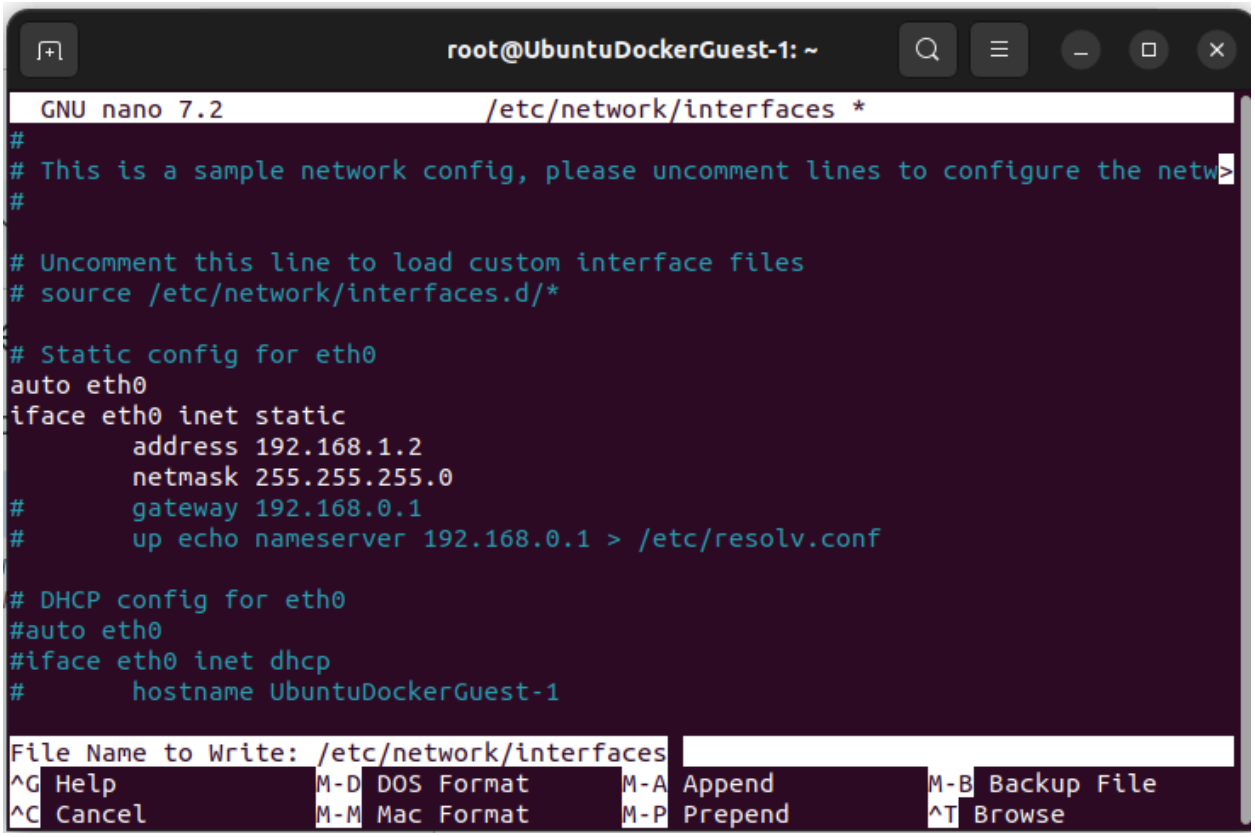
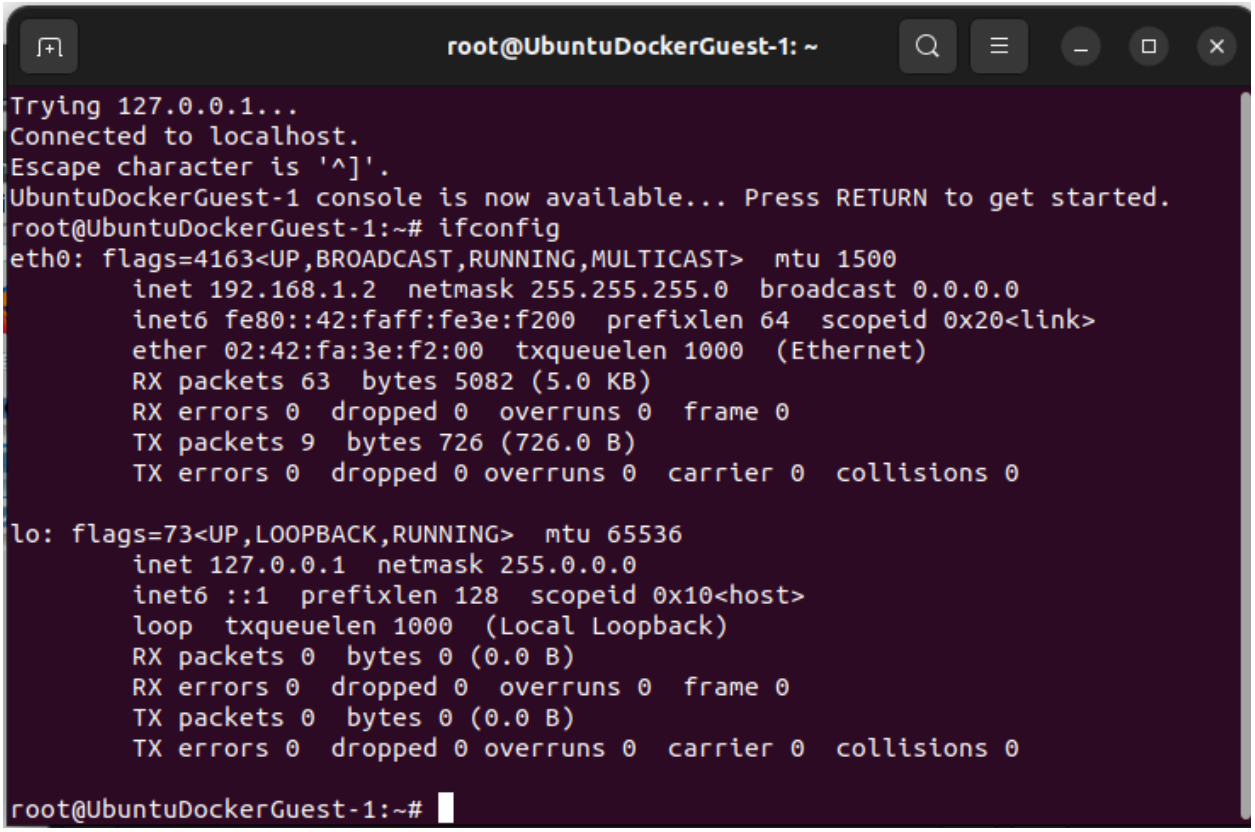
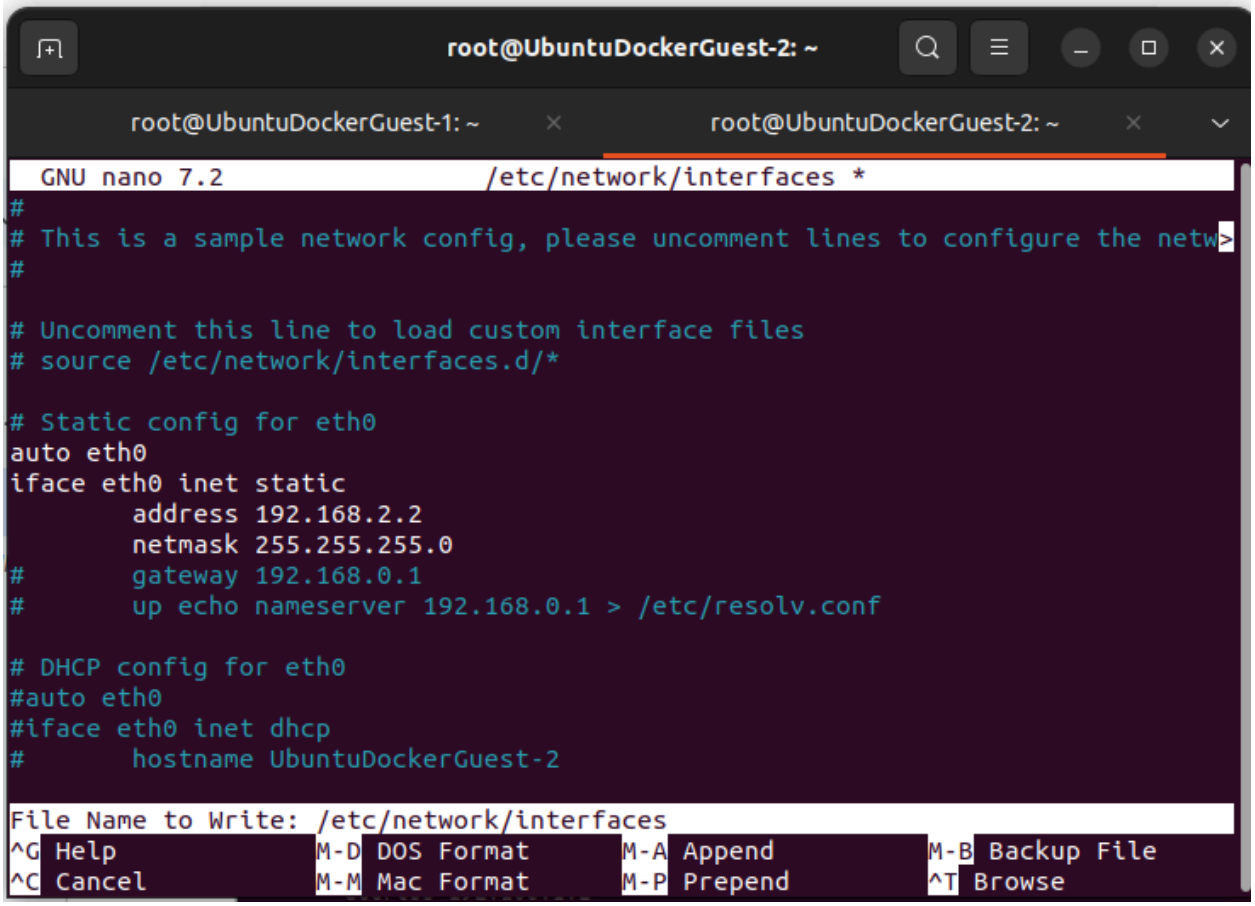
1) Please provide screenshots for the ifconfig output to prove that your changes have taken effect

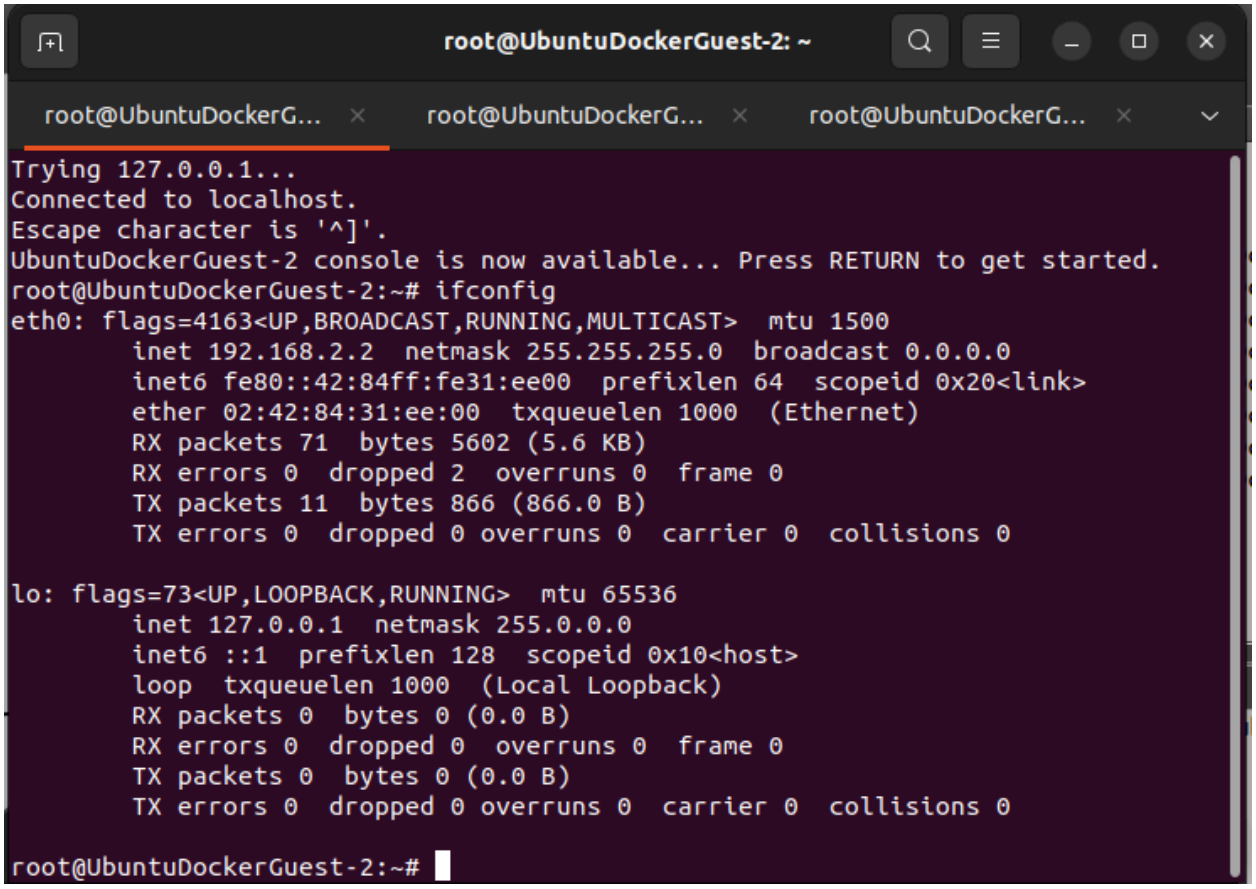
h1



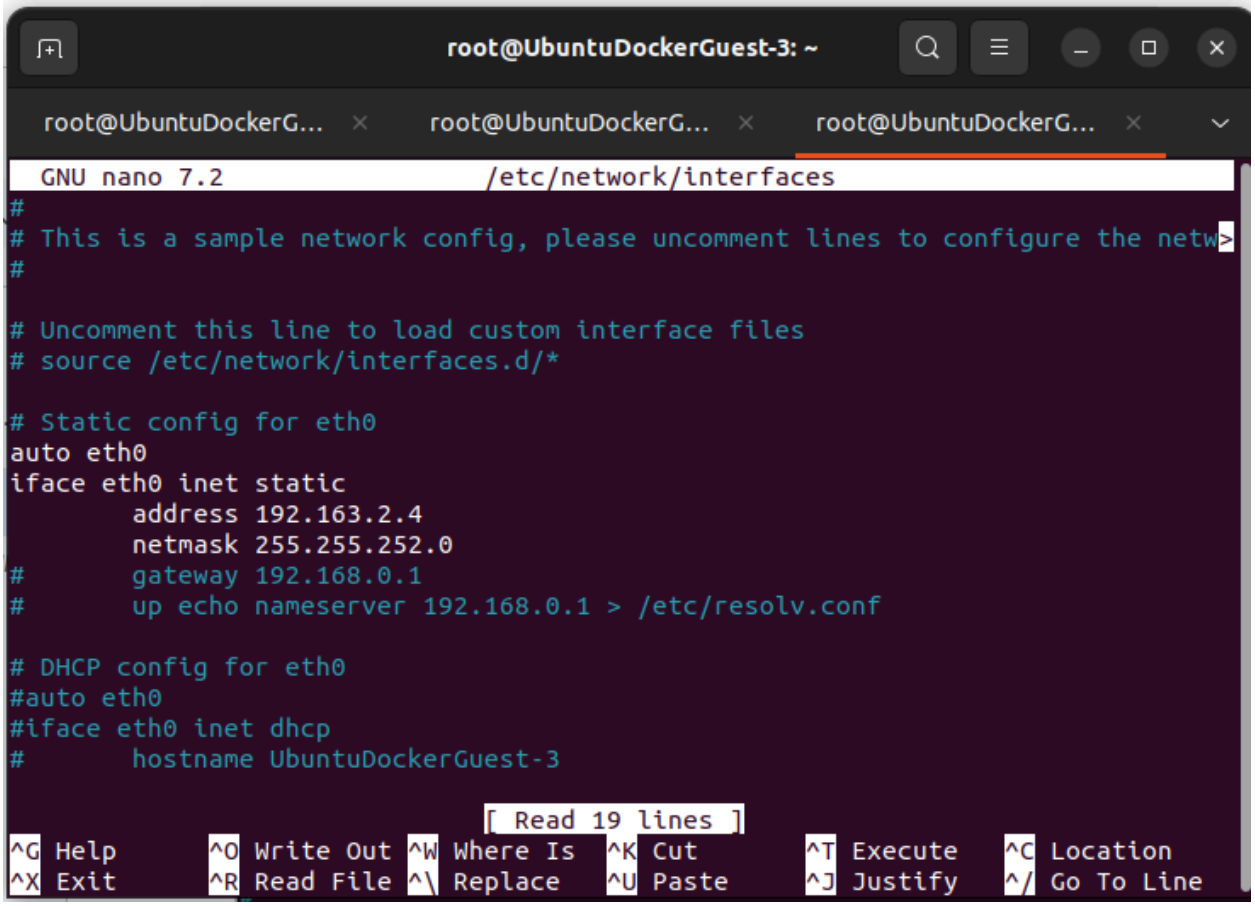

