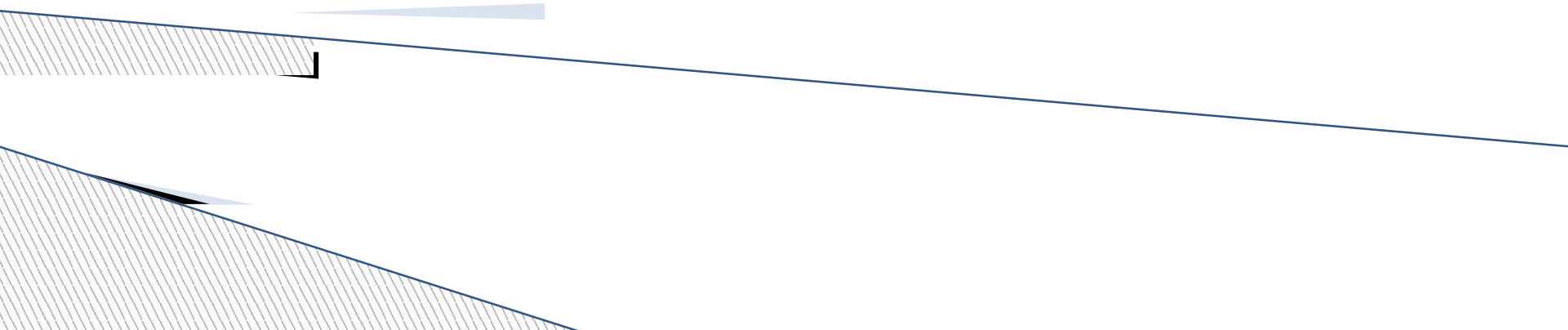


# **CST 8207**

## **GNU/Linux O/S I**

### **Create a New VMware Virtual Hard Disk**

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# Road Map for Creating a New VMware virtual 1 GB Hard Disk

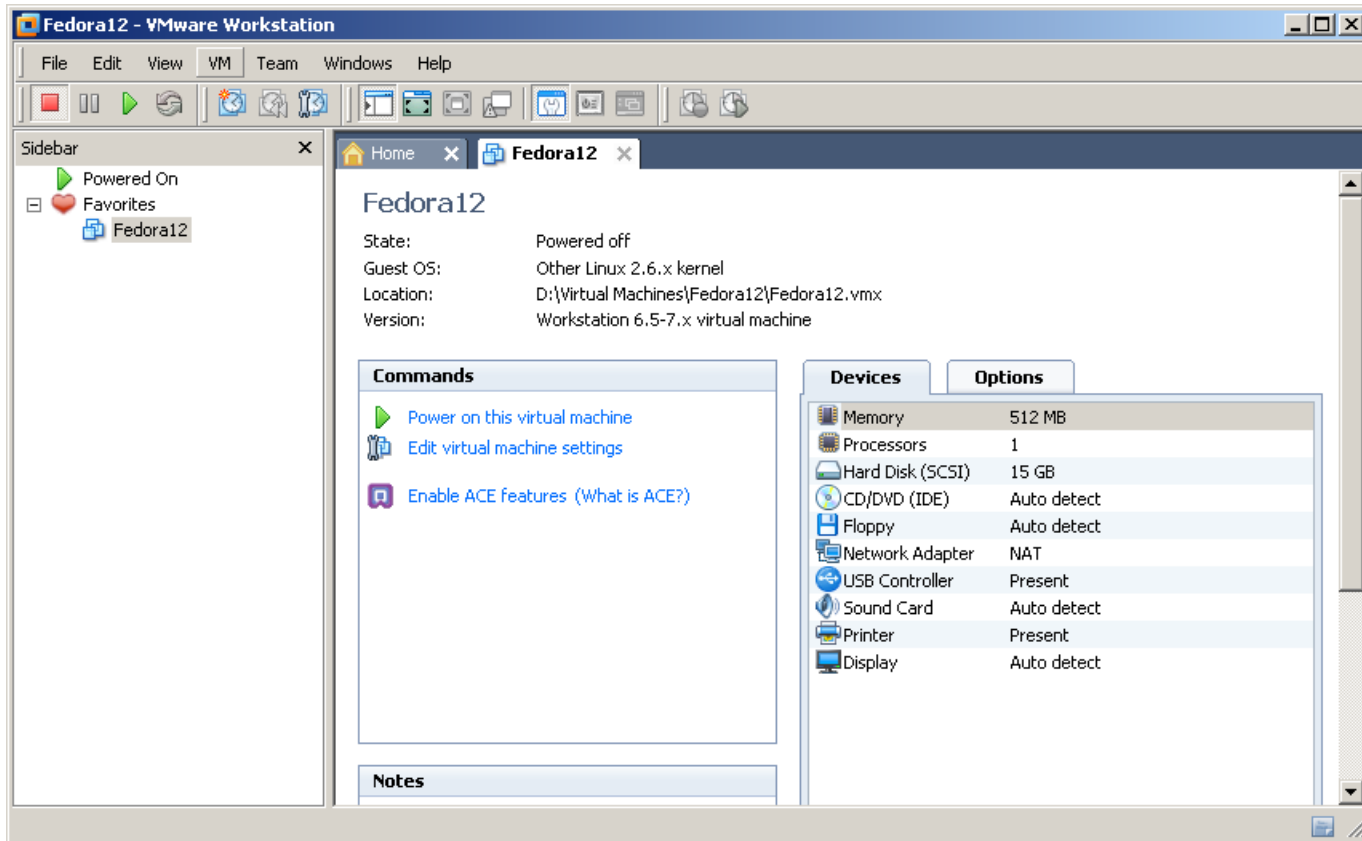
The following slides contain these steps that show you how to add a new 1 GB virtual hard disk in VMware. This first slide is an overview of what we will be doing in the next set of slides.

