

Debian 4 Install (117)

Debian 4.0r4a installation into a custom VM. Non-default partitions.

Requirements:

- Debian DVD ISO files
<http://iso.linuxquestions.org/>
- VMWare Server 1.05 or higher
<http://www.vmware.com/products/server/>

Create VM:

- Custom
- OS: Linux, Version: Other Linux 2.6.x kernel
- Name: Debian-4 or whatever you like
- Access rights: Not private (uncheck)
- VM Account: User that powers on the VM
- # processors: One
- 256K memory
- Bridged networking
- SCSI Adapter: LSI Logic
- Create a new virtual disk
- SCSI
- 5 GB drive, do not allocate space now (uncheck)
- Disk file: use default

Desired Installation:

Location	Type	Boot Code	Usage	Size
MBR		Microsoft		
/dev/sda1	Primary		swap	512 MB
/dev/sda2	Primary	GRUB	boot	100 MB
/dev/sda3	Primary		/	3.2 GB
/dev/sda4	Extended			
/dev/sda5	logical		/var	400 MB
/dev/sda6	logical		/home	200 MB

DVD and Floppy

- Edit VM settings
- Disconnect floppy (Remove check: Connect at power on, Use physical drive)
- "Insert" Linux Installation DVD (Check: Connect at power on, Use ISO image: and browse to Debian ISO file: debian-40r4a-i386-DVD-1.iso)
- Click OK to accept new settings

Start VM

- Edit VM settings



```
tall.386/vmlinuz
Enabling fast FPU save and restore... done.
Enabling unmasked SIMD FPU exception support... done.
Initializing CPU#0
PID hash table entries: 2048 (order: 11, 8192 bytes)
Console: colour UGA+ 80x25
Dentry cache hash table entries: 32768 (order: 5, 131072 bytes)
Inode-cache hash table entries: 16384 (order: 4, 65536 bytes)
Memory: 252880k/262144k available (1499k kernel code, 8616k reserved, 599k data,
 256k init, 0k highmem)
Checking if this processor honours the WP bit even in supervisor mode... Ok.
Calibrating delay using timer specific routine.. 5207.56 BogoMIPS (lpj=10415139)
Security Framework v1.0.0 initialized
SELinux: Disabled at boot.
Capability LSM initialized
Mount-cache hash table entries: 512
CPU: Trace cache: 12K uops, L1 D cache: 8K
CPU: L2 cache: 512K
Compat vDSO mapped to fffff000.
CPU: Intel(R) Pentium(R) 4 CPU 2.60GHz stepping 08
Checking 'hlt' instruction... OK.
ACPI: Core revision 20060707
ENABLING IO-APIC IRQs
..TIMER: vector=0x31 apic1=0 pin1=2 apic2=-1 pin2=-1
```

[!] Choose language

Please choose the language used for the installation process. This language will be the default language for the final system.

This list is restricted to languages that can currently be displayed.

Choose a language:

Albanian	- Shqip	↑
Arabic	- عربي	
Basque	- Euskara	
Belarusian	- Беларуская	
Bosnian	- Bosanski	
Bulgarian	- Български	
Catalan	- Català	
Chinese (Simplified)	- 中文(简体)	
Chinese (Traditional)	- 中文(繁體)	
Croatian	- Hrvatski	
Czech	- Čeština	
Danish	- Dansk	
Dutch	- Nederlands	
English	- English	↓

<Go Back>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!] Choose language

Based on your language, you are probably located in one of these countries or regions.

Choose a country, territory or area:

Australia
Botswana
Canada
Hong Kong
India
Ireland
New Zealand
Philippines
Singapore
South Africa
United Kingdom
United States
Zimbabwe
other

<Go Back>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!] Select a keyboard layout

Keymap to use:

- American English
- Belarusian
- Belgian
- Brazilian (ABNT2 layout)
- Brazilian (EUA layout)
- British English
- Bulgarian
- Canadian French
- Croatian
- Czech
- Danish
- Dutch
- Dvorak
- Estonian
- Finnish
- French
- German
- Greek
- Hebrew

<Go Back>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

Detecting hardware to find CD-ROM drives

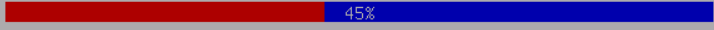
64%

Loading module 'pdc202xx_01d' for 'IDE chipset support'...

Loading additional components

45%

Retrieving mdcfg-utils

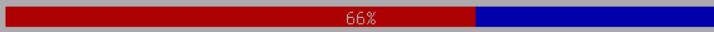
A progress bar with a red segment on the left and a blue segment on the right. The red segment represents 45% of the total progress.

Configuring the network with DHCP

66%

This may take some time.

<Cancel>

A progress bar with a red segment on the left and a blue segment on the right. The red segment represents 66% of the total progress.

[!] Configure the network

Please enter the hostname for this system.

The hostname is a single word that identifies your system to the network. If you don't know what your hostname should be, consult your network administrator. If you are setting up your own home network, you can make something up here.

Hostname:

debian-4

<Go Back> <Continue>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!] Configure the network

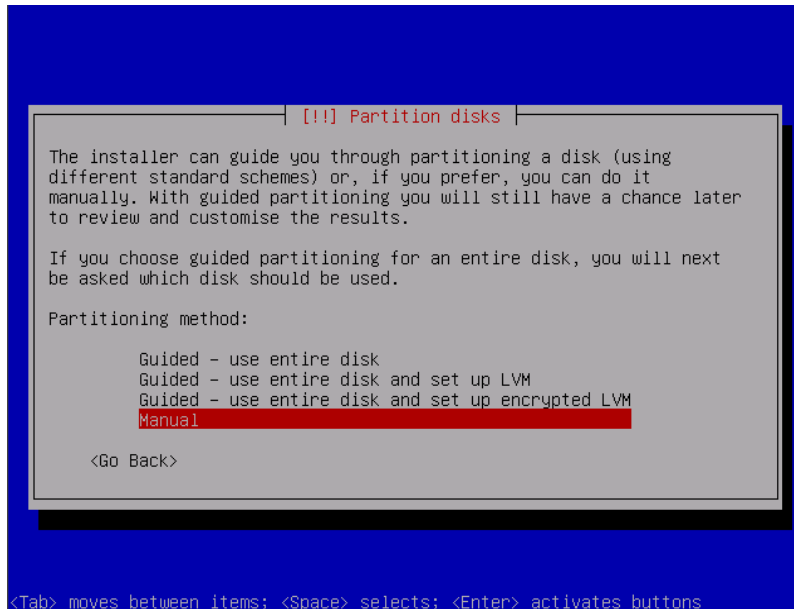
The domain name is the part of your Internet address to the right of your host name. It is often something that ends in .com, .net, .edu, or .org. If you are setting up a home network, you can make something up, but make sure you use the same domain name on all your computers.

