

# LPIC-1 101-400 – Lesson 18 – Lab

## \* Enter into your Lab Environment

- `# du /etc` # calculate the size of /etc
- `# du -h /etc` # same but show the result in human readable form
- `# du -sh /etc` # show only /etc not the contents
- `# du -Ssh /etc` # calculate only /etc not subdirectories
- `# du -sh /etc/*` # show only the contents of /etc
- `# du -sch /etc/*` # show only the contents of /etc and their sum
- `# du -ch /etc /boot` # Calculate both /etc and /boot
- `# du -sh` # run du in working directory
- `# du -sh /` # run du on the root directory
- `# du -shx /` # run du on the root filesystem only
- `# du -apparent-size -shx /` # find the apparent size
- `# df -h /` # compare it to the reported usage by df
- `# du -h --max-depth=2 /usr` # show the size of /usr contents up to 2 subdirectories deep

# Lesson 18 – Lab

- # **df -h** # show filesystems usage
- # **df -h /usr** # show usage of filesystem where **/usr** lies
- # **df -h /usr/share** # show usage of filesystem where **/usr/share** lies
- # **df -hT** # show filesystems usage along with filesystem type
- # **df -ah** # show all filesystems, even virtual
- # **df -i** # show inode usage for filesystems
- # **fsck /dev/vda1** # check **vda1**. Did it work?
- # **mkfs -t ext4 /dev/vdb1** # create an **ext4** filesystem on **vdb1**
- # **mount /dev/vdb1 /mnt** # mount it on **/mnt**
- # **df -hT /mnt** # check it out
- # **fsck /dev/vdb1** # run **fsck** on **vdb1**. Did it work?
- # **umount /dev/vda1** # unmount **/dev/vdb1**
- # **fsck -N /dev/vdb1** # don't run just simulate
- # **fsck /dev/vdb1** # run **fsck**. Did it work?



# Lesson 18 – Lab

- `# fsck -f /dev/vdb1 # force check vdb1`
- `# fsck -fv /dev/vd1 # force check with verbose output`
- `# debugfs /dev/vdb1 # interactively repair vda1`
- `: help # see help for debug`
- `: quit # I have no idea what I'm doing!`
- `# dumpe2fs /dev/vdb1 | less # show extended information for vdb1`
- `# dumpe2fs -h /dev/vdb1 | less # skip group descriptors`
- `# tune2fs -l /dev/vdb1 # list filesystem parameter values`
- `# tune2fs -l /dev/vda1 | grep name # find vda1 label`
- `# tune2fs -l /dev/vdb1 | grep name # find vdb1 label`
- `# umount /dev/vdb1 # unmount vdb1`
- `# tune2fs -L 'RECOVERY' /dev/vdb1 # set label for vdb1`
- `# tune2fs -l /dev/vdb1 | grep name # verify`

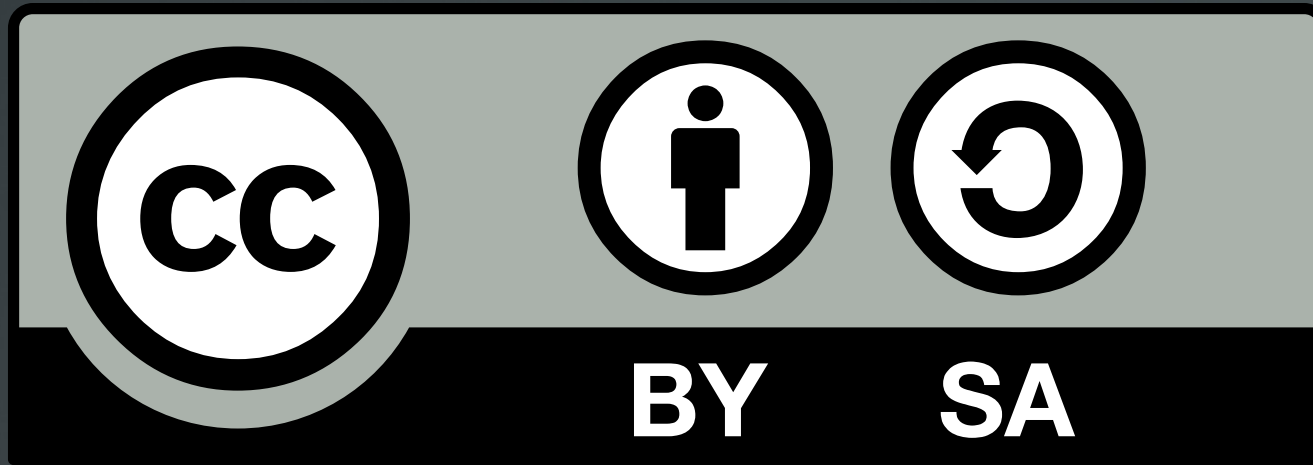


# Lesson 18 – Lab

- `# tune2fs -l /dev/vdb1 | grep -i uuid # check the UUID of vdb1`
- `# tune2fs -c 0 -i 0 /dev/sda1 # disable mount or time related checking`
- `# tune2fs -l /dev/vdb1 | grep -i reserve # check reserved space for the root user`
- `# tune2fs -m 10 /dev/vdb1 # increase reserved space to 10%`
- `# tune2fs -l /dev/vdb1 | grep -i reserve # verify`



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