

## LTSP (LINUX TERMINAL SERVER PROJECT)

WAN - LTSP(ROUTER) - LAN

WAN : 192.168.100.1

LTSP : eth1 192.168.100.10 / eth0 192.168.2.1

LAN : 192.168.2.0/24

1. set LTSP sebagai ROUTER

2. install LTSP

```
padli@raisa: ~  
padli@raisa:~$ sudo apt-get install ltsp-server-standalone openssh-server
```

3. set dhcp server

```
padli@raisa: ~  
GNU nano 2.2.6      File: /etc/ltsp/dhcpd.conf      Modified  
#  
# Default LTSP dhcpd.conf config file.  
#  
authoritative;  
  
subnet 192.168.2.0 netmask 255.255.255.0 {  
    range 192.168.2.20 192.168.2.250;  
    option domain-name "raisa.web.id";  
    option domain-name-servers 8.8.8.8;  
    option broadcast-address 192.168.2.255;  
    option routers 192.168.2.1;  
#    next-server 192.168.0.1;  
#    get-lease-hostnames true;  
    option subnet-mask 255.255.255.0;  
    option root-path "/opt/ltsp/i386";  
    if substring( option vendor-class-identifier, 0, 9 ) = "PXEclient" {  
        filename "/ltsp/i386/pxelinux.0";  
    } else {  
^G Get Help  ^O WriteOut  ^R Read File  ^Y Prev Page  ^K Cut Text   ^C Cur Pos  
^X Exit      ^J Justify   ^W Where Is   ^V Next Page  ^U UnCut Text^T To Spell
```

#### 4. set interface DHCP server

```
padli@raisa: ~  
GNU nano 2.2.6      File: /etc/default/isc-dhcp-server      Modified  
  
# Path to dhcpd's PID file (default: /var/run/dhcpd.pid).  
#DHCPD_PID=/var/run/dhcpd.pid  
  
# Additional options to start dhcpd with.  
#       Don't use options -cf or -pf here; use DHCPD_CONF/ DHCPD_PID instead  
#OPTIONS=""  
  
# On what interfaces should the DHCP server (dhcpd) serve DHCP requests?  
#       Separate multiple interfaces with spaces, e.g. "eth0 eth1".  
INTERFACES="eth0"
```

#### 5. start service dhcp

```
padli@raisa: ~  
padli@raisa:~$ sudo service isc-dhcp-server start  
isc-dhcp-server start/running, process 5837  
padli@raisa:~$ sudo service isc-dhcp-server start  
start: Job is already running: isc-dhcp-server  
padli@raisa:~$
```

#### 6. build fat client / for thin client just type "ltsp-build-client"

```
padli@raisa: ~  
padli@raisa:~$ sudo ltsp-build-client --fat-client --fat-client-desktop ubuntu-d  
esktop --arch i386 --mirror http://kambing.ui.ac.id/ubuntu
```

## 7. sesuaikan waktu server & client

```
root@raisa: /
root@raisa:/# date
Sel Jun  9 13:02:05 WIB 2015
root@raisa:/# chroot /opt/ltsp/i386 date
Tue Jun  9 13:02:15 WIB 2015
root@raisa:/#
```

```
root@raisa: /
root@raisa:/# chroot /opt/ltsp/i386 apt-get install language-pack-id
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following extra packages will be installed:
  firefox-locale-id language-pack-id-base
The following NEW packages will be installed:
  firefox-locale-id language-pack-id language-pack-id-base
0 upgraded, 3 newly installed, 0 to remove and 0 not upgraded.
Need to get 1802 kB of archives.
After this operation, 5510 kB of additional disk space will be used.
Do you want to continue? [Y/n]
```

```
root@raisa: /
root@raisa:/# date
Sel Jun  9 13:03:18 WIB 2015
root@raisa:/# chroot /opt/ltsp/i386 date
Sel Jun  9 13:03:22 WIB 2015
root@raisa:/#
```