Domain name:

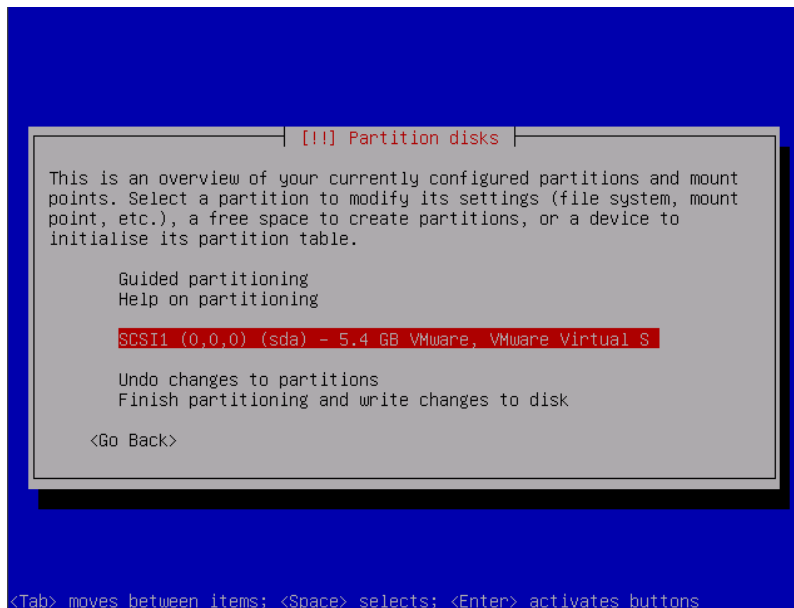
localdomain

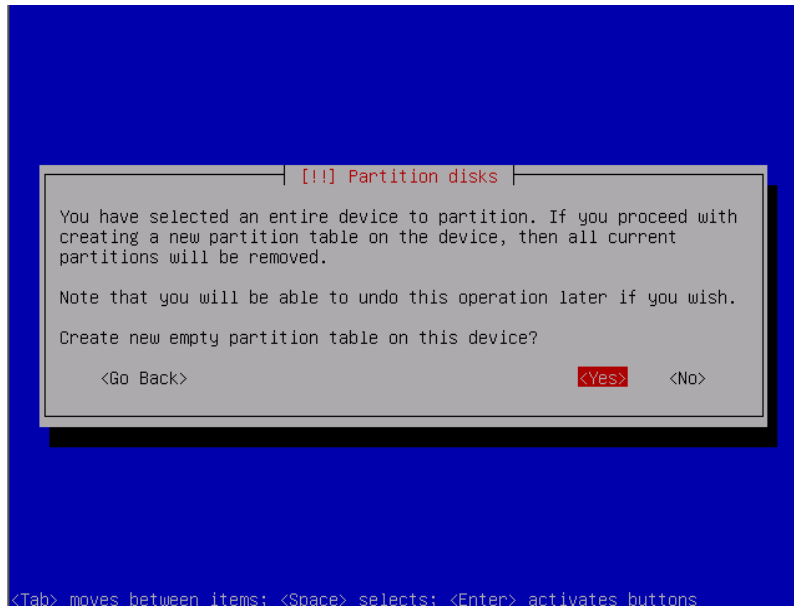
<Go Back> <Continue>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

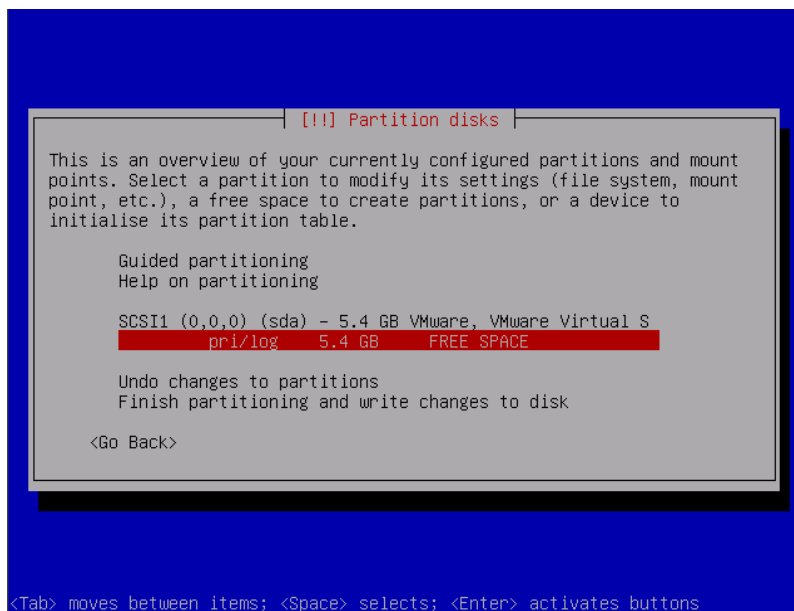


- Choose Manual and press Enter





- Select Yes to create new partition, then press Enter



Select the new partition and press Enter

[!!] Partition disks

How to use this free space:

Create a new partition

Automatically partition the free space

Show Cylinder/Head/Sector information

<Go Back>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!!] Partition disks

The maximum size you can use is 5.4 GB.

Hint: Use "20%" (or "30%", etc.) for 20% (resp. 30%, etc.) of the available free space for this partition. Use "max" as a shortcut for the maximum allowed size.

New partition size:

512 MB

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<Continue>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!!] Partition disks

Type for the new partition:

Primary

Logical

<Go Back>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!!] Partition disks

Please choose whether you want the new partition to be created at the beginning or at the end of the available space.

Location for the new partition:

Beginning

End

<Go Back>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!!] Partition disks

You are editing partition #1 of SCSI1 (0,0,0) (sda). No existing file system was detected in this partition.

Partition settings:

Use as:	Ext3 journaling file system
Mount point:	/
Mount options:	defaults
Label:	none
Reserved blocks:	5%
Typical usage:	standard
Bootable flag:	off

Done setting up the partition
Copy data from another partition
Delete the partition

<Go Back>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!!] Partition disks

How to use this partition:

- Ext3 journaling file system
- Ext2 file system
- ReiserFS journaling file system
- JFS journaling file system
- XFS journaling file system
- FAT16 file system
- FAT32 file system
- swap area
- physical volume for encryption
- physical volume for LVM
- physical volume for RAID
- do not use the partition

<Go Back>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!!] Partition disks

You are editing partition #1 of SCSI1 (0,0,0) (sda). No existing file system was detected in this partition.

Partition settings:

Use as: swap area
Bootable flag: off

Done setting up the partition
Copy data from another partition
Delete the partition

<Go Back>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!!] Partition disks

This is an overview of your currently configured partitions and mount points. Select a partition to modify its settings (file system, mount point, etc.), a free space to create partitions, or a device to initialise its partition table.

Guided partitioning
Help on partitioning

SCSI1 (0,0,0) (sda) - 5.4 GB VMware, VMware Virtual S
#1 primary 509.9 MB f swap swap
pri/log 4.9 GB FREE SPACE

Undo changes to partitions
Finish partitioning and write changes to disk

<Go Back>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!] Partition disks

How to use this free space:

Create a new partition

Automatically partition the free space

Show Cylinder/Head/Sector information

<Go Back>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!] Partition disks

The maximum size you can use is 4.9 GB.

Hint: Use "20%" (or "30%", etc.) for 20% (resp. 30%, etc.) of the available free space for this partition. Use "max" as a shortcut for the maximum allowed size.

New partition size:

100 MB

<Go Back>

<Continue>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!!] Partition disks

Type for the new partition:

Primary
Logical

<Go Back>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!!] Partition disks

Please choose whether you want the new partition to be created at the beginning or at the end of the available space.

