driver if needed for Dell Server

1. Copy the NIC driver installation file shown below into /root
bcm5700-8.1.55.tar.gz
2. Execute this command to extract the appropriate files for installation and create the bcm5700-8.1.55 directory
tar zxvf bcm5700-8.1.55.tar.gz
- 3.To install execute these instructions:

```
cd bcm5700-8.1.55  
cd src  
make  
make install
```

F. Load the PROMPT Business System Startup system

1. The file prompt-tgz can be downloaded from prompt-usa.com once authorization is obtained by submitting the download request form found on the web site
2. Place the downloaded file in the directory /edx.
3. To extract the programs and files from prompt.tgz, type this command at # /edx:
tar xzvf prompt.tgz
The files will be extracted and placed in the /edx directory
4. Change owner and group of /edx off / directory and /edx off /home
chown edx edx
chgrp group edx
5. Remove the load file – prompt.tgz
rm prompt.tgz
remove regular file 'prompt.tgz'? **y**
6. From /edx using a root level login (#) copy these files to fix backtab on the server
cp backtab.map /lib/kbd/keymaps/include
cp keyboard /etc/sysconfig Overwrite = y
7. If the system is coming up at run level 5 because of GUI and you want to change it to come up at run level 3, do this:
Go to /etc/inittab
Find this line: Id:5:initdefault:
Change the 5 to a 3
8. Request the PROMPT Security key by sending an email to garvin@prompt-usa.com with your Hdaddr and, of course your company name and contact name. Your Hwaddr is obtained at the root level (#) with the command ifconfig.
9. Go to www.prompt-usa.com and print the Getting Started instructions found under Support.