***Do not do any of these steps until you have read all of the slides!***

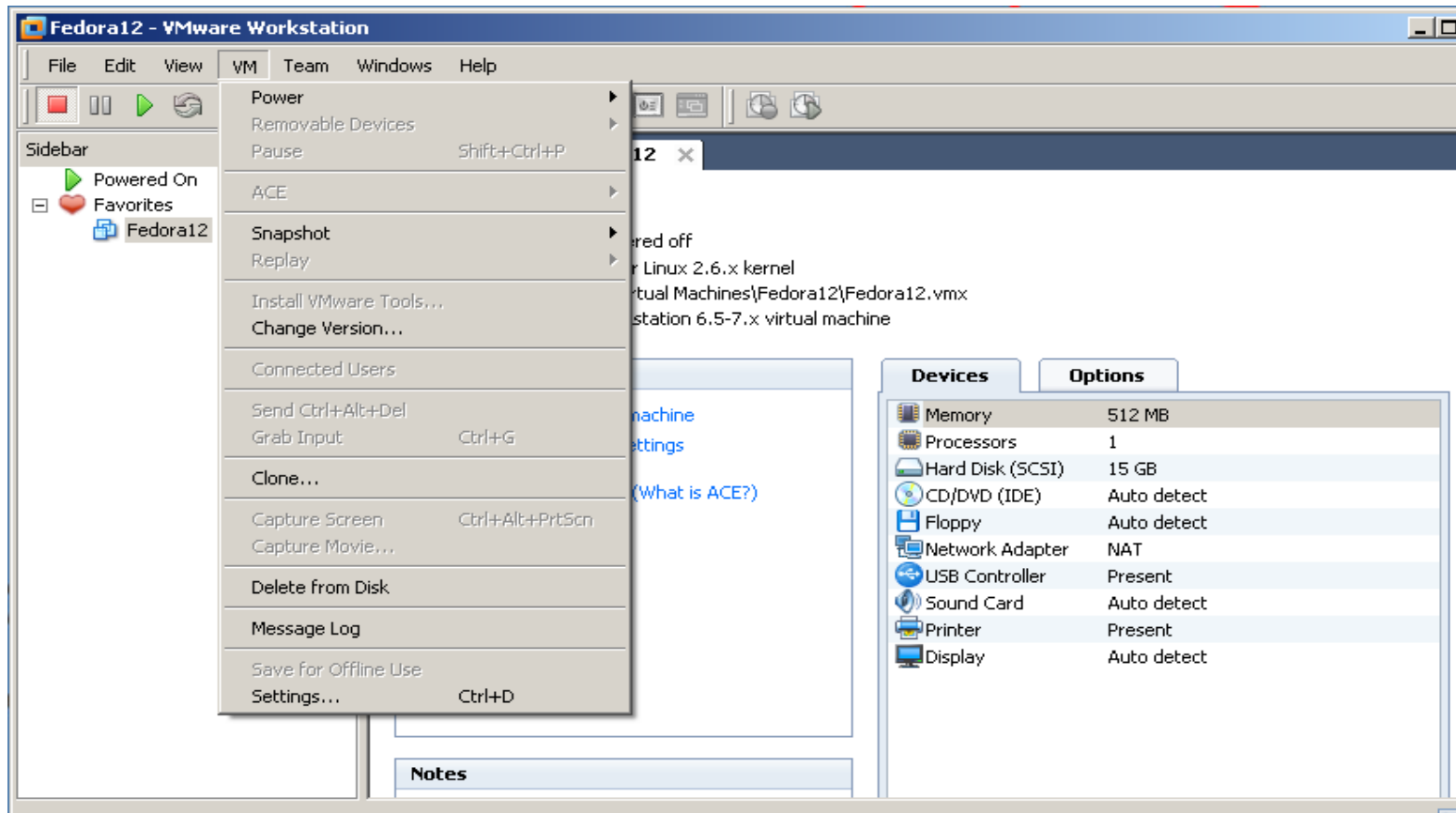
1. Before we begin, shut down Linux (do not suspend - shut down)
  - `shutdown -h now`
2. VMware: Virtual Machine -> Settings -> Hard Disk
3. VMware: Add Hard Disk - Exactly 1 GB
4. boot (power on) Linux
5. `ls -l /dev/sd*` *(make sure the sdb disk is visible)*
6. `cat /proc/partitions` *(make sure the sdb disk is visible)*