Location for the new partition:

Beginning
End

<Go Back>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

```

[!!] Partition disks

You are editing partition #2 of SCSI1 (0,0,0) (sda). No existing file
system was detected in this partition.

Partition settings:

Use as:                               Ext3 journaling file system
Mount point:                           /
Mount options:                          defaults
Label:                                  none
Reserved blocks:                        5%
Typical usage:                          standard
Bootable flag:                          off

Done setting up the partition
Copy data from another partition
Delete the partition

<Go Back>

```

<Tab> moves between items; <Space> selects; <Enter> activates buttons

```

[!!] Partition disks

Mount point for this partition:

/ - the root file system
/boot - static files of the boot loader
/home - user home directories
/tmp - temporary files
/usr - static data
/var - variable data
/srv - data for services provided by this system
/opt - add-on application software packages
/usr/local - local hierarchy
Enter manually
Do not mount it

<Go Back>

```

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!!] Partition disks

You are editing partition #2 of SCSI1 (0,0,0) (sda). No existing file system was detected in this partition.

Partition settings:

Use as: Ext3 journaling file system
Mount point: /boot
Mount options: defaults
Label: none
Reserved blocks: 5%
Typical usage: standard
Bootable flag: off

Done setting up the partition
Copy data from another partition
Delete the partition

<Go Back>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!!] Partition disks

This is an overview of your currently configured partitions and mount points. Select a partition to modify its settings (file system, mount point, etc.), a free space to create partitions, or a device to initialise its partition table.

Guided partitioning
Help on partitioning

SCSI1 (0,0,0) (sda) - 5.4 GB VMware, VMware Virtual S
#1 primary 509.9 MB f swap swap
#2 primary 98.7 MB f ext3 /boot
pri/log 4.8 GB FREE SPACE

Undo changes to partitions
Finish partitioning and write changes to disk

<Go Back>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!!] Partition disks

How to use this free space:

Create a new partition

Automatically partition the free space

Show Cylinder/Head/Sector information

<Go Back>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!!] Partition disks

The maximum size you can use is 4.8 GB.

Hint: Use "20%" (or "30%", etc.) for 20% (resp. 30%, etc.) of the available free space for this partition. Use "max" as a shortcut for the maximum allowed size.

New partition size:

3.2 GB

<Go Back>

<Continue>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!!] Partition disks

Type for the new partition:

Primary
Logical

<Go Back>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!!] Partition disks

Please choose whether you want the new partition to be created at the beginning or at the end of the available space.

Location for the new partition:

Beginning
End

<Go Back>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!!] Partition disks

You are editing partition #3 of SCSI1 (0,0,0) (sda). No existing file system was detected in this partition.

Partition settings:

Use as: Ext3 journaling file system
Mount point: /
Mount options: defaults
Label: none
Reserved blocks: 5%
Typical usage: standard
Bootable flag: off

Done setting up the partition
Copy data from another partition
Delete the partition

<Go Back>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!!] Partition disks

This is an overview of your currently configured partitions and mount points. Select a partition to modify its settings (file system, mount point, etc.), a free space to create partitions, or a device to initialise its partition table.

Guided partitioning
Help on partitioning

SCSI1 (0,0,0) (sda) - 5.4 GB VMware, VMware Virtual S
#1 primary 509.9 MB f swap swap
#2 primary 98.7 MB f ext3 /boot
#3 primary 3.2 GB f ext3 /
pri/log 1.6 GB FREE SPACE

Undo changes to partitions
Finish partitioning and write changes to disk

<Go Back>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!!] Partition disks

How to use this free space:

Create a new partition

Automatically partition the free space

Show Cylinder/Head/Sector information

<Go Back>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!!] Partition disks

The maximum size you can use is 1.6 GB.

Hint: Use "20%" (or "30%", etc.) for 20% (resp. 30%, etc.) of the available free space for this partition. Use "max" as a shortcut for the maximum allowed size.

New partition size:

400 MB

<Go Back>

<Continue>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!!] Partition disks

Type for the new partition:

Primary
Logical

<Go Back>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!!] Partition disks

Please choose whether you want the new partition to be created at the beginning or at the end of the available space.

Location for the new partition:

Beginning
End

<Go Back>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

```

[!] Partition disks

You are editing partition #5 of SCSI1 (0,0,0) (sda). No existing file
system was detected in this partition.

Partition settings:

Use as:                               Ext3 journaling file system
Mount point:                           /home
Mount options:                          defaults
Label:                                  none
Reserved blocks:                        5%
Typical usage:                          standard
Bootable flag:                          off

Done setting up the partition
Copy data from another partition
Delete the partition

<Go Back>

```

<Tab> moves between items; <Space> selects; <Enter> activates buttons

```

[!] Partition disks

Mount point for this partition:

/ - the root file system
/boot - static files of the boot loader
/home - user home directories
/tmp - temporary files
/usr - static data
/var - variable data
/srv - data for services provided by this system
/opt - add-on application software packages
/usr/local - local hierarchy
Enter manually
Do not mount it

<Go Back>

```

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!!] Partition disks

You are editing partition #5 of SCSI1 (0,0,0) (sda). No existing file system was detected in this partition.

Partition settings:

Use as: Ext3 journaling file system
Mount point: /var
Mount options: defaults
Label: none
Reserved blocks: 5%
Typical usage: standard
Bootable flag: off

Done setting up the partition

Copy data from another partition
Delete the partition

<Go Back>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!!] Partition disks

This is an overview of your currently configured partitions and mount points. Select a partition to modify its settings (file system, mount point, etc.), a free space to create partitions, or a device to initialise its partition table.

Guided partitioning
Help on partitioning

SCSI1 (0,0,0) (sda) - 5.4 GB VMware, VMware Virtual S

#1	primary	509.9 MB	f	swap	swap
#2	primary	98.7 MB	f	ext3	/boot
#3	primary	3.2 GB	f	ext3	/
#5	logical	403.0 MB	f	ext3	/var
	logical	1.2 GB		FREE SPACE	

Undo changes to partitions
Finish partitioning and write changes to disk

<Go Back>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!!] Partition disks

How to use this free space:

Create a new partition

Automatically partition the free space

Show Cylinder/Head/Sector information

<Go Back>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!!] Partition disks

The maximum size you can use is 1.2 GB.

Hint: Use "20%" (or "30%", etc.) for 20% (resp. 30%, etc.) of the available free space for this partition. Use "max" as a shortcut for the maximum allowed size.

