

Linux RedHat v.5.1 (Manhattan) installeerimine

PC-le, kus enne on Windows95

Pentium 100 MHz

RAM 32 MB

HDD : Quantum Fireball EL5.1A ; 5,1 GB

Windows95b partititions (Partition Magic'uga):

C: FAT32; 1020,0 MB; clusters 8 kB; Primary,Active; Cyl 0 - 129

D: FAT32; 2000,0 MB; clusters 8 kB; Logical Cyl 130 - 384

E: FAT16; 729,5 MB; clusters 16 kB; Logical Cyl 385 - 477

Extended partition : 2769 MB, Cyl 130 - 482

Free : Cyl 478 - 622 - siia tuleb Linux!

Monitor : Yakumo, 14", SVGA, NI, Hfreq=31,5/35,5/48 kHz, Vfreq=50...90Hz

Video Card : S3 Trio32/64 PCI, 1 MB

Mouse : Logitech Serial, 3 buttons, COM1

Keyboard : Standard, 101/102 - keys; Estonian Layout

Sound Card: Crystal 16bit PnP, CS4237B

Red Hat 5.1 allikas : CD, Cheapbytes, 633 MB; 3150 f, 193 k.

Installeerimismeetod : lokaalselt CD-ROM-lt

- 1) Boot-flopi sisse ja alglaadimine: "Welcome to Red Hat Linux! <Enter>
Loading initrd.img
Loading vmlinuz....

- 2) Choose a Language : **English**

- 3) Keyboard type : tr-f-latin5, tr-q-latin5, tralt, trf, trq, uk, us-prokey, **us**, ...
(Saab hiljem muuta : /etc/sysconfig/keyboard-s käsitsi või programmiga **kbdconfig**)

- 4) Installation Method: **Local CDROM**
NFS image
Hard drive
FTP
SMB image

Note : insert your Red Hat CD into your CD drive now

- 5) Installation Path : **Install** | Upgrade

- 6) SCSI configuration: Do you have any SCSI adapters? **No**

- 7) Disk Setup :
Disk Druid | **fdisk** | Back
(Fdisk on paindlikum, Disk Druid tahab ise palju asju ära teha)

8) Partition Disks :

This is the **fdisk** program for partitioning you drive. It is running on /dev/hda.

```
/dev/hda      -      Model QUANTUM FIREBALL EL5.1A
              Done |      Edit   |      Back
```

9) This is the **fdisk** program for partitioning you drive.

Command (m for help) : **m**

```
a - toggle a bootable flag
b - edit bsd disklabel
c - toggle to dos compatibility flags
d - delete the partition
l - list known partition types
m - print this menu
n - add a new partition
p - print the partition table
q - quit without saving changes
t - change a partitions system id
u - change display/entry units
v - verify the partition table
w - write table to disk and exit
x - extra functionality (experts only)
```

Command (m for help) : **l** (L)

0 Empty	9 AIX bootable	75 PC/IX	b7 BSDI fs
1 DOS 12-bit FAT	a OS/2 Boot Manag	80 Old Minix	b8 BSDI swap
2 XENIX root	b Win95 FAT32	81 Linux/minix	c7 Syrinx
3 XENIX usr	40 Venix 80286	82 Linux swap	db CP/M
4 DOS 16-bit < 32M	51 Novell ?	83 Linux native	e1 DOS Access
5 Extended	52 Microport	93 Amoeba	e3 DOS R/O
6 DOS 16-bit >=32M	63 GNU HURD	94 Amoeba BBT	f2 DOS Secondary
7 OS/2 HPFS	64 Novell Netware	a5 BSD/386	ff BB5
8 AIX	65 Novell Netware		

Command (m for help) : **p**

Disk /tmp/hda : 255 heads, 63 sectors, 623 cylinders

Units = cylinders of 16065 * 512 bytes (siit – 1 cyl » 8 MB)

Device	Boot	Begin	Start	End	Blocks	ID	System
/tmp/hda1	*	1	1	130	1044193+	b	Win95 FAT32
/tmp/hda2		131	131	483	2835472	5	Extended
/tmp/hda5		131	131	385	2048256	b	Win95 FAT32
/tmp/hda6		386	386	478	746991	6	DOS 16-bit >=32M

10) Linuxi partitsioonide root, usr ja swap tegemine :

Kuna juba on 1 primary ja 1 extended, saab veel teha 2 primary't ja ülejäänud panna juba olemasoleva extended partitsiooni sisse, kus on ruumi cyl 479 – 483 vahel.