Be sure to use fdisk on the new **sdb** 1 GB hard drive, *not sda!*

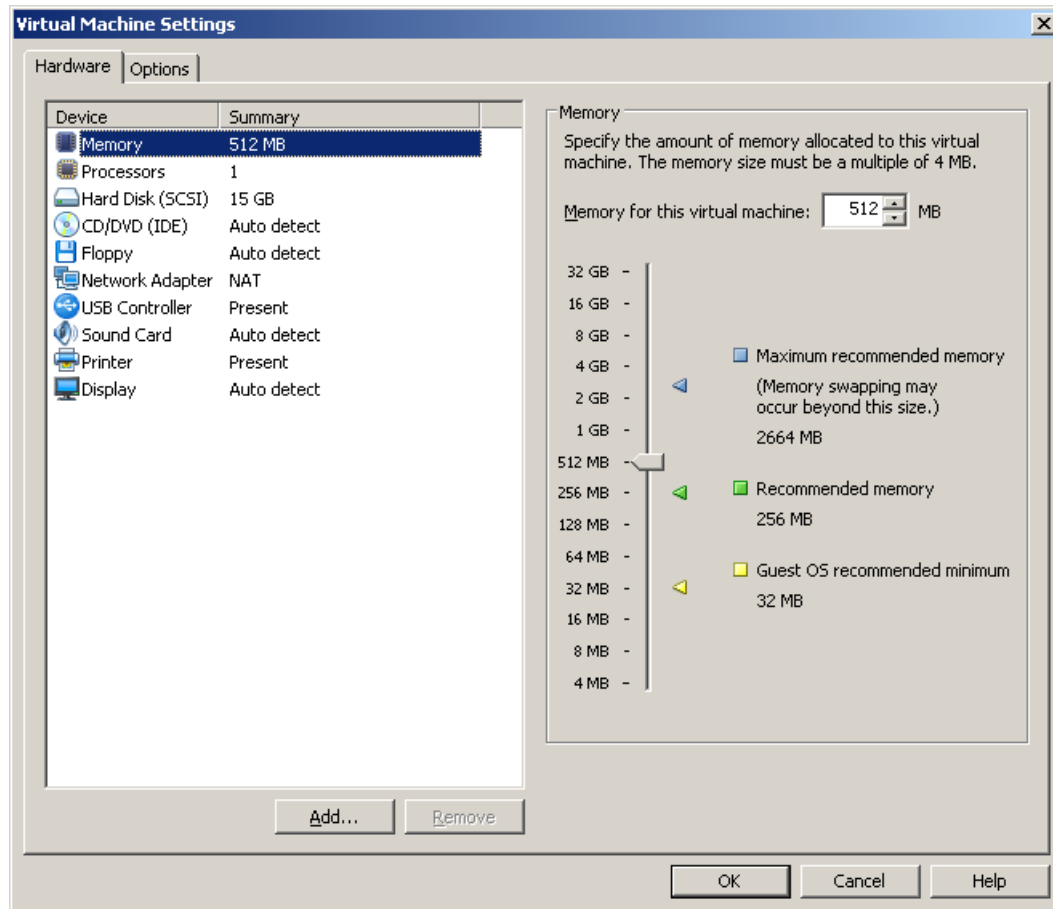
# Add Hard Disk: Be sure you're dealing with your Linux VM



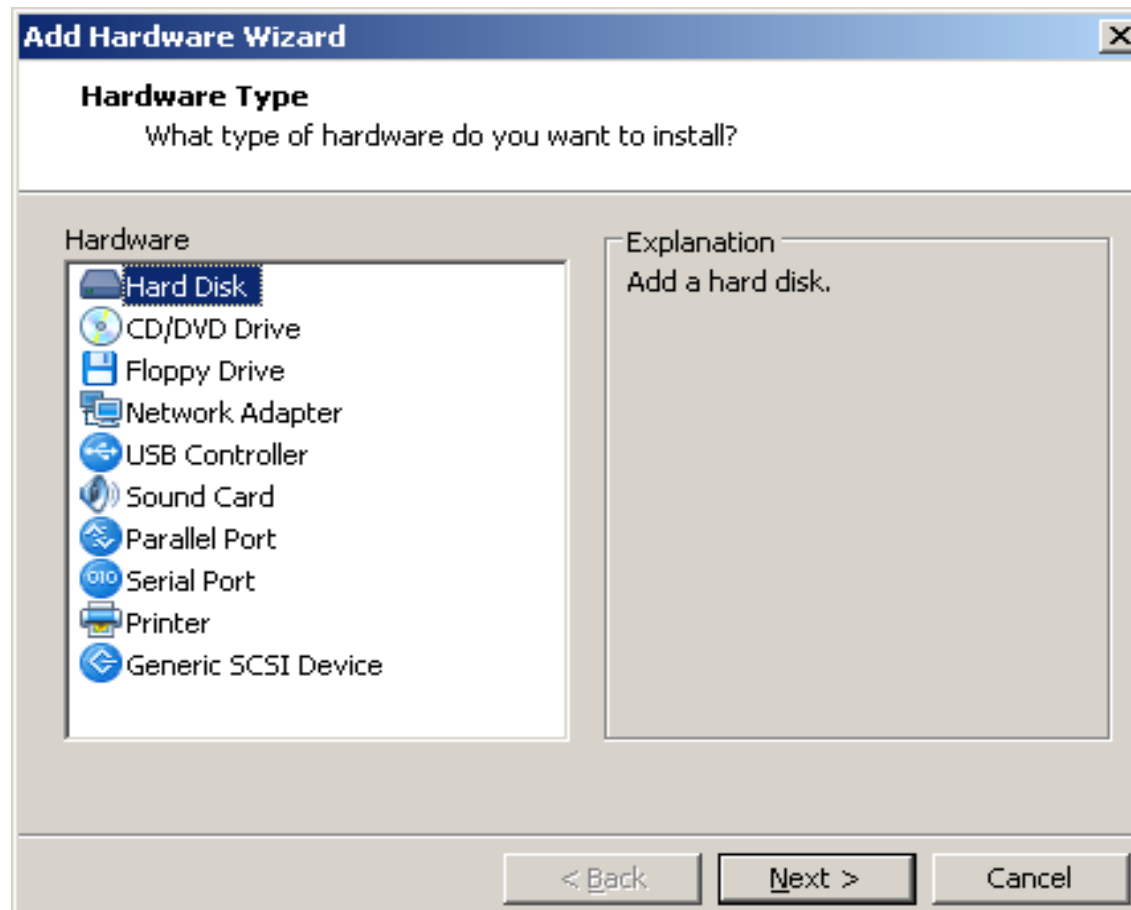
# Click on the “VM” menu, select “Settings...” at the bottom