root@UbuntuDockerGuest-1: ~
Trying 127.0.0.1...
Connected to localhost.
Escape character is '^]'.
UbuntuDockerGuest-1 console is now available... Press RETURN to get started.
root@UbuntuDockerGuest-1:~# ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
inet 192.168.1.2 netmask 255.255.255.0 broadcast 0.0.0.0
inet6 fe80::42:faff:fe3e:f200 prefixlen 64 scopeid 0x20<link>
ether 02:42:fa:3e:f2:00 txqueuelen 1000 (Ethernet)
RX packets 63 bytes 5082 (5.0 KB)
RX errors 0 dropped 0 overruns 0 frame 0
TX packets 9 bytes 726 (726.0 B)
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:~#

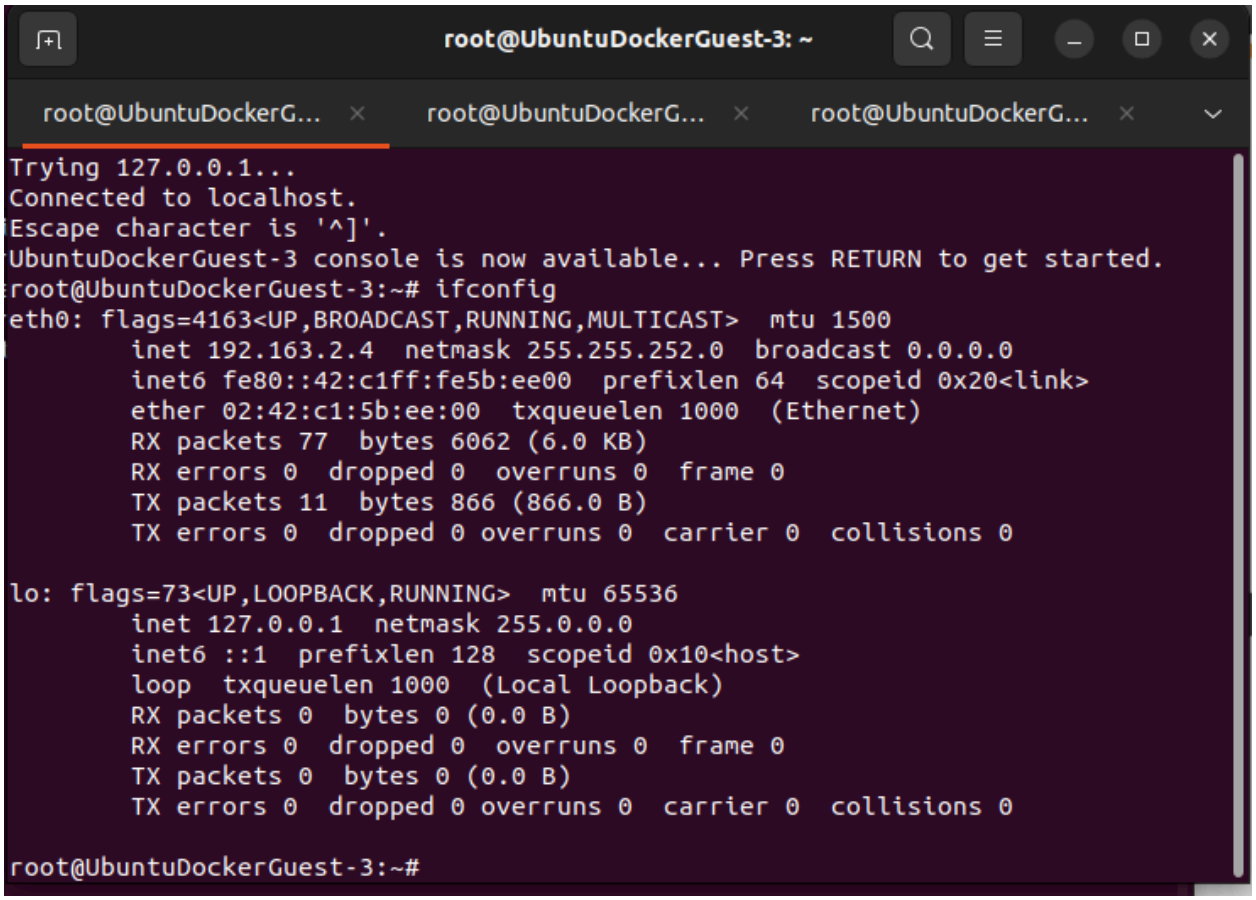
h2