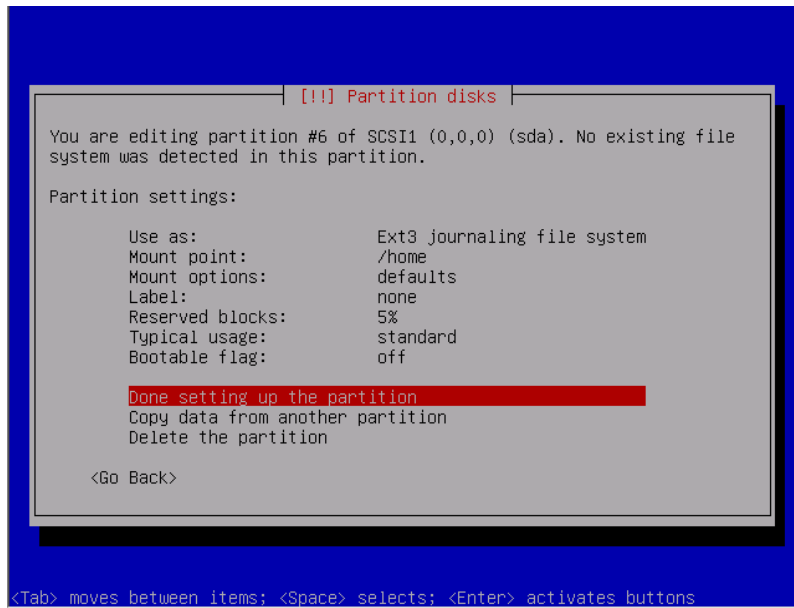
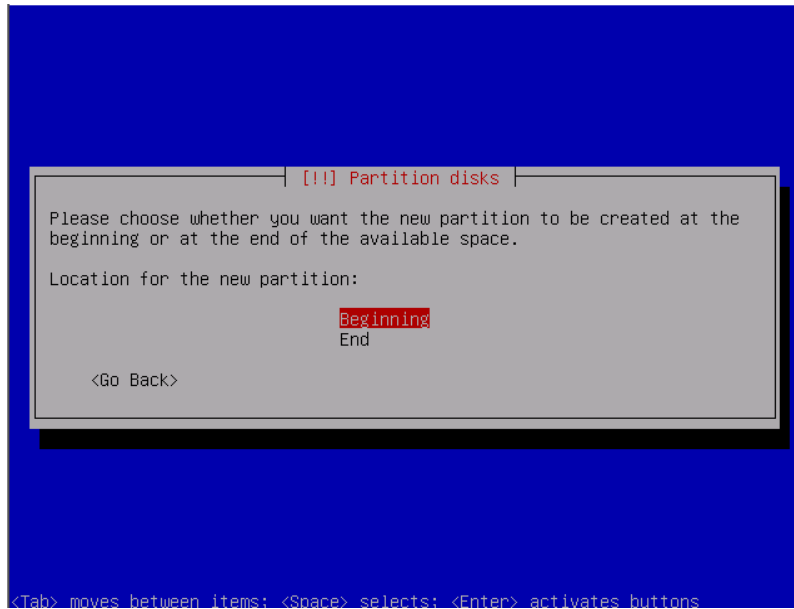
New partition size:

200 MB

<Go Back>

<Continue>

<Tab> moves between items; <Space> selects; <Enter> activates buttons



- Uh oh ... we did not set active partition. Let fix that now.

[!] Partition disks

This is an overview of your currently configured partitions and mount points. Select a partition to modify its settings (file system, mount point, etc.), a free space to create partitions, or a device to initialise its partition table.

Guided partitioning
Help on partitioning

SCSI1 (0,0,0) (sda) - 5.4 GB VMware, VMware Virtual S

#1	primary	509.9 MB	f	swap	swap
#2	primary	98.7 MB	f	ext3	/boot
#3	primary	3.2 GB	f	ext3	/
#5	logical	403.0 MB	f	ext3	/var
#6	logical	197.4 MB	f	ext3	/home
	logical	954.1 MB		FREE SPACE	

Undo changes to partitions
Finish partitioning and write changes to disk

<Go Back>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!] Partition disks

You are editing partition #2 of SCSI1 (0,0,0) (sda). No existing file system was detected in this partition.

Partition settings:

Use as: Ext3 journaling file system
Mount point: /boot
Mount options: defaults
Label: none
Reserved blocks: 5%
Typical usage: standard
Bootable flag: off

Done setting up the partition
Copy data from another partition
Delete the partition

<Go Back>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!] Partition disks

You are editing partition #2 of SCSI1 (0,0,0) (sda). No existing file system was detected in this partition.

Partition settings:

Use as: Ext3 journaling file system
Mount point: /boot
Mount options: defaults
Label: none
Reserved blocks: 5%
Typical usage: standard
Bootable flag: on

Done setting up the partition

Copy data from another partition

Delete the partition

<Go Back>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!] Partition disks

This is an overview of your currently configured partitions and mount points. Select a partition to modify its settings (file system, mount point, etc.), a free space to create partitions, or a device to initialise its partition table.

Guided partitioning
Help on partitioning

SCSI1 (0,0,0) (sda) - 5.4 GB VMware, VMware Virtual S
#1 primary 509.9 MB f swap swap
#2 primary 96.7 MB B f ext3 /boot
#3 primary 3.2 GB f ext3 /
#5 logical 403.0 MB f ext3 /var
#6 logical 197.4 MB f ext3 /home
logical 954.1 MB FREE SPACE

Undo changes to partitions

Finish partitioning and write changes to disk

<Go Back>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!] Partition disks

If you continue, the changes listed below will be written to the disks. Otherwise, you will be able to make further changes manually.

WARNING: This will destroy all data on any partitions you have removed as well as on the partitions that are going to be formatted.

The partition tables of the following devices are changed:
SCSI1 (0,0,0) (sda)

The following partitions are going to be formatted:
partition #1 of SCSI1 (0,0,0) (sda) as swap
partition #2 of SCSI1 (0,0,0) (sda) as ext3
partition #3 of SCSI1 (0,0,0) (sda) as ext3
partition #5 of SCSI1 (0,0,0) (sda) as ext3
partition #6 of SCSI1 (0,0,0) (sda) as ext3

Write the changes to disks?

<Go Back> **<Yes>** <No>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!] Configure time zone

Select your time zone:

- Eastern
- Central
- Mountain
- Pacific**
- Alaska
- Hawaii
- Arizona
- East Indiana
- Samoa

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<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!!] Set up users and passwords

You need to set a password for 'root', the system administrative account. A malicious or unqualified user with root access can have disastrous results, so you should take care to choose a root password that is not easy to guess. It should not be a word found in dictionaries, or a word that could be easily associated with you.

A good password will contain a mixture of letters, numbers and punctuation and should be changed at regular intervals.

Note that you will not be able to see the password as you type it.

Root password:

<Go Back>

<Continue>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!!] Set up users and passwords

Please enter the same root password again to verify that you have typed it correctly.

Re-enter password to verify:

<Go Back>

<Continue>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!!] Set up users and passwords

A user account will be created for you to use instead of the root account for non-administrative activities.

Please enter the real name of this user. This information will be used for instance as default origin for emails sent by this user as well as any program which displays or uses the user's real name. Your full name is a reasonable choice.

Full name for the new user:

CIS 191 Student

<Go Back>

<Continue>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!!] Set up users and passwords

Select a username for the new account. Your first name is a reasonable choice. The username should start with a lower-case letter, which can be followed by any combination of numbers and more lower-case letters.

Username for your account:

cis191

<Go Back>

<Continue>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!!] Set up users and passwords

A good password will contain a mixture of letters, numbers and punctuation and should be changed at regular intervals.