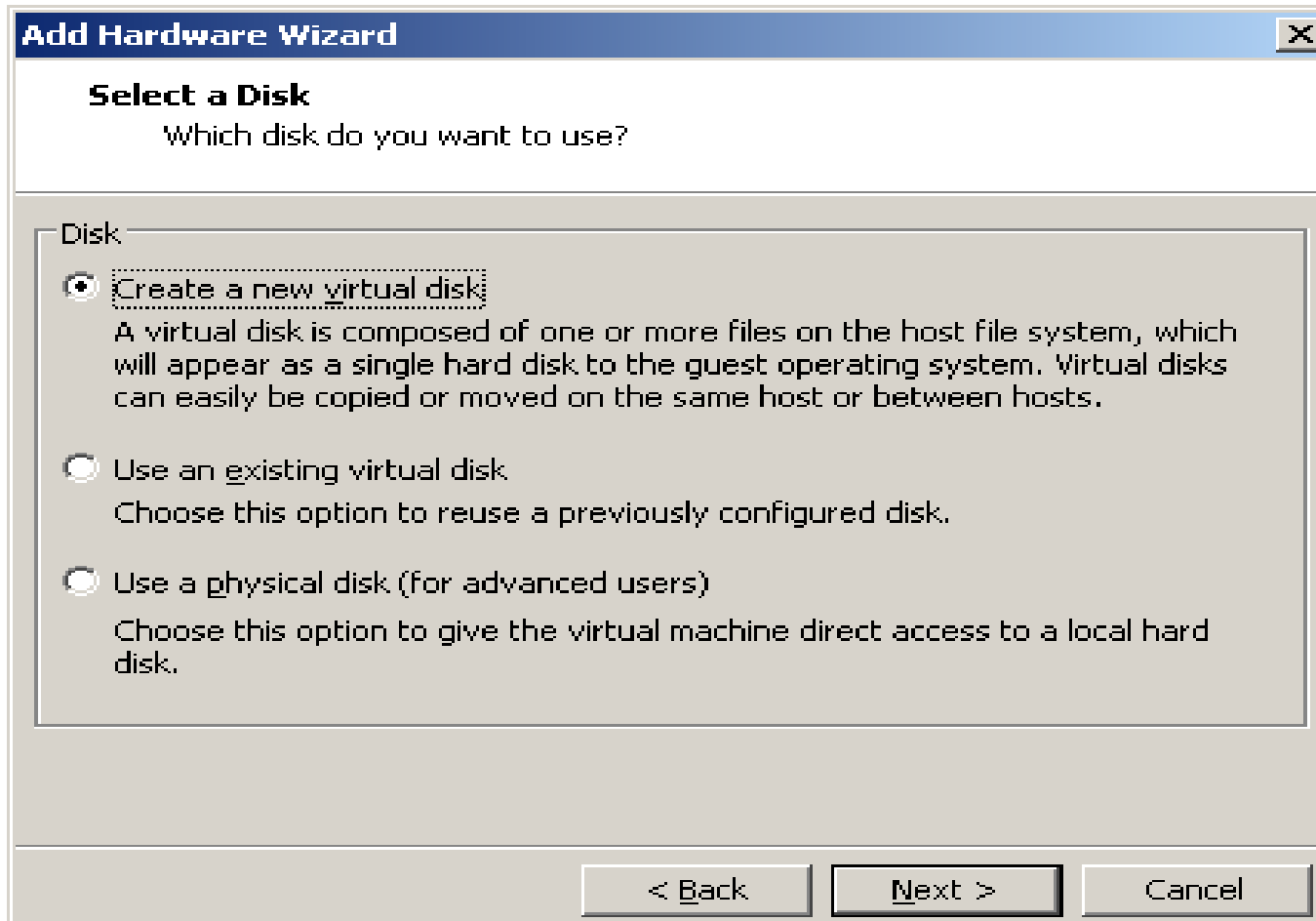
# At the bottom, select “Add...”