## 8. tambahkan user admin untuk LTSP server

```
root@raisa: /home/padli
padli@raisa: ~
padli@raisa:~$ sudo -s -H
root@raisa:/home/padli# chroot /opt/ltsp/i386
root@raisa:/# useradd -m padli -G sudo
root@raisa:/# passwd padli
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
root@raisa:/# exit
exit
```

## 9. tambahkan user biasa untuk LTSP client

```
root@raisa: /home/padli
padli@raisa: ~ x root@raisa: /home/padli x
root@raisa:/home/padli# adduser raisa
Adding user `raisa' ...
Adding new group `raisa' (1001) ...
Adding new user `raisa' (1001) with group `raisa' ...
Creating home directory `/home/raisa' ...
Copying files from `/etc/skel' ...
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
Changing the user information for raisa
Enter the new value, or press ENTER for the default
    Full Name []:
    Room Number []:
    Work Phone []:
    Home Phone []:
    Other []:
Is the information correct? [Y/n] y
root@raisa:/home/padli#
```

```
root@raisa: /home/padli
root@raisa:/home/padli# chroot /opt/ltsp/i386 adduser raisa
Adding user `raisa' ...
Adding new group `raisa' (1001) ...
Adding new user `raisa' (1001) with group `raisa' ...
Creating home directory `/home/raisa' ...
Copying files from `/etc/skel' ...
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
Changing the user information for raisa
Enter the new value, or press ENTER for the default
    Full Name []:
    Room Number []:
    Work Phone []:
    Home Phone []:
    Other []:
Is the information correct? [Y/n] y
root@raisa:/home/padli#
```

```
root@raisa: /home/padli
padli@raisa: ~
root@raisa:/home/padli# ls /home/
padli  raisa
root@raisa:/home/padli# ls /opt/ltsp/i386/home/
padli  raisa
root@raisa:/home/padli#
```

10. samakan file sources.list & pindahkan file lts.conf

```
padli@raisa: ~
padli@raisa:~$ sudo cp /opt/ltsp/i386/etc/apt/sources.list /etc/apt/sources.list
padli@raisa:~$
```

```
root@raisa: /home/padli
root@raisa:/home/padli# cp /opt/ltsp/i386/etc/lts.conf /var/lib/tftpboot/ltsp/i386/
```

11. update server

```
padli@raisa: ~
padli@raisa:~$ sudo apt-get update
```

```
padli@raisa: ~
padli@raisa:~$ sudo chroot /opt/ltsp/i386 apt-get update
```

## 12. update image

```
root@raisa: /home/padli
padli@raisa: ~ x root@raisa: /home/padli x
root@raisa:/home/padli# ltsp-update-sshkeys
root@raisa:/home/padli# ltsp-update-image
Parallel mksquashfs: Using 2 processors
Creating 4.0 filesystem on /opt/ltsp/images/i386.img.tmp, block size 131072.
[==/ ] 1322/26668 4%
```

