

# pxe

- [pxe](#)

# pxe

```
apt install syslinux pxelinux tftpd-hpa nfs-kernel-server lighttpd -y
```

```
vim /etc/default/tftpd-hpa
```

```
TFTP_OPTIONS="--secure --ipv4"
```

```
mkdir --p /netboot/tftp/pxelinux.cfg
mkdir -p /netboot/pxe/configs
mkdir -p /netboot/pxe/data
chmod -R 777 /netboot/pxe
chown -R www-data:www-data pxe
```

```
ssh-keygen
```

```
cp ~/.ssh/id_rsa.pub /netboot/pxe/sshkeys.pub
```

```
mkdir -p /netboot/nfs/
```

```
vim /etc/exports
```

```
/netboot/nfs/ *(ro,sync,no_wdelay,insecure_locks,no_root_squash,insecure,no_subtree_check)
```

```
exportfs -a
```

```
echo "Setting up NFS for local network"
echo "/netboot/pxe 10.0.9.0/255.255.255.0(rw,sync,no_root_squash,no_subtree_check)" >>
/etc/exports
echo "Restarting NFS service"
exportfs -ra
```

```
vim /etc/lighttpd/lighttpd.conf
```

```
server.document-root = "/netboot/pxe"
dir-listing.activate      = "enable"
```

```
service lighttpd restart
```

```
cd /netboot/pxe/  
wget http://nl.alpinelinux.org/alpine/v3.9/releases/x86_64/netboot/vmlinuz-vanilla  
wget http://nl.alpinelinux.org/alpine/v3.9/releases/x86_64/netboot/modloop-vanilla  
wget http://nl.alpinelinux.org/alpine/v3.9/releases/x86_64/netboot/initramfs-vanilla
```

```
cp -v /usr/lib/PXELINUX/pxelinux.0 /netboot/tftp/
```

```
cp -v /usr/lib/syslinux/modules/bios/{ldlinux.c32, libcom32.c32, libutil.c32, vesamenu.c32}  
/netboot/tftp/
```

```
touch /netboot/tftp/pxelinux.cfg/default
```

```
vim /netboot/tftp/pxelinux.cfg/default
```

```
DEFAULT vesamenu.c32  
PROMPT 0  
TIMEOUT 300  
MENU TITLE PXE Network Boot Menu  
LABEL local  
MENU LABEL Von Festplatte starten  
MENU DEFAULT  
LOCALBOOT 0  
LABEL memtest  
MENU LABEL Speichertest mit memtest86+ v4.20  
KERNEL memtest
```

```
wget http://releases.ubuntu.com/18.04/ubuntu-18.04.3-desktop-amd64.iso
```

```
mount -o loop ubuntu-18.04.3-desktop-amd64.iso /mnt
```

```
mkdir -v /netboot/{nfs,tftp}/ubuntu1804
```

```
cp -Rfv /mnt/* /netboot/nfs/ubuntu1804/
```

```
cp -v /mnt/casper/{vmlinuz,initrd} /netboot/tftp/ubuntu1804/
```

```
chmod -Rfv 777 /netboot
```

```
umount /mnt
```

```
rm ubuntu-18.04.3-desktop-amd64.iso
```

```
vim /netboot/tftp/pxelinux.cfg/default
```

```
default vesamenu.c32
```

```
label install1
```

```
menu label ^Install Ubuntu 18.04 LTS Desktop
```

```
menu default
```

```
kernel ubuntu1804/vmlinuz
```

```
append initrd=ubuntu1804/initrd boot=casper netboot=nfs nfsroot=super41.home: /
```

```
netboot/nfs/ubuntu1804/ splash toram ---
```

[pxe alpine](#)