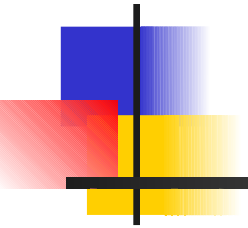
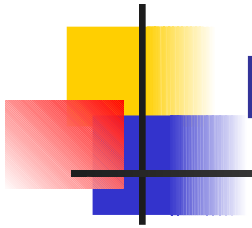


# OPS235

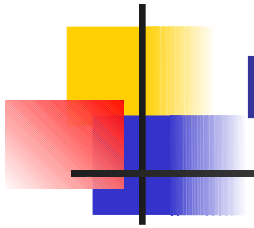
# MANAGING LVMs – PART I



# Lab 3 – Part 2 - Topics

Lab Time

- Preparing for Lab 3 and Lab 4
- Adjusting Space on your **c6host**
- LVM Management
  - Theory
  - Graphical
  - Command Line

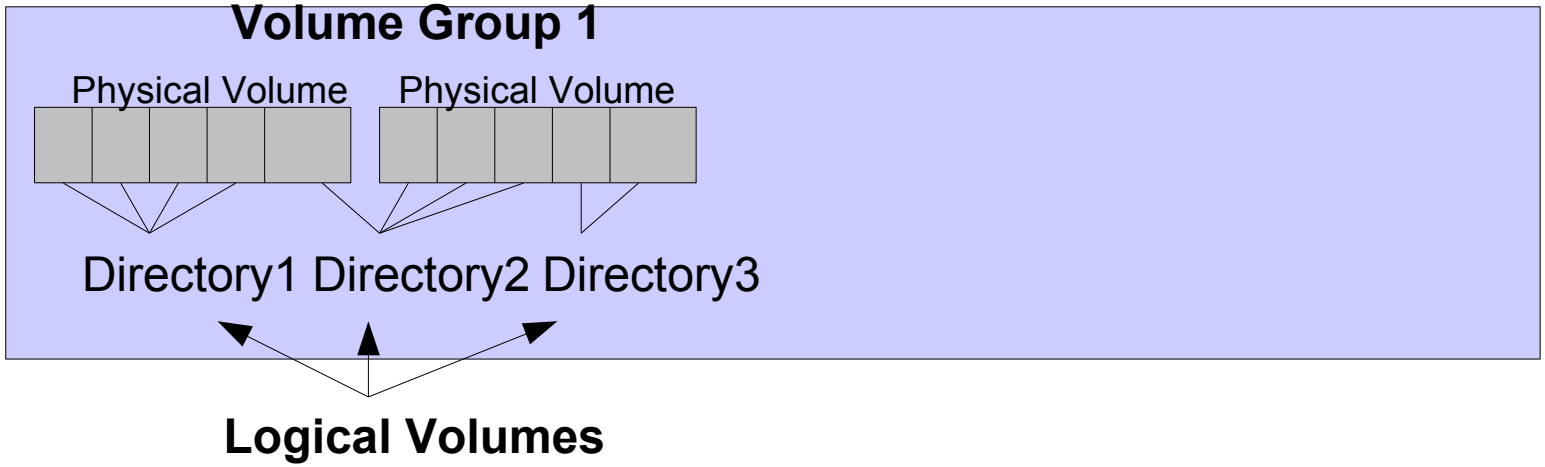


# Preparing for Labs 3 & 4

- LVM is discussed in both labs 3 and 4. Take time to learn, and write down the steps to perform Investigations 4 and 5.
- It is a good idea to printout, read and gain a general understanding of the **“Logical Volume Management”** WIKI link near the beginning of Lab #3 and Lab #4 before your proceeding with labs.
- It is important to carefully read and follow the exact instructions in this lab!
- If problems occur in the lab, you can restore the VMs from backups performed in lab2 or lab3.

