LVM Notebook

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Adding new partition (VMWARE):

- Define the new disk:
  fdisk ->n → t → 8e)
- partprobe (רענון מערכת הקבצים ע"י הקרנל)
- mke2fs –j /dev/sda3 # פרמוט המחיצה החדשה
- pvcreate /dev/sda3
- vgextend VolGroup /dev/sda3 – הגדלת VG
- lvresize –L 55G /dev/mapper/VolGroup00-LogVol00 # *הגדלת LV*

- resize2fs –p /dev/mapper/VolGroup00-LogVol00
  # הגדלת המחיצה בתוך LV

LVM Shrink Overview (not root FS)

1. Pwd
2. lvdisplay LV_NAME (to find out VG name)
3. vgdisplay VG_NAME
4. lvresize -L +3GB LV_NAME
5. lvdisplay LV_NAME (to verify the new LV size)
6. resize2fs -p /dev/mapper... /lvname
   The path to the LV as appear in 'df -k' command
7. df -k

LVM Resizing-Shrink root FS Safety

All of the required steps must be performed on an **unmounted volume**. If want to reduce the size of a non-root volume, simply unmount it. For a root volume, boot from SystemRescueCD

1. # vgchange -a y
   This makes any logical volumes available to Linux. Most boot CD will do it automatically during boot but repeating command won't hurt.

2. # e2fsck -f /dev/polar/root
   force FS checking

3. # resize2fs /dev/polar/root 180G
   Replace 180G with about 90% of the size you want the final

volume to be. Why is this necessary? When we reduce the size of the actual volume in the next step, it's critical that the new size is greater than or equal to the size of the file system. To be on the safe side, we'll just shrink the file system a bit more than necessary and expand it to use the full space available later.

4. # lvreduce -L 200G /dev/polar/root
   Use the actual size you need

5. # resize2fs /dev/polar/root
   Grow the FS so that it uses all available space on the logical volume