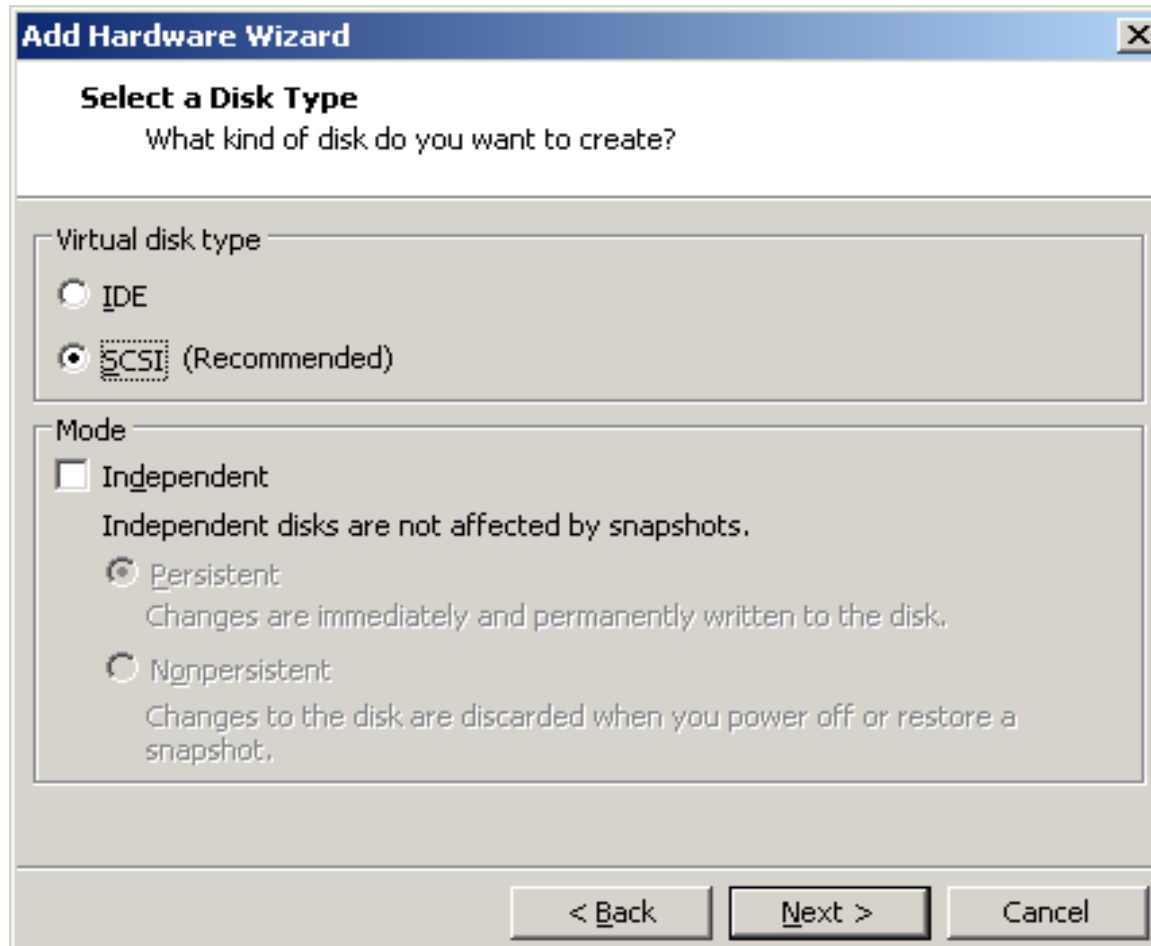
# Verify “Hard Disk” is selected, click “Next”



# Accept defaults, Click “Next”



# Accept Defaults, Click “Next”



**Add Hardware Wizard** [X]

**Select a Disk Type**  
What kind of disk do you want to create?

Virtual disk type

- IDE
- SCSI** (Recommended)