## 13. restart server

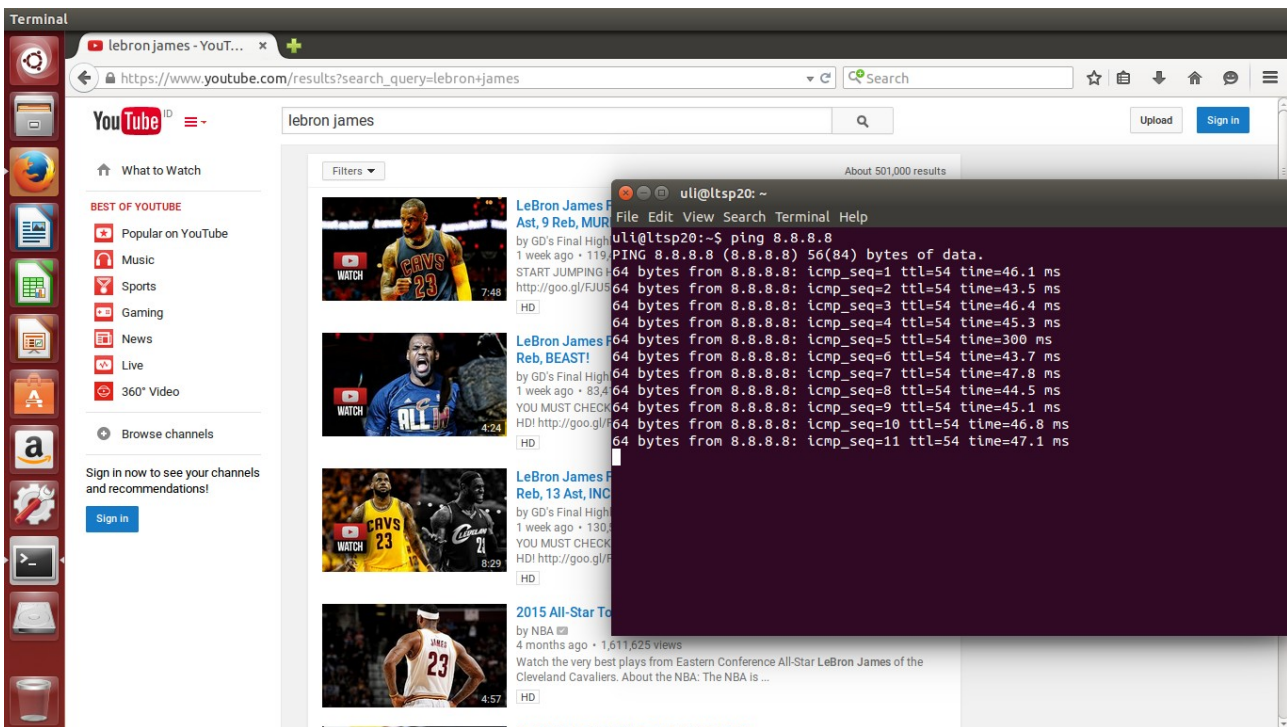
```
root@raisa: /home/padli
padli@raisa: ~ x root@raisa: /home/padli x
root@raisa:/home/padli# reboot
```

## 14. tes client (set bios / EFI boot from network)

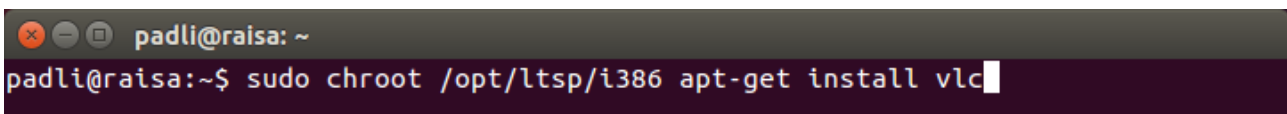
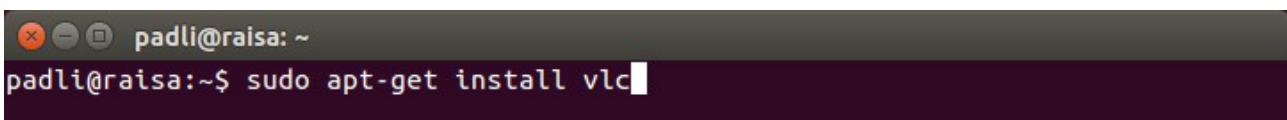