Command (m for help) : **n**

Command action l - logical (5 or over)
 p - primary partition (1-4)

l

First cylinder(479 - 483) : **479**

Last cylinder or +size or +sizeM or +sizeK ([479]-483) : **483**

Command (m for help) : **t**

Partition number (1-7) : **7**

Hex code (type L to list codes) : **82** - sellega on tehtud **swap**-partitsioon.

Command (m for help) : **n**

Command action l - logical (5 or over)

 p - primary partition (1-4)

p

Partition number (1-4) : **3**

First cylinder(484 - 623) : **484**

Last cylinder or +size or +sizeM or +sizeK ([484]-623) : **499** - **root**-partitsioon

Command (m for help) : **n**

Command action l - logical (5 or over)

 p - primary partition (1-4)

p

Partition number (1-4) : **4**

First cylinder(500-623) : **500**

Last cylinder or +size or +sizeM or +sizeK ([500]-623) : **623** - **usr**- partitsioon

Command (m for help) : **p**

Disk /tmp/hda : 255 heads, 63 sectors, 623 cylinders

Units = cylinders of 16065 * 512 bytes

Device	Boot	Begin	Start	End	Blocks	ID	System
/tmp/hda1	*	1	1	130	1044193+	b	Win95 FAT32
/tmp/hda2		131	131	483	2835472	5	Extended
/tmp/hda3		484	484	499	128520	83	Linux native
/tmp/hda4		500	500	623	996030	83	Linux native
/tmp/hda5		131	131	385	2048256	b	Win95 FAT32
/tmp/hda6		615	615	691	746991	6	DOS 16-bit >=32M
/tmp/hda7		479	479	483	40131	82	Linux swap

Command (m for help) : **w**

Märkus : Logical (l) diske saab teha ainult Extended partitsiooni (hda2) sisse, kuhu enne tuleb teha vaba ala ntx Partition Magic'uga. Nende (l) mahasaamisega (d) võib olla probleeme; viimastel võib muuta ID=83->6 (DOS) ja siis juba ntx PartMagicuga kustutada. Ka ei anna teha teist Extended ala teha ID =83->5 teel. Max saab antud juhul teha juurde 2 primary't (p).

11) Partition Disks :

/dev/hda	-	Model QUANTUM FIREBALL EL5.1A
Done		Edit Back

12) Current Disk Partitions

Mount Point	Device	Requested/Actual	Type
	hda1	1019M	Win95 FAT32
	hda3	125M	Linux native
	hda4	972M	Linux native
	hda5	2000M	Win95 FAT32
	hda6	729M	DOS 16-bit >=32
	hda7	39M	Linux swap

Drive Summaries:

Drive	Geom(C/H/S)	Total	Used	Free
hda	[623/255/63]	4886M	4886M	0M

Edit | Delete | OK | Back

Root / ja /usr 'mount points' on vajalikud, soovitatav on teha sama ka FAT16-partitsiooniga, antud juhul hda1 (Linux) ehk C:\ (Windows) , mis olgu näiteks **/dos**

13) Current Disk Partitions

Mount Point	Device	Requested/Actual	Type
	hda1	1019M	Win95 FAT32
/	hda3	125M	Linux native
/usr	hda4	972M	Linux native
	hda5	2000M	Win95 FAT32
/dos	hda6	729M	DOS 16-bit >=32
	hda7	39M	Linux swap

Drive Summaries:

Drive	Geom(C/H/S)	Total	Used	Free
hda	[623/255/63]	4886M	4886M	0M

Edit | Delete | **OK** | Back

14) Active Swap space :

```

[*] /dev/hda7          479          483          40131 kB
[*] Check for bad blocks...
Formatting swap space....
Scanning.....