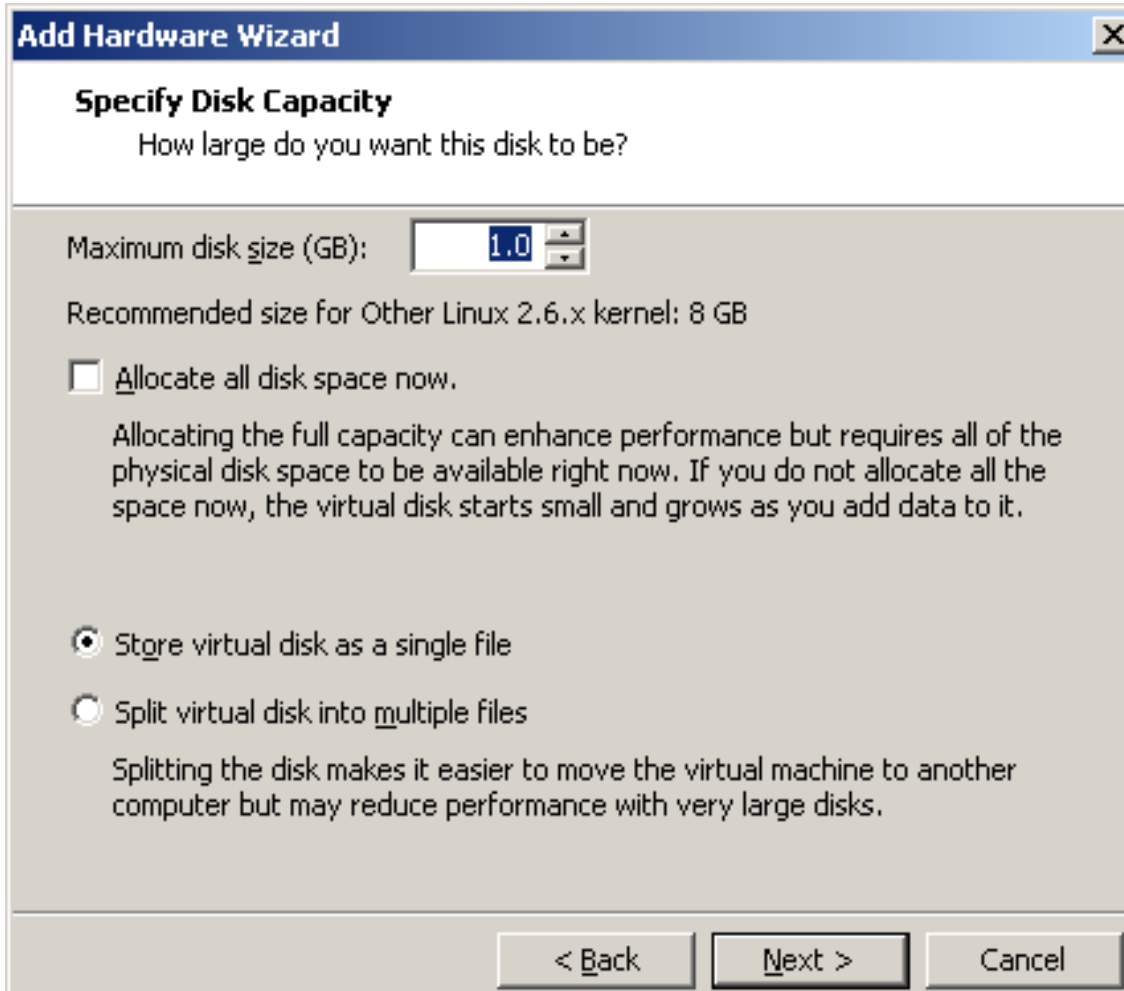
Mode

- Independent  
Independent disks are not affected by snapshots.
- Persistent**  
Changes are immediately and permanently written to the disk.
- Nonpersistent  
Changes to the disk are discarded when you power off or restore a snapshot.

< Back    **Next >**    Cancel



# Change size to “1.0” GB, click “Next”



**Add Hardware Wizard** [X]

**Specify Disk Capacity**  
How large do you want this disk to be?

Maximum disk size (GB):

Recommended size for Other Linux 2.6.x kernel: 8 GB

Allocate all disk space now.

Allocating the full capacity can enhance performance but requires all of the physical disk space to be available right now. If you do not allocate all the space now, the virtual disk starts small and grows as you add data to it.

