

## Installation

```
root@serv1:~# apt-get install dhcp3-server debconf-utils debootstrap fuse-utils
libasound2-plugins ltsp-server
ltsp-server-standalone ltspfs nbd-server nfs-kernel-server squashfs-tools tftpd-hpa
```

Edit `/etc/dhcp3-server/dhcpd.conf` according to your needs and your network features. The following is our non-authoritative, mac-address based, vdd server dhcpd configuration file (our vdd net is a subnet of a wider LAN). You can put here your thin-clients and, if does not another authoritative dhcp server exist in the LAN, your virtual machines.

```
# VDD net
shared-network vdd {
subnet 192.168.108.0 netmask 255.255.255.0 {
    option subnet-mask 255.255.252.0;
    option routers 192.168.108.1;
    default-lease-time 7200;
    max-lease-time 86400;
    option broadcast-address 192.168.108.255;
    option routers 192.168.108.1;
    option domain-name-servers 192.168.100.1;
    option domain-name "example.local";
    option netbios-name-servers 192.168.100.1;
    option netbios-node-type 8;
    filename "/ltsp/i386/pxelinux.0";
    option root-path "192.168.108.21:/opt/ltsp/i386";
    next-server 192.168.108.21;
    allow booting;
    allow bootp;

    host post_0 {
        hardware ethernet 00:08:02:11:5c:ec;
        fixed-address 192.168.108.10;
    }
    host post_1 {
        hardware ethernet 00:08:02:1f:f2:c4;
        fixed-address 192.168.108.11;
    }
...
    host vm_1 {
        hardware ethernet 00:00:00:00:00:01;
        fixed-address 192.168.108.31;
    }
...
}
```

Edit /etc/default/dhcp3-server

```
INTERFACES="eth0"
```

Restart you dhcp server

```
root@serv1:~# /etc/init.d/dhcp3-server restart
```

Build ltsp-client image \*If you are, as is the case, on a 64-bit system but your clients have another architecture you have to use the --arch option

```
root@serv1:~# ltsp-build-client --arch i386
root@serv1:~# cd /opt/ltsp/i386/
root@serv1:~# ln -s boot/pxelinux.0 pxelinux.0
```

Then update the client image. \* NOTE that you must do that every time you make some modifications in the ltsp-client root, id est in the directory /opt/ltsp/i386 \* \* See LTSP documentation for further details \*

```
root@serv1:~# ltsp-update-image
```

Edit /etc/default/tftpd-hpa

```
RUN_DAEMON = yes
```

Edit /etc/inetd.conf

```
# tftp dgram udp wait root /usr/sbin/in.tftpd /usr/sbin/in.tftpd -s /var/lib/tftpboot
```

Restart both services

```
root@serv1:~# /etc/init.d/tftpd-hpa restart
root@serv1:~# /etc/init.d/openbsd-inetd restart
```

// Still we are not really using lts.conf

Edit /etc/exports

```
/opt/ltsp 192.168.108.0/255.255.255.0(ro,no_root_squash,async,no_subtree_check)
```

and launch:

```
root@serv1:~# exportfs -a
```

Finally, if not already done, create at least one normal user on vdd server. It (or they) will be the user (or users) to login with in the ltsp thin client desktop environment and to do further interesting things ... ;)

```
root@serv1:~# adduser user1
```

{backbutton}