```

Märkus : [] märkimine käib <Space> - klahviga (<Space> Selects; <Tab>/<Alt-Tab> between elements; <F12> next screen)

15) Partitions To Format :

What partitions would you like to format? We strongly suggest formatting all of the system partitions, including /, /usr, and /var. There is no need to format /home or /usr/local if they have already been configured during a previous install.

```

[*] /dev/hda3          /
[*] /dev/hda4          /usr
[*] Check for bad blocks during format

```

16) Components to Install :

Linuxil on tunduvalt rohkem valikuvõimalusi kui näiteks Windowsis ja siin peab teadma, mida valida. Kui ruumi on, võib muidugi kõik panna. Kuna antud arvuti pole võrgus, siis vastavaid programme pole mõtet installierida.

- Printer Support
- X-Window system
- Mail/WWW/News/ Tools
- DOS/Windows Connectivity
- File Manager
- Graphic Manipulation
- X-Games
- Console Games
- X Multimedia Support
- Console Multimedia
- Print Server
- Networked Workstation
- Dialup Workstation
- News Server
- NFS Server
- SMB (Samba) Connectivity
- IPX/Netware TM Connectivity
- Anonymous FTP/Gopher Server
- Web Server
- DNS Name Server
- Postgres (SQL) Server
- Network Management Workstation
- TeX Document Formatting
- Emacs
- Emacs with X window
- C development
- Development Libraries
- C++ Development
- X Development
- Extra Documentation
- Everything

[*] Select individual packages - *NB!*

17) Select Individual Packages.....

Size 533 MB

18) Unresolved Dependencies

Some of the packages you have selected to install require packages you have not selected. If you just select OK all of those required packages will be installed.

<u>Package</u>	<u>Requirement</u>
finger	netkit-base

.....

[*] Install packages to satisfy dependencies . <OK>

See teade ei tarvitse aruka valiku puhul tulla. Lisati mõni pakett.

19) Install log

A complete log of you installation will be in /tmp/install.log after rebooting you system

20) Running : Making ext2 filesystem on /dev/hda3.....

Making ext2 filesystem on /dev/hda4.....

21) Install Status :

	<u>Packages</u>	<u>Bytes</u>	<u>Time</u>
Total	495	536M	0:17.33
Completed			
Remaining			

22) Probing Result: Probing found a serial mouse on **port cua0** <OK>

23) Configure Mouse : What type of mouse do you have?

No mouse	Microsoft compatible(serial)	Logitech Mouseman
Mouse systems	PS/2 Mouse	Microsoft Bus Mouse
Logitech Bus Mouse	ATI Bus Mouse	Logitech Mouse (serial,old type,C7)
MM Series	MM Hit Tablet	

[*] Emulate 3 Buttons? - soovitatakse X-Windowsi kasutatajale

24) Mouse Port :

/dev/cua0 (COM1 under DOS)
.....

25) PCI Probe :

PCI probing found a:

PCI entry : Trio32/Trio64

X Server : S3 <OK>

Installeeris veel paar paketti.

26) Monitor Setup :

Custom

27) Monitor Setup : Now we want to set the specifications of the monitor.

