

h1, h2, h3, h4 (enabling DHCP)

```
root@UbuntuDockerGuest-1:~# nano /etc/network/interfaces
#
# This is a sample network config, please uncomment lines to configure the network
#
# Uncomment this line to load custom interface files
# source /etc/network/interfaces.d/*
#
# Static config for eth0
#auto eth0
# iface eth0 inet static
#   address 192.168.0.2
#   netmask 255.255.255.0
#   gateway 192.168.0.1
#   up echo nameserver 192.168.0.1 > /etc/resolv.conf

# DHCP config for eth0
auto eth0
iface eth0 inet dhcp
  hostname UbuntuDockerGuest-1

Save modified buffer? [Y/N]
Y Yes
N No  C Cancel
```

```
root@UbuntuDockerGuest-2:~# nano /etc/network/interfaces
#
# This is a sample network config, please uncomment lines to configure the network
#
# Uncomment this line to load custom interface files
# source /etc/network/interfaces.d/*
#
# Static config for eth0
#auto eth0
# iface eth0 inet static
#   address 192.168.0.2
#   netmask 255.255.255.0
#   gateway 192.168.0.1
#   up echo nameserver 192.168.0.1 > /etc/resolv.conf

# DHCP config for eth0
auto eth0
iface eth0 inet dhcp
  hostname UbuntuDockerGuest-2
```

```
root@UbuntuDockerGuest-3:~# nano /etc/network/interfaces
#
# This is a sample network config, please uncomment lines to configure the network
#
# Uncomment this line to load custom interface files
# source /etc/network/interfaces.d/*
#
# Static config for eth0
#auto eth0
# iface eth0 inet static
#   address 192.168.0.2
#   netmask 255.255.255.0
#   gateway 192.168.0.1
#   up echo nameserver 192.168.0.1 > /etc/resolv.conf

# DHCP config for eth0
auto eth0
iface eth0 inet dhcp
  hostname UbuntuDockerGuest-3
```

```
root@UbuntuDockerGuest-4:~# nano /etc/network/interfaces
#
# This is a sample network config, please uncomment lines to configure the network
#
# Uncomment this line to load custom interface files
# source /etc/network/interfaces.d/*
#
# Static config for eth0
#auto eth0
# iface eth0 inet static
#   address 192.168.0.2
#   netmask 255.255.255.0
#   gateway 192.168.0.1
#   up echo nameserver 192.168.0.1 > /etc/resolv.conf

# DHCP config for eth0
auto eth0
iface eth0 inet dhcp
  hostname UbuntuDockerGuest-4
```

Creating a TCP server and setting up Netcat (LinuxHost1 and LinuxHost2 are able to communicate)

```
root@UbuntuDockerGuest-1:~# netrw/noble 1.3.2-3build1 amd64
  netcat like tool with nice features to transport files over network
root@UbuntuDockerGuest-1:~# ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
  inet 192.168.122.93 netmask 255.255.255.0 broadcast 192.168.122.255
    ether 02:42:90:0d:4f:00 txqueuelen 1000  (Ethernet)
      RX packets 19793 bytes 29523741 (29.5 MB)
      RX errors 0 dropped 0 overruns 0 frame 0
      TX packets 3055 bytes 230431 (230.4 KB)
      TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
  inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
      loop txqueuelen 1000  (Local Loopback)
        RX packets 0 bytes 0 (0.0 B)
        RX errors 0 dropped 0 overruns 0 frame 0
        TX packets 0 bytes 0 (0.0 B)
        TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

root@UbuntuDockerGuest-1:~# netcat -l -p 12345
testing
```

```
root@UbuntuDockerGuest-2:~# update-alternatives: warning: skip creation of /usr/share/man/man1/nc.1.gz because associated file /usr/share/man/man1/nc_openbsd.1.gz (of link group nc) doesn't exist
update-alternatives: warning: skip creation of /usr/share/man/man1/netcat.1.gz because associated file /usr/share/man/man1/nc_openbsd.1.gz (of link group nc) doesn't exist
root@UbuntuDockerGuest-2:~# apt search netcat
Sorting... Done
Full Text Search... Done
netcat/noble 7.94+git20230807.3be01efb1+dfsg-3build2 amd64
  NMAP netcat reimplementation
netcat-openbsd/noble,now 1.226-1ubuntu2 amd64 [installed]
  TCP/IP swiss army knife
netcat-traditional/noble 1.10-48 amd64
  TCP/IP swiss army knife
netrw/noble 1.3.2-3build1 amd64
  netcat like tool with nice features to transport files over network
root@UbuntuDockerGuest-2:~# netcat 192.168.122.93 12345
testing
```