# Hands-off installation of Ubuntu

#### BV

[2015-03-28 Sat 18:19]

#### 1 Overview of installation

- 1. Capture MAC address of computer
- 2. Enter it into system
- 3. Turn computer on, booting with netboot
- 4. Computer loads pxelinux bootloader over the network
- 5. PXELinux boots Ubuntu netboot with preseed file
- 6. Enter BIOS to turn off netboot
- 7. After installation, use ansible/puppet to polish off

## 2 Capture MAC addresses

Boot to BIOS or run tcpdump -qtel broadcast and port bootpc while target machine boots.

# 3 Configure installation server

### 3.1 PXE/DHCP/TFTP

Local network has untouchable DHCP server, use dnsmasq to provide proxyDHCP and TFTP.

\$ sudo apt-get install dnsmasq

Add to /etc/dnsmasq.conf

```
# Ubuntu sets up to use self for resolving and resolv.conf lists
# localhost so avoid self reference
no-resolv
# Router is real DNS server
server=192.168.1.1
# limit what interface to listen on
interface=eth0
# probably partly redudant
listen-address=127.0.0.1,192.168.1.123
# load aux config chunks
conf-dir=/etc/dnsmasq.d
   /etc/dnsmasq.d/proxydhcp.conf
# log traffic info
log-dhcp
# Turn on the included TFTP server
enable-tftp
# Root directory for TFTP files
tftp-root=/var/lib/tftpboot
# PXE boot loader
dhcp-boot=pxelinux.0
# Act as proxyDHCP on given network
dhcp-range=192.168.1.0, proxy
# Ignore anybody we don't know
dhcp-ignore=tag:!known
# last arg is pxe file bootloader sans ".0"
pxe-service=x86PC, "Boot PXELinux", pxelinux
   /etc/dnsmasq.d/known-hosts.conf
dhcp-host=00:22:19:dc:2e:bb
   Put all known hosts in this file. Any not listed will simply be ignored by
dnsmasq. Any changes to the config files requires a restart
# service dnsmasq restart
   Monitor dnsmasq with
# tail -f /var/log/syslog
```

### 3.2 Prepare TFTP file area

Download netboot image:

```
# cd /var/lib/tftpboot
# for n in trusty utopic vivid
> do
> mkdir $n
> wget -0- http://archive.ubuntu.com/ubuntu/dists/$n/main/installer-amd64/current/im
> done
# rm -rf pxelib
# mkdir pxelib
# cd pxelib
# ln -s ../$n/ubuntu-installer/amd64/boot-screens/*.c32 .
# cd ..
# ln -sf $n/ldlinux.c32 .
# ln -sf $n/pxelinux.0 .
Configure.
```

### 3.3 Preseeding

This takes crafting.