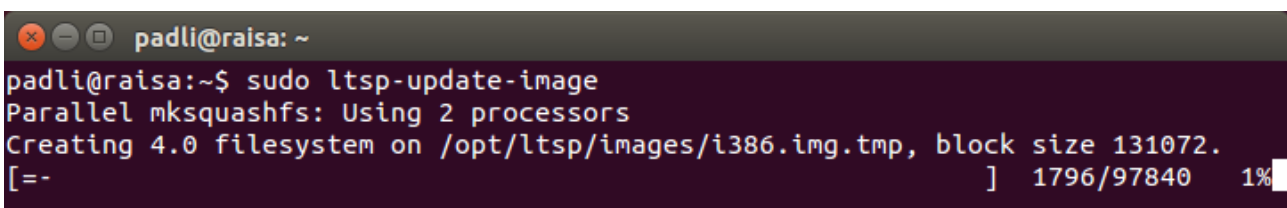
## 15. tes client browsing (ctrl+alt+del untuk logout)



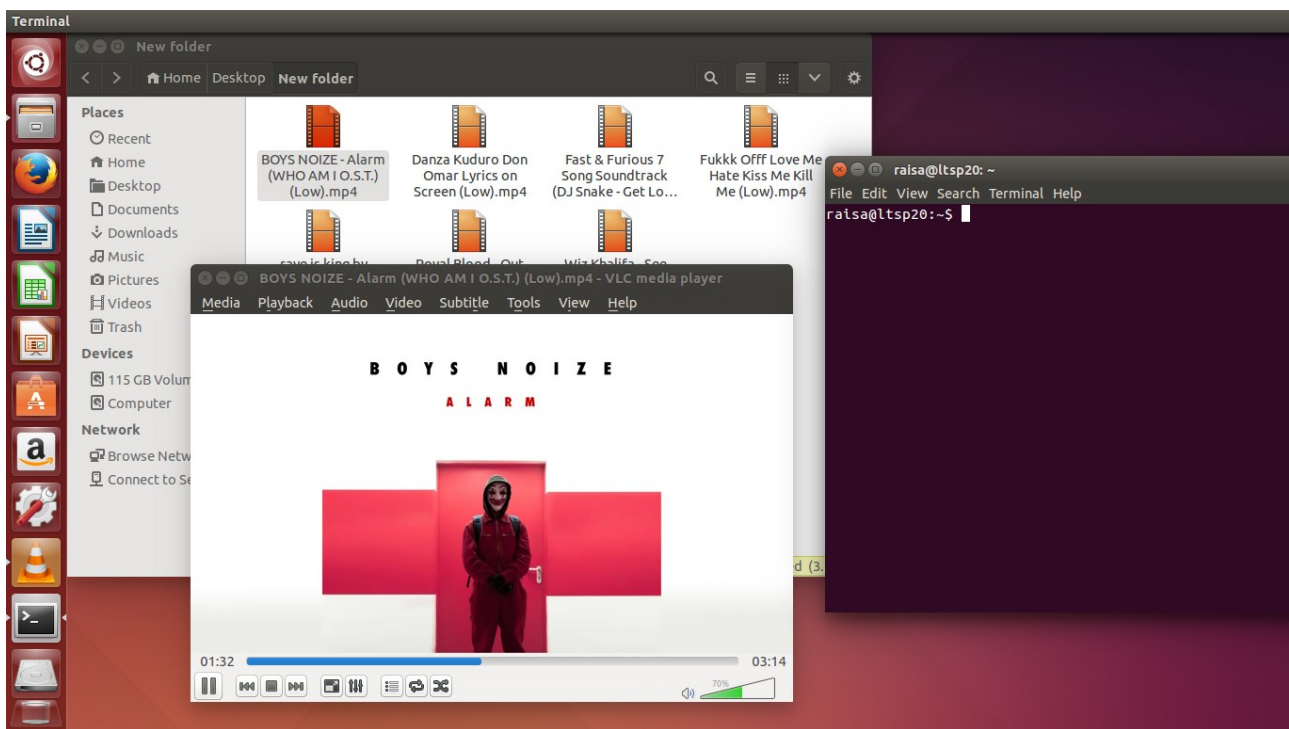
## 16. install vlc player di server



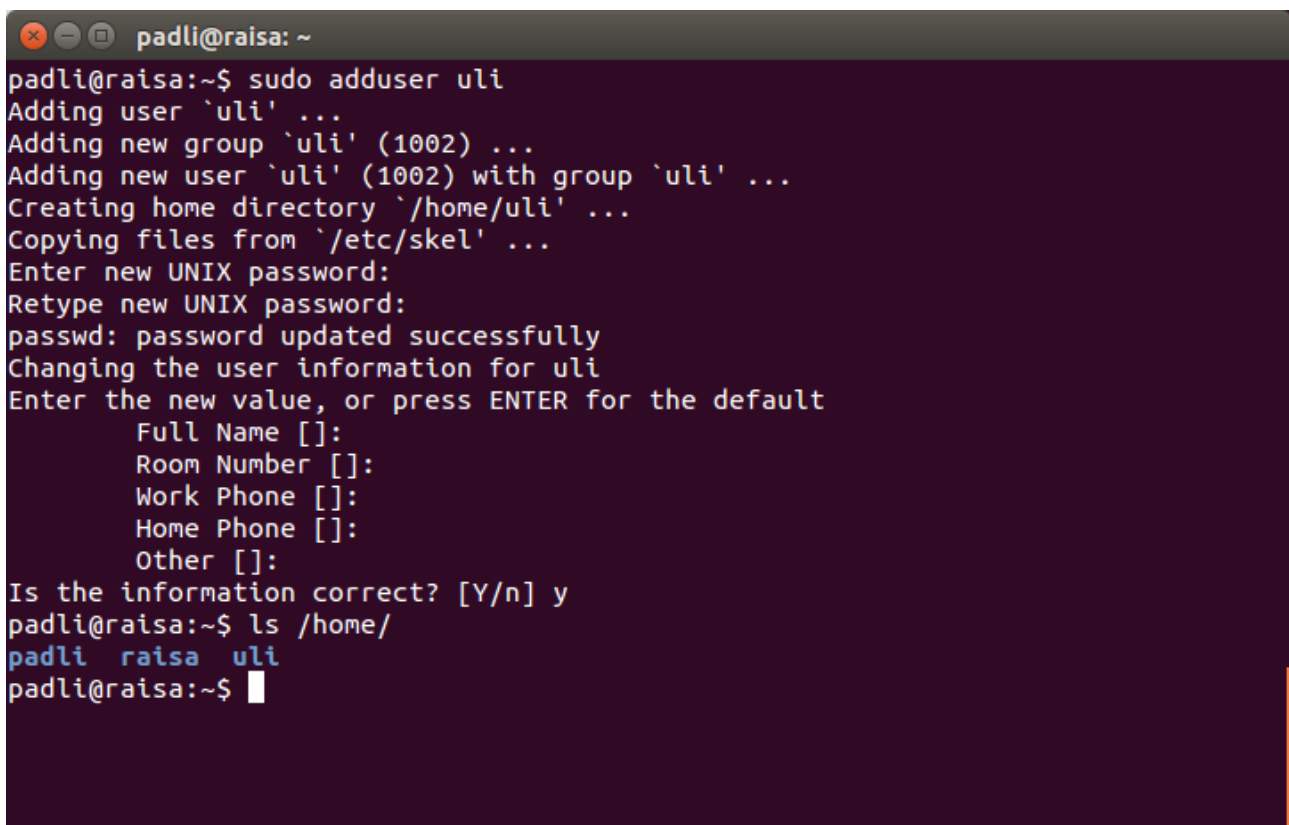
## 17. update image



## 18. tes vlc player di client



## 19. tambah user di server

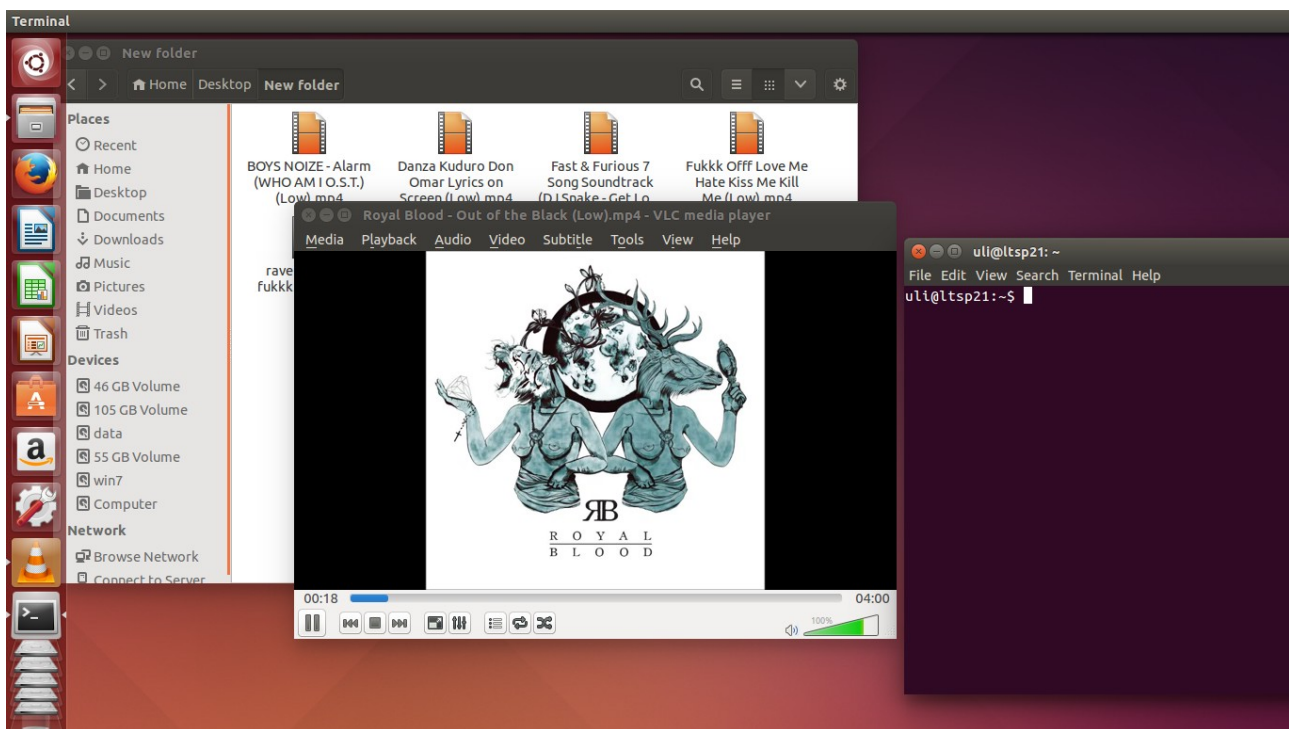




```
root@raisa: /home/padli
root@raisa:/home/padli# chroot /opt/ltsp/i386 adduser uli
Adding user `uli' ...
Adding new group `uli' (1002) ...
Adding new user `uli' (1002) with group `uli' ...
Creating home directory `/home/uli' ...
Copying files from `/etc/skel' ...
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
Changing the user information for uli
Enter the new value, or press ENTER for the default
    Full Name []:
    Room Number []:
    Work Phone []:
    Home Phone []:
    Other []:
Is the information correct? [Y/n] y
root@raisa:/home/padli#
```

```
padli@raisa: ~
padli@raisa:~$ ls /home/
padli  raisa  uli
padli@raisa:~$ ls /opt/ltsp/i386/home/
padli  raisa  uli
padli@raisa:~$
```

## 20. tes client (user2)



NOTE : thin client (spek server > spek client)

fat client (spek server = spek client)

FMI : <https://help.ubuntu.com/community/UbuntuLTSP>

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