Choose a password for the new user:

<Go Back>

<Continue>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!!] Set up users and passwords

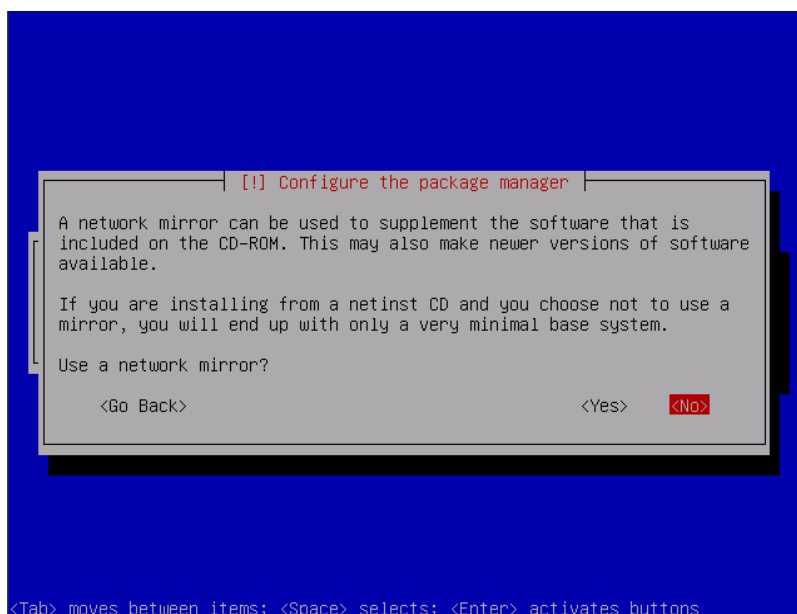
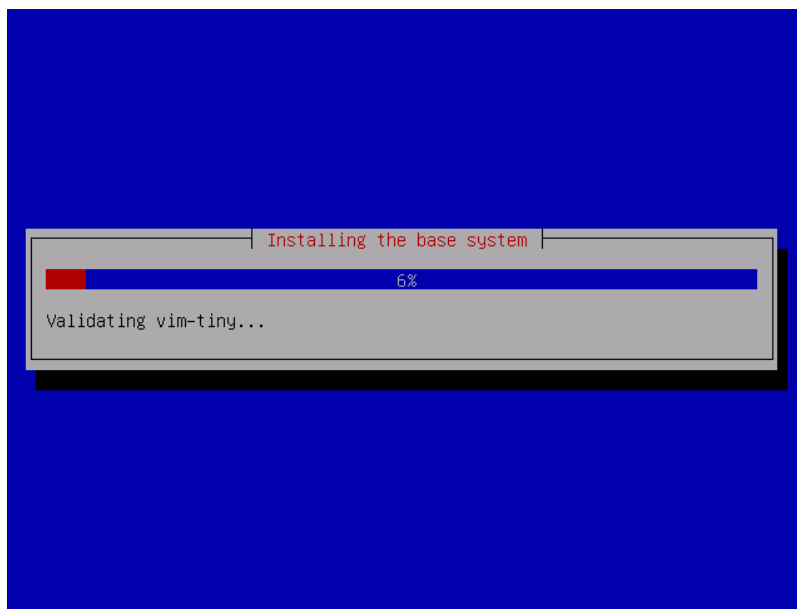
Please enter the same user password again to verify you have typed it correctly.

Re-enter password to verify:

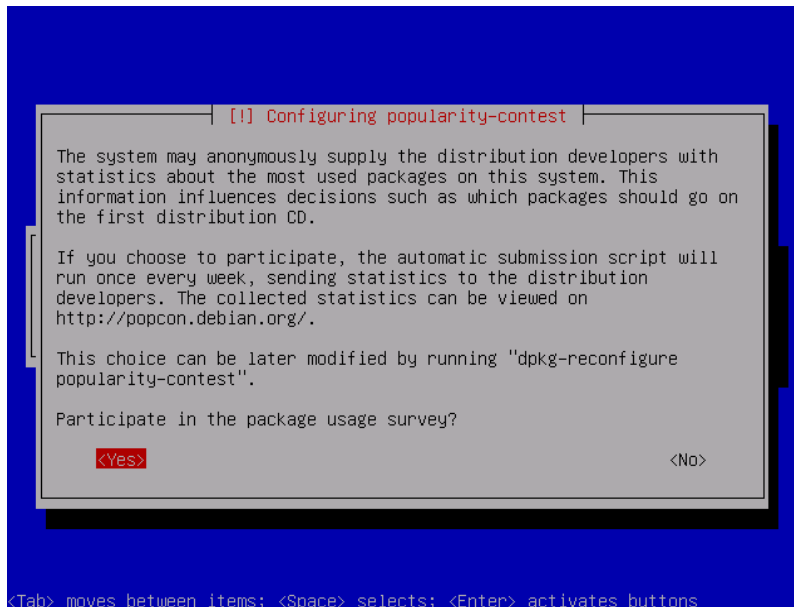
<Go Back>

<Continue>

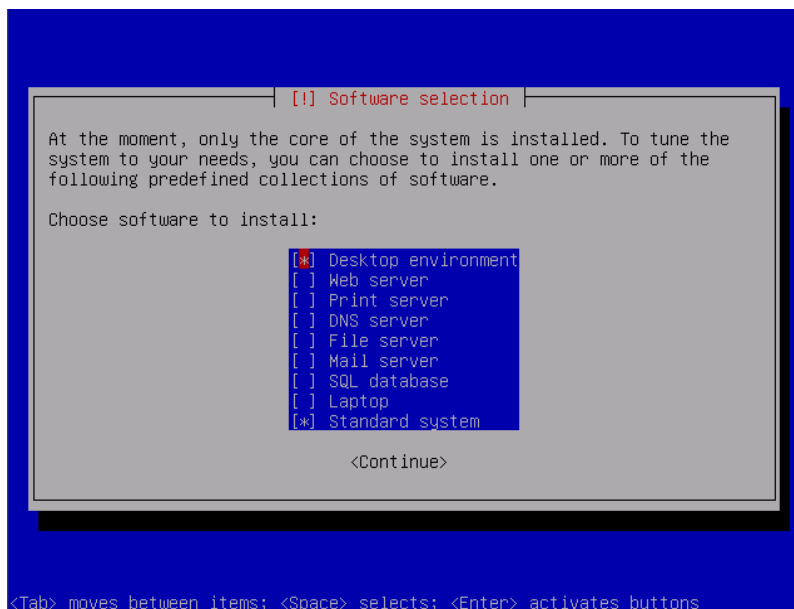
<Tab> moves between items; <Space> selects; <Enter> activates buttons



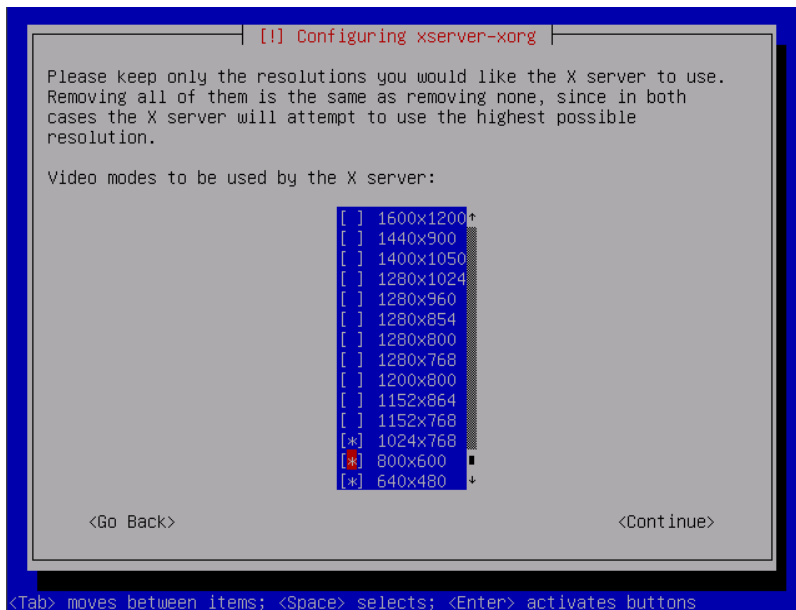
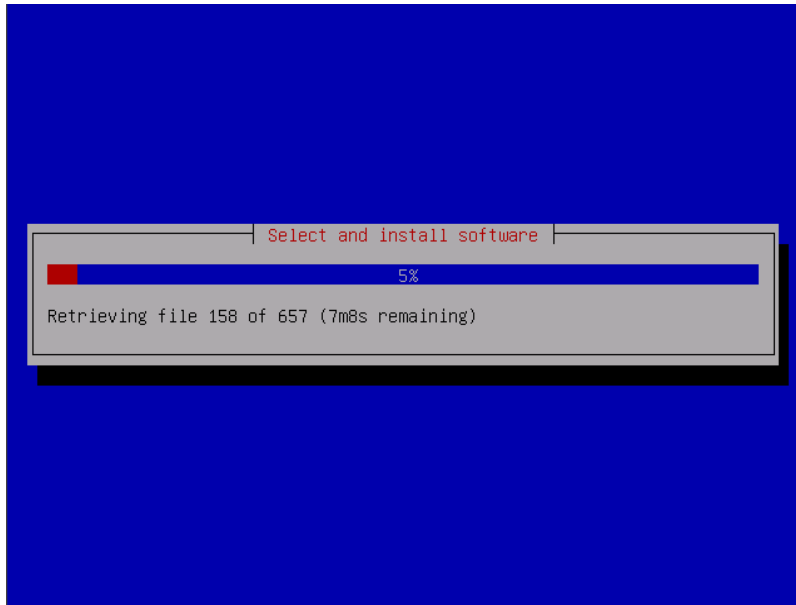
- We just down-loaded this DVD so let's use it