..... /usr/X11R6/lib/X11/doc/Monitors

28) Monitor Setup (Continued) :

Standard VGA , 640x480 @ 60 Hz

Super VGA , 800x600 @ 56 Hz

8514 Compatible , 1024x768 @ 87 Hz Interlaced (no 800x600)

Super VGA 1024x768 @ 87 Hz interlaced, 800x600 @ 56 Hz

Extended Super VGA , 800x600 @ 60 Hz , 640x480 @ 72 Hz

Non-Interlaced SVGA, 1024x768 & 60 Hz 800x600 & 72 Hz

High Frequency SVGA , 1024x768 @ 70 Hz

Monitor that can do 1280x1024 @ 60 Hz

Monitor that can do 1280x1024 @ 74 Hz

Monitor that can do 1280x1024 @ 76 Hz

29) Monitor Setup (Continued) :

Vert sync range.... 50-70
50-90
 50-100
 40-150

30) Probing To Begin :

Xconfigurator will now run the X server you selected to probe various information about your video card. It is normal for the screen to blink several times. **<OK>**

Plinkis 3-4 korda

31) Probing finished :

Xconfigurator has successfully probed you video card. The default video mode will be :

Color depth : 8 bits per pixel
 Resolution : 1024x768

Do you want to accept this setting, or select for yourself?

Use Default | **Let me choose**

32) Select video modes:

8 bit modes allow for 256 colors
 16 bit modes allow for 64k colors
 24 bit modes allow for True colors

<u>8 bit</u>	<u>16 bit</u>	<u>24 bit</u>
☐ 640x480	☐ 640x480	
☒ 800x600	☒ 800x600	
☒ 1024x768		

33) Network Configuration: **No**34) Configure Timezones:

☒ Hardware clock set to GMT

Europe/Tallinn

.....

35) Services:

What services should be automatically started? - *Vaikimisi olid ja jätsin:*

apmd	inet	nfs	smb
atd	kerneld	nfsfs	snmpd
crond	keytable	pcmcia	sound
dhcpcd	lpd	portmap	syslog
gpm	named	random	
httpd	network	sendmail	

36) Configure Printer: **No**37) Root Password : xxxxxxxxxxxx
xxxxxxxxxx38) Bootdisk : **Yes**

- 39) Bootdisk : Insert a blank floppy in the first drive /dev/fd0
 Tühi flopi sisse ja <OK>
 Creating bootdisk....
- 40) LILO Installation :
 Where do you want to install the bootloader?
 /dev/hda Master boot record - **No !!!!!**
 /dev/hda3 First sector of boot partition - *Põhimõtteliselt võiks*
 OK | **Skip** | Back
- 41) Done : Congratulations..... <OK>. Rebooting....(*LILO-boot flopi sees*)
- 42) **Red Hat Linux release 5.1 (Manhattan)**
 Kernel 2.0.34 on an i586

 localhost login : root
 Password : xxxxxxxxxx

 [root @ localhost /root]#
- 43) Üks võimalus buutida Linuxit üles ilma Lilo-boot flopita on kasutada **loadlin.exe**'t

]# cp /boot/vmlinuz-2.0.34-0.6 /tmp/vmlinuz
]# mv /tmp/vmlinuz /dos/vmlinuz ;
 *Windows95-s teha kaust C:\Linux, kuhu viia kernel **vmlinuz** ja **loadlin.exe***

 Autoexec.bat'i kirjutada lisaread :

 goto %config%
 :linux
 :win95
 mode con codepage prepare=((775) C:\WINDOWS\COMMAND\ega3.cpi)
 mode con codepage select=775
 Keyb EE,,C:\Windows\Command\Keybrd1.EE
 SET PATH=C:\TOOLS;

 Config.sys'i kirjutada lisaread :

 [menu]
 menuitem=Win95, Boot to Windows 95
 menuitem=Linux, Boot to Linux
 menucolor=15,1
 menudefault=Win95, 10
 [linux]
 shell=C:\Linux\loadlin.exe C:\Linux\vmlinuz root=/dev/hda3 ro
 [win95]
 device=C:\WINDOWS\COMMAND\display.sys con=(ega,,1)
 Country=372,775,C:\WINDOWS\COMMAND\country.sys

Sellisel juhul tuleb peale alglaadimise “Starting Windows95...” ette sinine ekraan valikuga :

1. Boot to Windows95
2. Boot to Linux

Vaikimisi laaditakse 10 sekundi pärast üles Windows95.