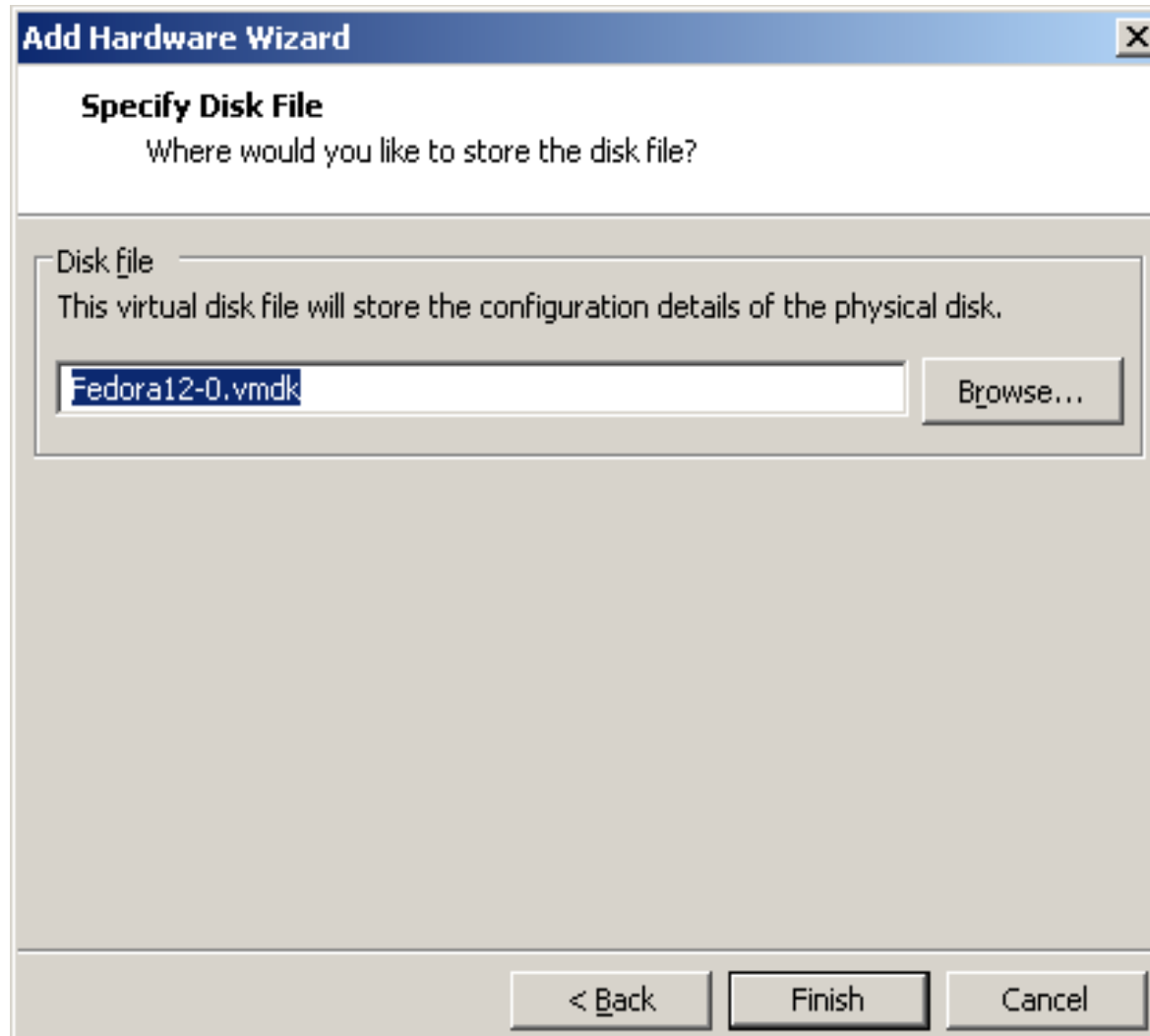
Store virtual disk as a single file

Split virtual disk into multiple files

Splitting the disk makes it easier to move the virtual machine to another computer but may reduce performance with very large disks.