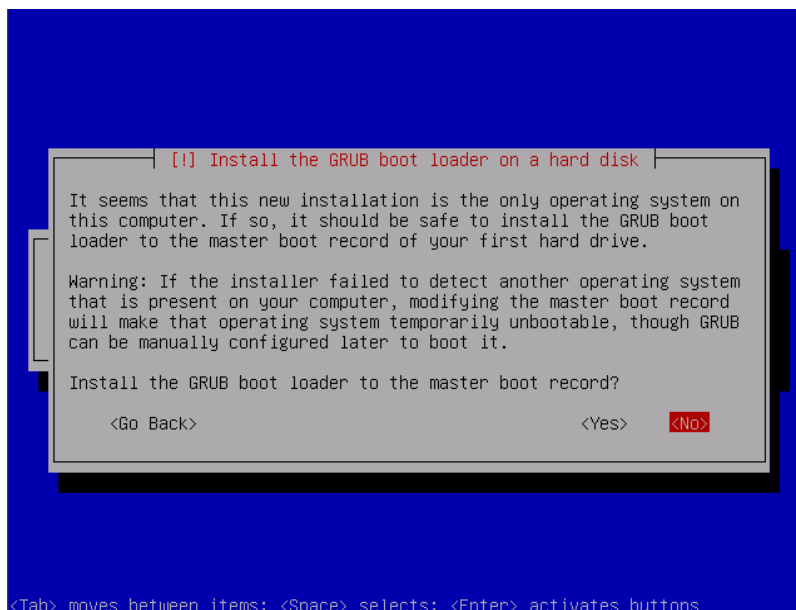
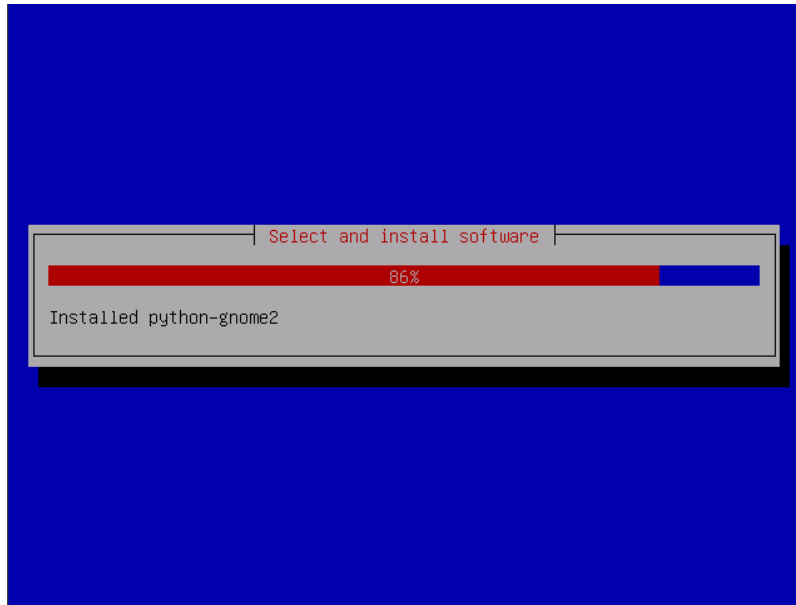


- Sure, why not.



- Added Desktop environment





[!] Install the GRUB boot loader on a hard disk

You need to make the newly installed system bootable, by installing the GRUB boot loader on a bootable device. The usual way to do this is to install GRUB on the master boot record of your first hard drive. If you prefer, you can install GRUB elsewhere on the drive, or to another drive, or even to a floppy.

The device can be specified using GRUB's "(hdm,m)" notation, or as a device in /dev. Below are some examples:

- "(hd0)" or "/dev/hda" will install GRUB to the master boot record of your first hard drive (IDE);
- "(hd0,1)" or "/dev/hda2" will use the second partition of your first IDE drive;
- "(hd2,4)" or "/dev/sdc5" will use the first extended partition of your third drive (SCSI here);
- "(fd0)" or "/dev/fd0" will install GRUB to a floppy.

Device for boot loader installation:

(hd0,1)

<Go Back>

<Continue>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

[!] Finish the installation

Installation complete

Installation is complete, so it is time to boot into your new system. Make sure to remove the installation media (CD-ROM, floppies), so that you boot into the new system rather than restarting the installation.

<Go Back>

<Continue>

<Tab> moves between items; <Space> selects; <Enter> activates buttons

GNU GRUB version 0.97 (638K lower / 260032K upper memory)

Debian GNU/Linux, kernel 2.6.18-6-686
Debian GNU/Linux, kernel 2.6.18-6-686 (single-user mode)

Use the ↑ and ↓ keys to select which entry is highlighted.
Press enter to boot the selected OS, 'e' to edit the
commands before booting, or 'c' for a command-line.

The highlighted entry will be booted automatically in 4 seconds.

```
Uniform CU-ROM driver Revision: 3.20
ioc0: 53C1030: Capabilities={Initiator}
scsi0 : ioc0: LSI53C1030, Firmware=00000000h, Ports=1, MaxQ=128, IRQ=169
Vendor: VMware, Model: VMware Virtual S Rev: 1.0
Type: Direct-Access ANSI SCSI revision: 02
target0:0:0: Beginning Domain Validation
target0:0:0: Domain Validation skipping write tests
target0:0:0: Ending Domain Validation
target0:0:0: FAST-160 WIDE SCSI 320.0 MB/s DT IU RDSTRM RTI WRFLOW PCOMP (6.25
ns, offset 127)
ACPI: PCI Interrupt 0000:00:11.0[A] -> GSI 18 (level, low) -> IRQ 177
pcnet32: PCnet/PCI II 79C970A at 0x1400, 00 0c 29 fc f0 d1 assigned IRQ 177.
eth0: registered as PCnet/PCI II 79C970A
pcnet32: 1 cards_found.
SCSI device sda: 10485760 512-byte hdwr sectors (5369 MB)
sda: Write Protect is off
sda: cache data unavailable
sda: assuming drive cache: write through
SCSI device sda: 10485760 512-byte hdwr sectors (5369 MB)
sda: Write Protect is off
sda: cache data unavailable
sda: assuming drive cache: write through
_sda: sda1 sda2 sda3 sda4 < sda5 sda6 >
sd 0:0:0:0: Attached scsi disk sda
```

