

```
joe@dhcp:~$ echo "Fixed addresses. Associate mac address with ip so the same address is allocated to a machine"
```

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```

```
joe@dhcp:~$ █
```

```
ddns-update-style none;
```

```
# If this DHCP server is the official DHCP server for the local
# network, the authoritative directive should be uncommented.
authoritative;
```

```
# Use this to send dhcp log messages to a different log file (you also
# have to hack syslog.conf to complete the redirection).
log-facility local7;
```

```
# No service will be given on this subnet, but declaring it helps the
# DHCP server to understand the network topology.
```

```
subnet 144.38.199.32 netmask 255.255.255.240 {
  # what part of this range should be served dynamically?
  range 144.38.199.40 144.38.199.46;
  #override a global option if you want
  option domain-name-servers 8.8.8.8;
  #option domain-name "foobar.com";
  option subnet-mask 255.255.255.240;
  option routers 144.38.199.33;
}
```

```
include "/etc/dhcp/IT3110-dhcp.txt";
# i could list the addresses in this file
# But i have chose to put them in the included file for clarity
```

```
# I have deleted everything below this for clarity (it was all comments)
```

```
"/etc/dhcp/dhcpd.conf" 50L, 1601C written
```

46,63

Bot

```
joe@dhcp:~$ sudo vi /etc/dhcp/IT3110-dhcp.txt
```



```
jfranco@desdemona:~$ citv clonevm bionic_template_2019 fixed-1-2019 512 2003
```

```
jfranco@desdemona:~$ citv clonevm bionic_template_2019 fixed-2-2019 512 2003
```

```
jfrancom@desdemona:~$ citv showvm | grep fixed
```

```
    fixed-1-2019      512    1 None:5955    2003 52:54:00:08:00:36    0/0 IT4
```

```
200
```

```
    fixed-2-2019      512    1 None:5956    2003 52:54:00:08:00:37    0/0 IT4
```

```
200
```

```
jfrancom@desdemona:~$ █
```

```
host client1 {
hardware ethernet 52:54:00:08:00:36;
fixed-address 144.38.199.37;
}
host client2 {
hardware ethernet 52:54:00:08:00:37;
fixed-address 144.38.199.38;
}
```

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```
joe@dhcp:~$ echo "When assigning fixed addresses, make sure that they are NOT part of your 'range' statement"
```

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```

```
joe@dhcp:~$ □
```

```
joe@dhcp:~$ echo "When assigning fixed addresses, make sure that they are NOT part of your 'range' statement"
```

```
When assigning fixed addresses, make sure that they are NOT part of your 'range' statement
```

```
joe@dhcp:~$ cat /etc/dhcp/dhcpd.conf | grep range
```

```
# what part of this range should be served dynamically?
```

```
range 144.38.199.40 144.38.199.46;
```

```
joe@dhcp:~$ echo "See that my fixed addresses are not in that range"
```

```
See that my fixed addresses are not in that range
```

```
joe@dhcp:~$
```

```
jfranco@desdemona:~$ citv bootvm fixed-1-2019 c
/usr/bin/ssh -q cleopatra "/qemu/bin/qemu-boot 55 'jfranco-fixed-1-2019' 512 '52:54:00:08:00:
36' '' '' '' 'c' 1 1 2003 '/qemu/images';"
User(jfranco) has booted machine(fixed-1-2019) on server(cleopatra:55) with 512 memory.
jfranco@desdemona:~$ citv bootvm fixed-2-2019 c
/usr/bin/ssh -q cleopatra "/qemu/bin/qemu-boot 56 'jfranco-fixed-2-2019' 512 '52:54:00:08:00:
37' '' '' '' 'c' 1 1 2003 '/qemu/images';"
User(jfranco) has booted machine(fixed-2-2019) on server(cleopatra:56) with 512 memory.
jfranco@desdemona:~$
```



```
Jan 10 10:30:54 bionic-template dhcpd[10056]: Sending on LPF/ens4/52:54:00:08:00:32/144.38.199.32/28
Jan 10 10:30:54 bionic-template sh[10056]: Sending on LPF/ens4/52:54:00:08:00:32/144.38.199.32/28
Jan 10 10:30:54 bionic-template dhcpd[10056]: Sending on Socket/fallback/fallback-net
Jan 10 10:30:54 bionic-template sh[10056]: Sending on Socket/fallback/fallback-net
Jan 10 10:30:54 bionic-template dhcpd[10056]: Server starting service.
Jan 10 10:32:38 bionic-template dhcpd[10056]: uid lease 144.38.199.40 for client 52:54:00:08:00:36 is duplicate on 144.38.199.32/28
Jan 10 10:32:38 bionic-template dhcpd[10056]: DHCPDISCOVER from 52:54:00:08:00:36 via ens4
Jan 10 10:32:38 bionic-template dhcpd[10056]: DHCPOFFER on 144.38.199.37 to 52:54:00:08:00:36 via ens4
Jan 10 10:32:38 bionic-template dhcpd[10056]: uid lease 144.38.199.40 for client 52:54:00:08:00:36 is duplicate on 144.38.199.32/28
Jan 10 10:32:38 bionic-template dhcpd[10056]: DHCPREQUEST for 144.38.199.37 (144.38.199.34) from 52:54:00:08:00:36 via ens4
Jan 10 10:32:38 bionic-template dhcpd[10056]: DHCPACK on 144.38.199.37 to 52:54:00:08:00:36 via ens4
Jan 10 10:32:45 bionic-template dhcpd[10056]: uid lease 144.38.199.40 for client 52:54:00:08:00:37 is duplicate on 144.38.199.32/28
Jan 10 10:32:45 bionic-template dhcpd[10056]: DHCPDISCOVER from 52:54:00:08:00:37 via ens4
Jan 10 10:32:45 bionic-template dhcpd[10056]: DHCPOFFER on 144.38.199.38 to 52:54:00:08:00:37 via ens4
Jan 10 10:32:45 bionic-template dhcpd[10056]: uid lease 144.38.199.40 for client 52:54:00:08:00:37 is duplicate on 144.38.199.32/28
Jan 10 10:32:45 bionic-template dhcpd[10056]: DHCPREQUEST for 144.38.199.38 (144.38.199.34) from 52:54:00:08:00:37 via ens4
Jan 10 10:32:45 bionic-template dhcpd[10056]: DHCPACK on 144.38.199.38 to 52:54:00:08:00:37 via ens4
```

```
joe@dhcp:~$ ssh joe@144.38.199.38
```

```
joe@144.38.199.38's password:
```

```
Welcome to Ubuntu 18.04.1 LTS (GNU/Linux 4.15.0-36-generic x86_64)
```

- \* Documentation: <https://help.ubuntu.com>
- \* Management: <https://landscape.canonical.com>
- \* Support: <https://ubuntu.com/advantage>

```
Last login: Fri Jan 10 10:33:22 2020 from 144.38.199.34
```

```
joe@bionic-template:~$ █
```