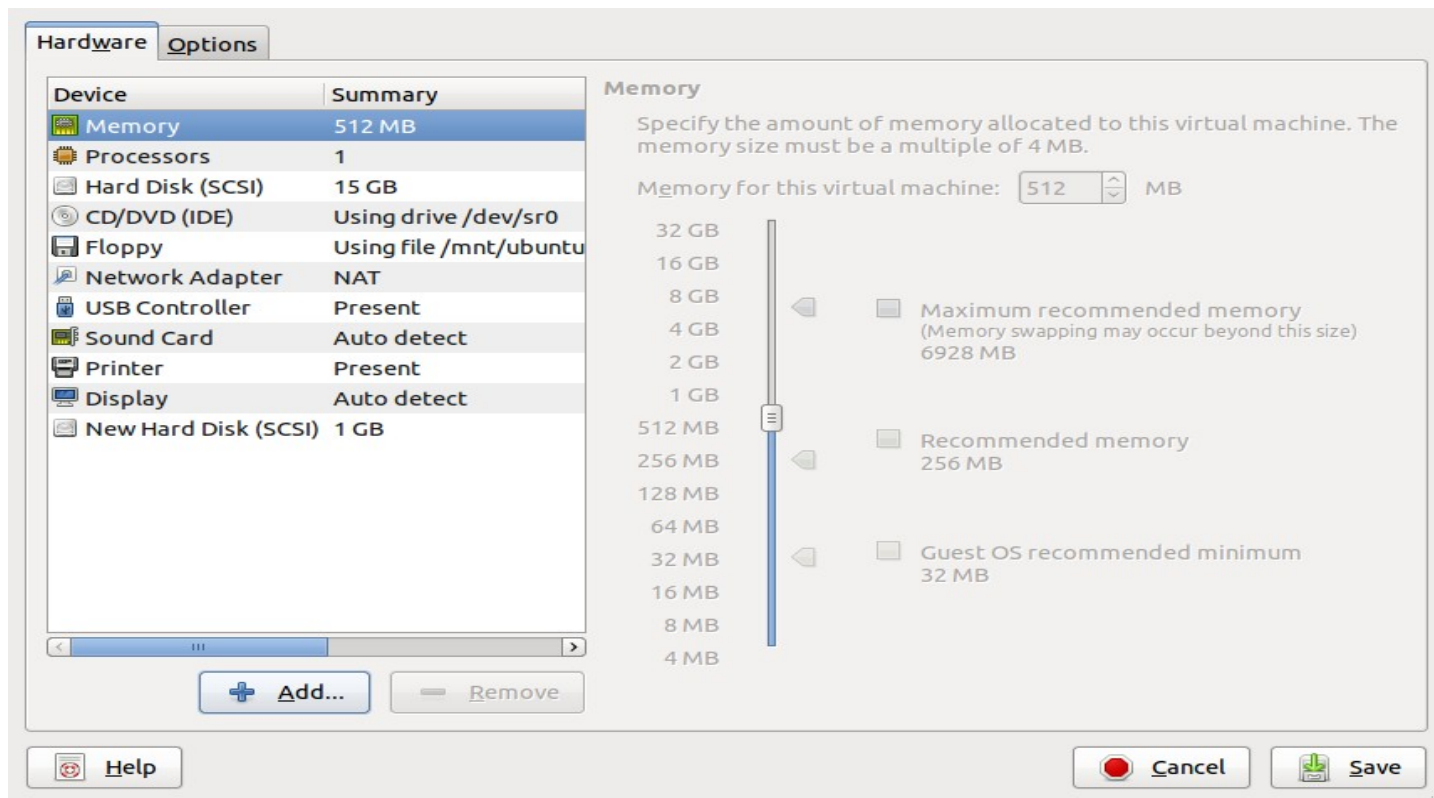
< Back    Next >    Cancel

# Accept default, Click “Finish”

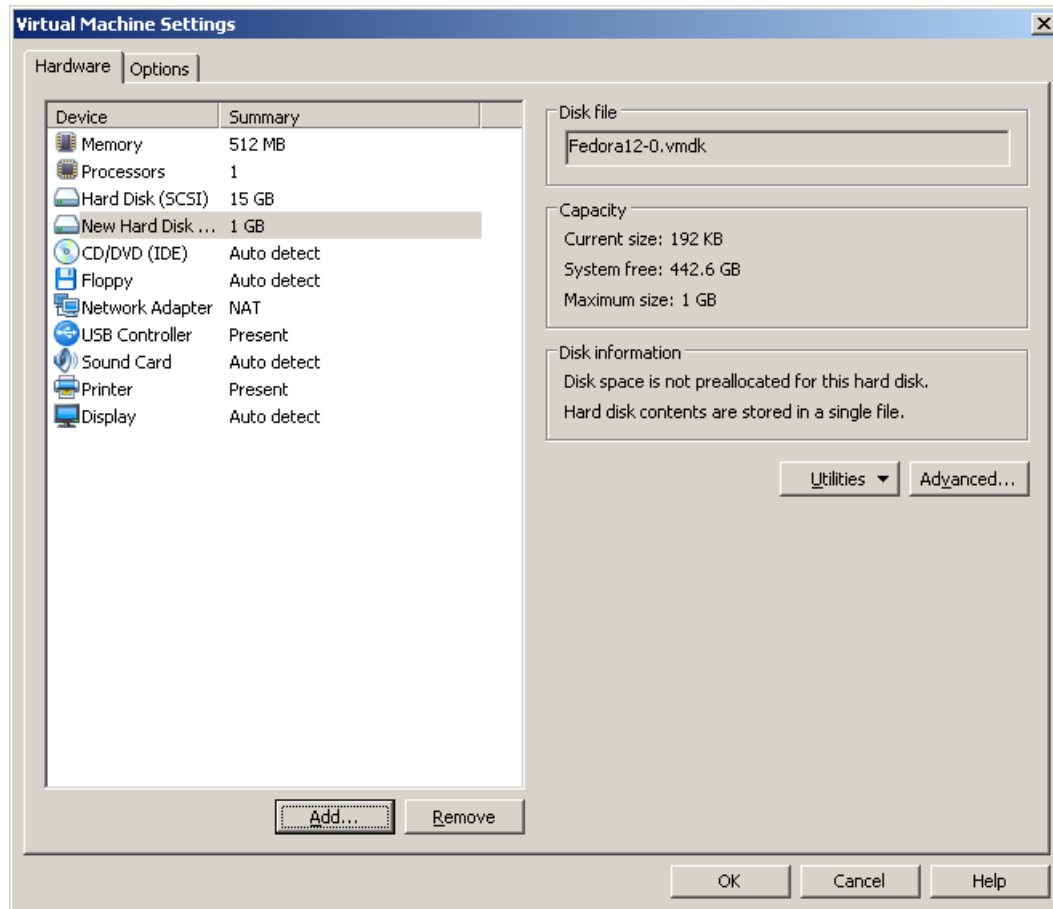


# If Necessary, click “Save”

Some versions of VMware will want you to “Save” your changes. Save your changes, if you are prompted to do so:



# Notice a 1GB Hard Disk has been added to the Devices



# Verify New Drive in Linux

1.Reboot (power on) your Linux virtual machine.

2.Check - the new disk should appear as `/dev/sdb`:

➤ `ls -l /dev/sd*` (make sure the **sdb** disk is visible)

➤ `cat /proc/partitions` (make sure the **sdb** disk is visible)

Be sure to use the disk partition command **fdisk** only on the new **sdb** 1 GB hard drive, *not sda*!

The **sda** disk is your Linux **ROOT** disk; if you damage it you will need to recover back to your snapshot.