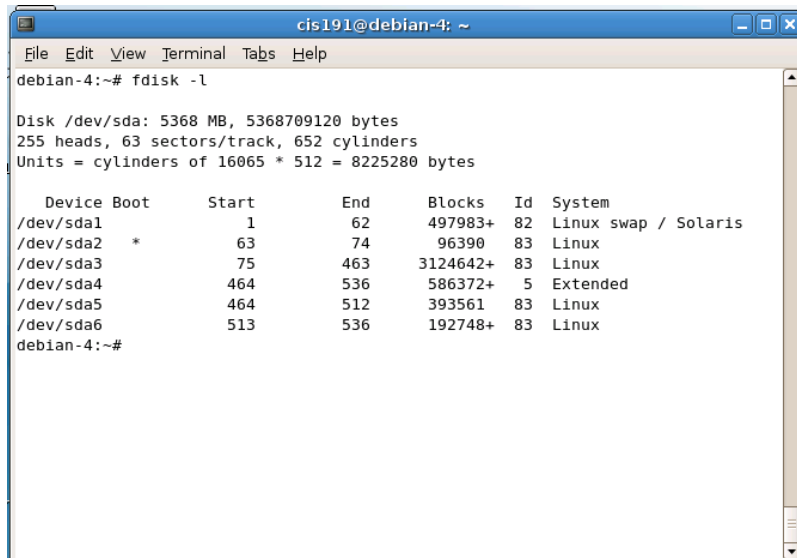


After: Desktop > Preferences > Screen Resolution to 800 x 600



Here is what you should have now on your new VM:

```
fdisk -l
```

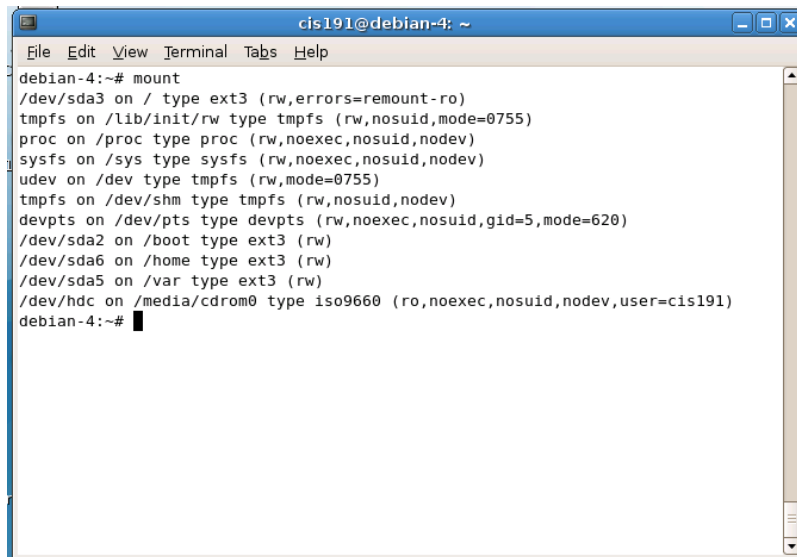


```
debian-4:~# fdisk -l

Disk /dev/sda: 5368 MB, 5368709120 bytes
255 heads, 63 sectors/track, 652 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes

   Device Boot      Start         End      Blocks   Id  System
/dev/sda1            1           62     497983+   82  Linux swap / Solaris
/dev/sda2 *          63           74       96390   83  Linux
/dev/sda3            75          463    3124642+   83  Linux
/dev/sda4            464          536     586372+    5  Extended
/dev/sda5            464          512     393561   83  Linux
/dev/sda6            513          536     192748+   83  Linux
debian-4:~#
```

```
mount
```



```
debian-4:~# mount
/dev/sda3 on / type ext3 (rw,errors=remount-ro)
tmpfs on /lib/init/rw type tmpfs (rw,nosuid,mode=0755)
proc on /proc type proc (rw,noexec,nosuid,nodev)
sysfs on /sys type sysfs (rw,noexec,nosuid,nodev)
udev on /dev type tmpfs (rw,mode=0755)
tmpfs on /dev/shm type tmpfs (rw,nosuid,nodev)
devpts on /dev/pts type devpts (rw,noexec,nosuid,gid=5,mode=620)
/dev/sda2 on /boot type ext3 (rw)
/dev/sda6 on /home type ext3 (rw)
/dev/sda5 on /var type ext3 (rw)
/dev/hdc on /media/cdrom0 type iso9660 (ro,noexec,nosuid,nodev,user=cis191)
debian-4:~# █
```

```
df
```

```
cis191@debian-4: ~
File Edit View Terminal Tabs Help
debian-4:~# df
Filesystem      1K-blocks      Used Available Use% Mounted on
/dev/sda3       3075536    1644044   1275260   57% /
tmpfs           128484         0    128484    0% /lib/init/rw
udev            10240         64    10176    1% /dev
tmpfs           128484         0    128484    0% /dev/shm
/dev/sda2       93327       17055    71453   20% /boot
/dev/sda6      186663       6199   170827    4% /home
/dev/sda5      381138     171600   189860   48% /var
/dev/hdc       4587628    4587628         0 100% /media/cdrom0
debian-4:~# █
```

more /boot/grub/menu.lst

```
cis191@debian-4: ~
File Edit View Terminal Tabs Help
debian-4:~# cat /boot/grub/menu.lst
# menu.lst - See: grub(8), info grub, update-grub(8)
#
# grub-install(8), grub-floppy(8),
# grub-md5-crypt, /usr/share/doc/grub
# and /usr/share/doc/grub-doc/.
## default num
# Set the default entry to the entry number NUM. Numbering starts from 0, and
# the entry number 0 is the default if the command is not used.
#
# You can specify 'saved' instead of a number. In this case, the default entry
# is the entry saved with the command 'savedefault'.
# WARNING: If you are using dmraid do not change this entry to 'saved' or your
# array will desync and will not let you boot your system.
default      0

## timeout sec
# Set a timeout, in SEC seconds, before automatically booting the default entry
# (normally the first entry defined).
timeout      5

# Pretty colours
color cyan/blue white/blue

## password [--md5] passwd
# If used in the first section of a menu file, disable all interactive editing
```



```
cis191@debian-4: ~
File Edit View Terminal Tabs Help
## e.g. memtest86=true
##      memtest86=false
# memtest86=true

## should update-grub adjust the value of the default booted system
## can be true or false
# updatedefaultentry=false

## ## End Default Options ##

title          Debian GNU/Linux, kernel 2.6.18-6-686
root            (hd0,1)
kernel         /vmlinuz-2.6.18-6-686 root=/dev/sda3 ro
initrd         /initrd.img-2.6.18-6-686
savedefault

title          Debian GNU/Linux, kernel 2.6.18-6-686 (single-user mode)
root            (hd0,1)
kernel         /vmlinuz-2.6.18-6-686 root=/dev/sda3 ro single
initrd         /initrd.img-2.6.18-6-686
savedefault

### END DEBIAN AUTOMAGIC KERNELS LIST
debian-4:~#
```

