



Create your own Live CD from Knoppix

THE LIVE CD WORKSHOP

Presenter: **Sarath Lakshman**

www.sarathlakshman.info

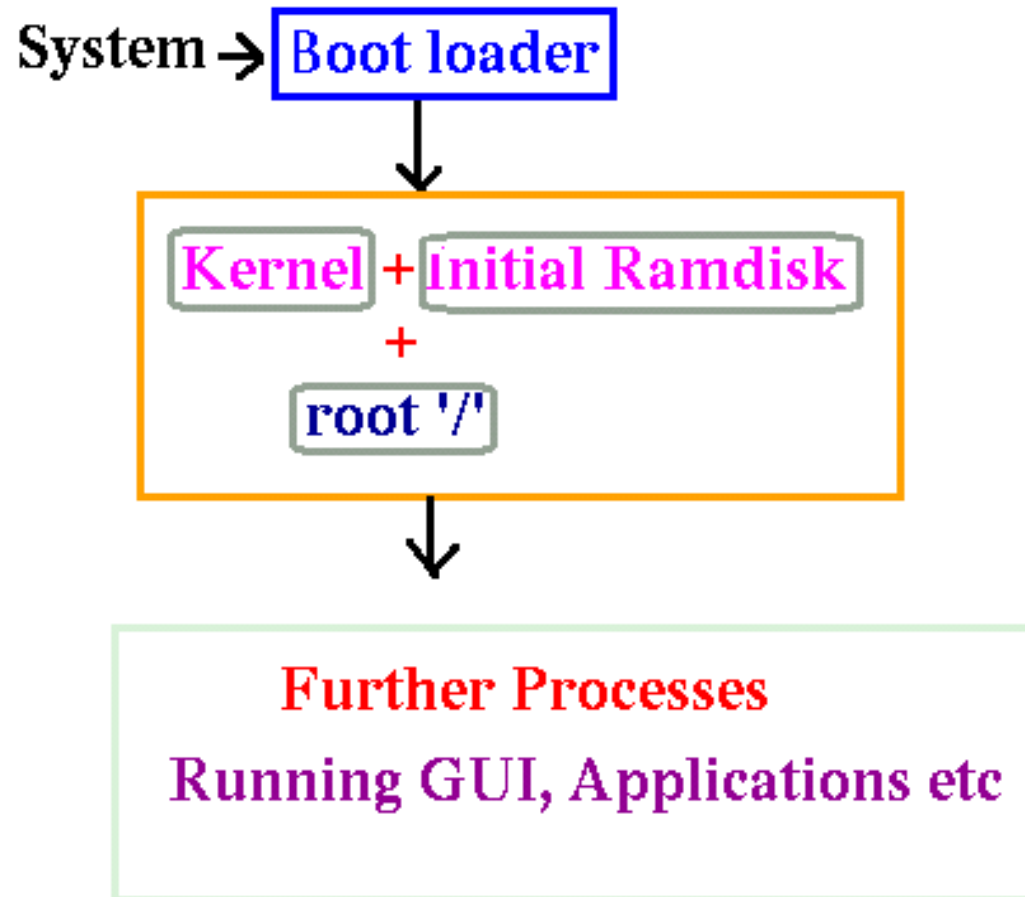


Essence of this workshop

- What is a Live CD?
- Uses
- Origin of Live CDs.
- How does it work?
- About Knoppix.
- My experience with SLYNIX
- What is remastering?
- Remastering process explained. (Knoppix)



Working of GNU/Linux OS





How knoppix works?

System → **Boot loader from CD**



Kernel + miniroot.gz

Boot Scripts

1. **Cloop mounting --> CD Rom/KNOPPIX to /KNOPPIX**
2. **chroot /KNOPPIX**



Further Processes
Running GUI, Applications etc



Knoppix remasteing Howto ?

- Boot using knoppix
- Copy /KNOPPIX to My Remaster/new (say)
- Create Swap partition
- Chroot to My Remaster/new
- Add/ Remove applications
- Cloop – Compression
- Create iso and burn it.





Commandlines

Create a ext3/ext2 (say hda1) & a Swap partition

```
# mount /dev/hda1 /mnt/hda1
```

```
# mkdir /mnt/hda1/my_knx
```

```
# mkdir /mnt/hda1/my_knx/newCD
```

```
# copy /boot (from CD Rom) to  
/mnt/hda1/my_knx/newCD
```

```
# cp -Rp /KNOPPIX /mnt/hda1/my_knx
```

```
# chroot /mnt/hda1/my_knx/KNOPPIX
```

```
root@0[/]#apt-get install ...remove
```

```
root@0[/]#dpkg -i ...
```



Commandlines..

```
# mkdir /mnt/hda1/my_knx/newCD/KNOPPIX
#mkisofs -R ../KNOPPIX | create_compressed_fs - 65536>
/mnt/hda1/my_knx/newCD/KNOPPIX

# mkisofs -pad -l -r -J -v -V "KNOPPIX" -no-emul-boot -boot-load-size
4 \
  -boot-info-table -b boot/isolinux/isolinux.bin -c boot/isolinux/boot.cat \
  -hide-rr-moved -o /mnt/hda1/my_knx/newdistro.iso
/mnt/hda1/knx/newCD
```

Burn the iso and enjoy.



Tips to work with appearance

- Working with boot scripts
- Copy /boot/miniroot.gz
- # gunzip miniroot.gz
- # mkdir test
- # mount -o loop miniroot test
- Make necessary changes.. (linuxrc)
- Umount it and gzip...Replace original



Tips about appearance

- **Bootscreen:**
- Find `/boot/isolinux/logo.16`
- `# lss16toppm logo.16 <logo.ppm>`
- `# ppmtolss16 logo.ppm <logo.16>`
- **Working out with GUI**
- Copy user ~ dir to `/etc/skel`



Tips

- Remastering made easy using automation scripts. :)
<http://debian.tu-bs.de/knoppix/remaster/>
- New UNIONFS
- Cloop and Squashfs
- Other distros :-
- Slax, Mepis, Kanotix, Morphix, puppy, Gnoppix....



Testing, Common errors

- Testing your new custom knoppix.
- Using Emulators:
- Vmware
- Qemu
- Errors
- 1.) Compression
- 2) About creating logo.16



Thanks to foss.in

- Experience with my distro - SLYNUX

Let's Create a Live CD now.



Happy Remastering!

Thank you!

Sarath Lakshman

sarathlakshman@gmail.com

www.slynux.org

www.sarathlakshman.info