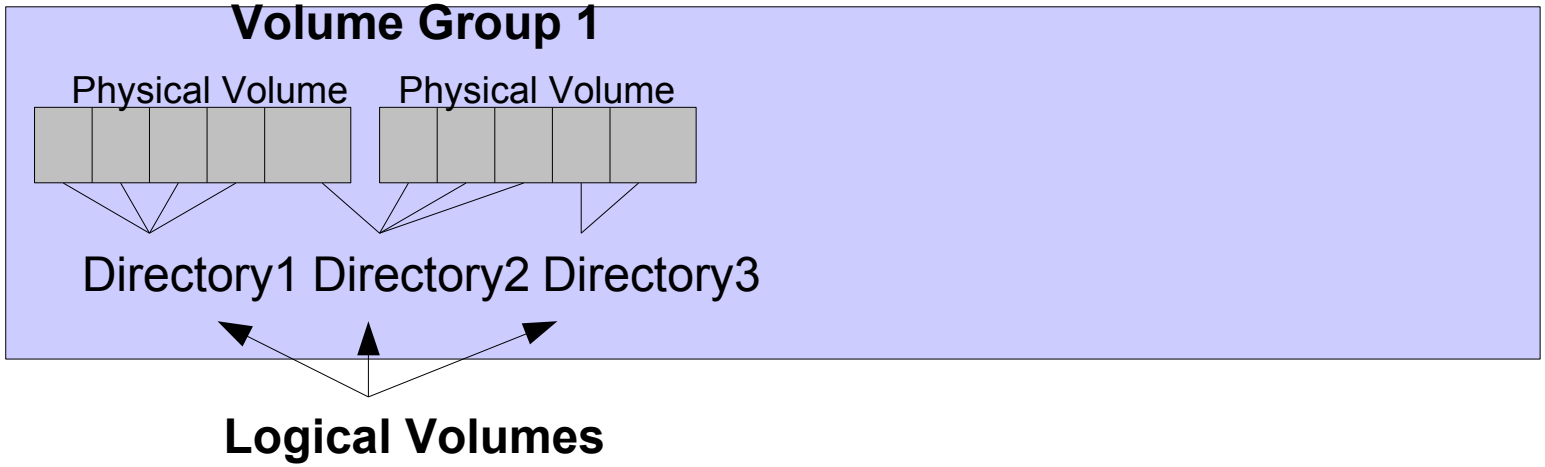
# LVM Administration

- In **Lab1**, we installed our main disk-pack (fedora16host) using LVM for future file-system expansion. The concept was that we could expand our file-system by adding another partition (physical volume), even if that means adding other hard-disk drives.



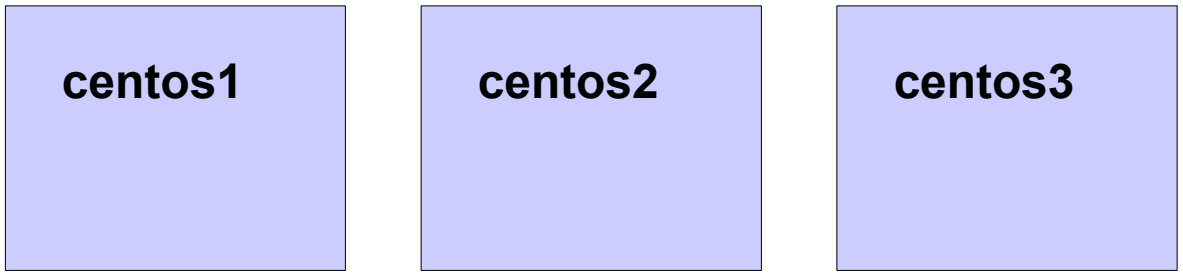
# LVM Administration

- In **Lab1**, we installed our main disk-pack (c6host) using LVM for future file-system expansion. The concept was that we could expand our file-system by adding another partition (physical volume), even if that means adding other hard-disk drives.



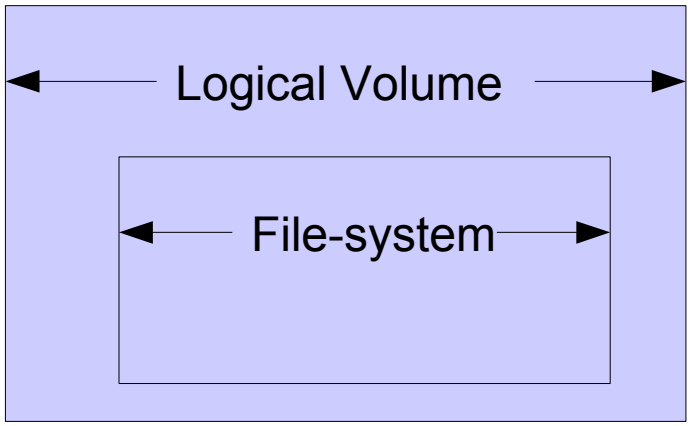
# LVM Administration

- In **Lab2**, we learned how to create **virtual machines** to allow us to practice what we learn in OPS235 such as **networking**, and also to **manipulate file system sizes** within these virtual machines (*i.e. labs 3 & 4*).
- We also learned in lab2 how to **backup your virtual machines** so that they can be restored to end of lab2 in case of any future problems arise.
- The first **3** investigations in lab3 deal with **manipulating the size of file systems** in your virtual machine both graphically and command-line.



# LVM Administration

- Growing file-system sizes using LVM is easier than reducing file-system sizes.
  - Grow logical volume size, then grow file-system size.
  - Reduce file-system size, then reduce logical volume size (not to exceed file system size!).



# LVM Administration

- How to determine information on:
  - Physical Volume
  - Volume Group
  - Logical Volume
  - Why use above command information?

# LVM Administration

- How to resize a file-system using LVM? ( up,down)
  - Graphical (name of program) / How to use?
  - Command Line / Why use command line?
  - What are potential problems?
- How to create / remove a Logical Volume?
  - Purpose?
  - Graphical / Command Line
- How to add physical Volumes?
  - Graphical / Command-Line