xxd /dev/sda | more

```
cis191@debian-4: ~
File Edit View Terminal Tabs Help
debian-4:~# xxd /dev/sda | more
0000000: fab8 0010 8ed0 bc00 b0b8 0000 8ed8 8ec0 .....
0000010: fbbe 007c bf00 06b9 0002 f3a4 ea21 0600 ...|.!.
0000020: 00be be07 3804 750b 83c6 1081 fefe 0775 ...8.u...u
0000030: f3eb 16b4 02b0 01bb 007c b280 8a74 018b .....|...t..
0000040: 4c02 cd13 ea00 7c00 00eb fe00 0000 0000 L....|.
0000050: 0000 0000 0000 0000 0000 0000 0000 0000 .....
0000060: 0000 0000 0000 0000 0000 0000 0000 0000 .....
0000070: 0000 0000 0000 0000 0000 0000 0000 0000 .....
0000080: 0000 0000 0000 0000 0000 0000 0000 0000 .....
0000090: 0000 0000 0000 0000 0000 0000 0000 0000 .....
00000a0: 0000 0000 0000 0000 0000 0000 0000 0000 .....
00000b0: 0000 0000 0000 0000 0000 0000 0000 0000 .....
00000c0: 0000 0000 0000 0000 0000 0000 0000 0000 .....
00000d0: 0000 0000 0000 0000 0000 0000 0000 0000 .....
00000e0: 0000 0000 0000 0000 0000 0000 0000 0000 .....
00000f0: 0000 0000 0000 0000 0000 0000 0000 0000 .....
0000100: 0000 0000 0000 0000 0000 0000 0000 0000 .....
0000110: 0000 0000 0000 0000 0000 0000 0000 0000 .....
0000120: 0000 0000 0000 0000 0000 0000 0000 0000 .....
0000130: 0000 0000 0000 0000 0000 0000 0000 0000 .....
0000140: 0000 0000 0000 0000 0000 0000 0000 0000 .....
0000150: 0000 0000 0000 0000 0000 0000 0000 0000 .....
0000160: 0000 0000 0000 0000 0000 0000 0000 0000 .....
0000170: 0000 0000 0000 0000 0000 0000 0000 0000 .....
0000180: 0000 0000 0000 0000 0000 0000 0000 0000 .....
--More--
```

```
cis191@debian-4: ~
File Edit View Terminal Tabs Help
0000190: 0000 0000 0000 0000 0000 0000 0000 0000 .....
00001a0: 0000 0000 0000 0000 0000 0000 0000 0000 .....
00001b0: 0000 0000 0000 0000 d7aa 0c00 0000 0001 .....
00001c0: 0100 82fe 3f3d 3f00 0000 7f32 0f00 8000 ....?=?...2...
00001d0: 013e 83fe 3f49 be32 0f00 0cf1 0200 0000 .>...?I.2.....
00001e0: 014a 83fe 7fce ca23 1200 455b 5f00 0000 .J....#...E[...
00001f0: 41cf 05fe bf17 0f7f 7100 09e5 1100 55aa A.....q....U.
0000200: 0000 0000 0000 0000 0000 0000 0000 0000 .....
0000210: 0000 0000 0000 0000 0000 0000 0000 0000 .....
0000220: 0000 0000 0000 0000 0000 0000 0000 0000 .....
0000230: 0000 0000 0000 0000 0000 0000 0000 0000 .....
0000240: 0000 0000 0000 0000 0000 0000 0000 0000 .....
0000250: 0000 0000 0000 0000 0000 0000 0000 0000 .....
0000260: 0000 0000 0000 0000 0000 0000 0000 0000 .....
0000270: 0000 0000 0000 0000 0000 0000 0000 0000 .....
0000280: 0000 0000 0000 0000 0000 0000 0000 0000 .....
0000290: 0000 0000 0000 0000 0000 0000 0000 0000 .....
00002a0: 0000 0000 0000 0000 0000 0000 0000 0000 .....
00002b0: 0000 0000 0000 0000 0000 0000 0000 0000 .....
00002c0: 0000 0000 0000 0000 0000 0000 0000 0000 .....
00002d0: 0000 0000 0000 0000 0000 0000 0000 0000 .....
00002e0: 0000 0000 0000 0000 0000 0000 0000 0000 .....
00002f0: 0000 0000 0000 0000 0000 0000 0000 0000 .....
0000300: 0000 0000 0000 0000 0000 0000 0000 0000 .....
0000310: 0000 0000 0000 0000 0000 0000 0000 0000 .....
0000320: 0000 0000 0000 0000 0000 0000 0000 0000 .....
--More--
```

xxd /dev/sda2 | more

```
cis191@debian-4: ~
File Edit View Terminal Tabs Help
debian-4:~# xxd /dev/sda2 | more
0000000: eb48 9000 0000 0000 0000 0000 0000 0000 .H.....
0000010: 0000 0000 0000 0000 0000 0000 0000 0000 .....
0000020: 0000 0000 0000 0000 0000 0000 0000 0000 .....
0000030: 0000 0000 0000 0000 0000 0000 0000 0302 .....
0000040: ff00 0080 c27a 1100 0008 fa90 90f6 c280 ....Z.....
0000050: 7502 b280 ea59 7c00 0031 c08e d88e d0bc u...Y|.l.....
0000060: 0020 fba0 407c 3cff 7402 88c2 52be 7f7d ..@|<.t...R..}
0000070: e834 01f6 c280 7454 b441 bbaa 55cd 135a .4....tT.A..U..Z
0000080: 5272 4981 fb55 aa75 43a0 417c 84c0 7505 RrI..U.uC.A|.u.
0000090: 83e1 0174 3766 8b4c 10be 057c c644 ff01 ...t7f.L...|.D..
00000a0: 668b 1e44 7cc7 0410 00c7 4402 0100 6689 f..D|....D...f.
00000b0: 5c08 c744 0600 7066 31c0 8944 0466 8944 \..D..pf1..D.f.D
00000c0: 0cb4 42cd 1372 05bb 0070 eb7d b408 cd13 ..B..r...p}....
00000d0: 730a f6c2 800f 84ea 00e9 8d00 be05 7cc6 s.....E...|.
00000e0: 44ff 0066 31c0 88f0 4066 8944 0431 d288 D..f1...@f.D.1..
00000f0: cac1 e202 88e8 88f4 4089 4408 31c0 88d0 .....@.D.1...
0000100: c0e8 0266 8904 66a1 447c 6631 d266 f734 ...f..f.D|f1.f.4
0000110: 8854 0a66 31d2 66f7 7404 8854 0b89 440c .T.f1.f.t...T..D.
0000120: 3b44 087d 3c8a 540d c0e2 068a 4c0a fec1 ;D.><.T....L...
0000130: 08d1 8a6c 0c5a 8a74 0bbb 0070 8ec3 31db ...l.Z.t...p..l.
0000140: b801 02cd 1372 2a8c c38e 0648 7c60 1eb9 .....r*...H|`..
0000150: 0001 8edb 31f6 31ff fcf3 a51f 61ff 2642 ...l.1....a.&B
0000160: 7cbe 857d e840 00eb 0ebe 8a7d e838 00eb |..}@....}.8..
0000170: 06be 947d e830 00be 997d e82a 00eb fe47 ...}.0...}*...G
0000180: 5255 4220 0047 656f 6d00 4861 7264 2044 RUB .Geom.Hard D
0000190: 6973 6b00 5265 6164 0020 4572 726f 7200 isk.Read. Error.
--More--
```