root@UbuntuDockerGuest-2: ~
root@UbuntuDockerGuest-1: ~
root@UbuntuDockerGuest-2: ~
GNU nano 7.2 /etc/network/interfaces *
#
This is a sample network config, please uncomment lines to configure the netw
#
Uncomment this line to load custom interface files
source /etc/network/interfaces.d/*
Static config for eth0
auto eth0
iface eth0 inet static
address 192.168.2.2
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
File Name to Write: /etc/network/interfaces
^G Help
M-D DOS Format
M-A Append
M-B Backup File
^C Cancel
M-M Mac Format
M-P Prepend
^T Browse

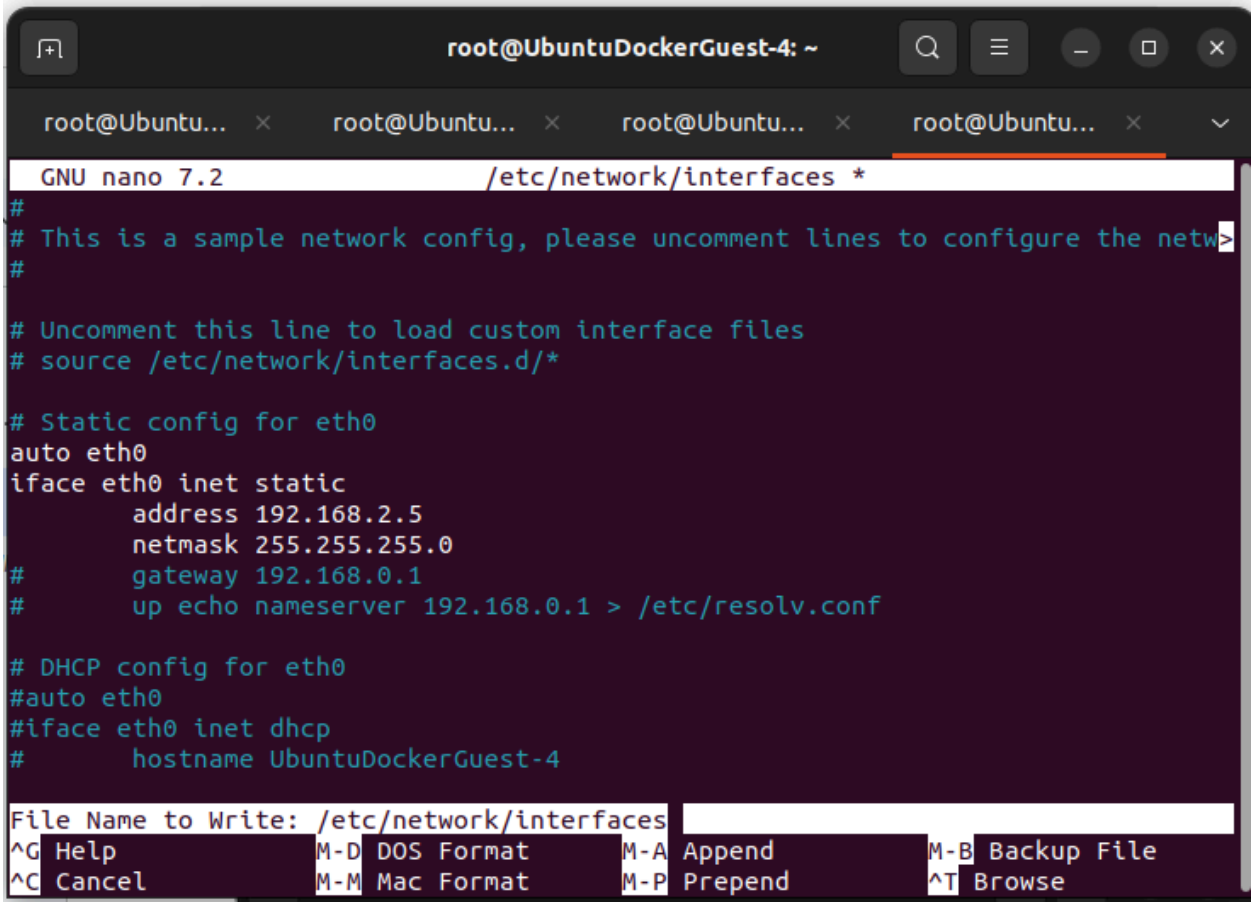

root@UbuntuDockerGuest-2: ~
root@UbuntuDockerG...
root@UbuntuDockerG...
root@UbuntuDockerG...
Trying 127.0.0.1...
Connected to localhost.
Escape character is '^]'.
UbuntuDockerGuest-2 console is now available... Press RETURN to get started.
root@UbuntuDockerGuest-2:~# ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
inet 192.168.2.2 netmask 255.255.255.0 broadcast 0.0.0.0
inet6 fe80::42:84ff:fe31:ee00 prefixlen 64 scopeid 0x20<link>
ether 02:42:84:31:ee:00 txqueuelen 1000 (Ethernet)
RX packets 71 bytes 5602 (5.6 KB)
RX errors 0 dropped 2 overruns 0 frame 0
TX packets 11 bytes 866 (866.0 B)
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-2:~#

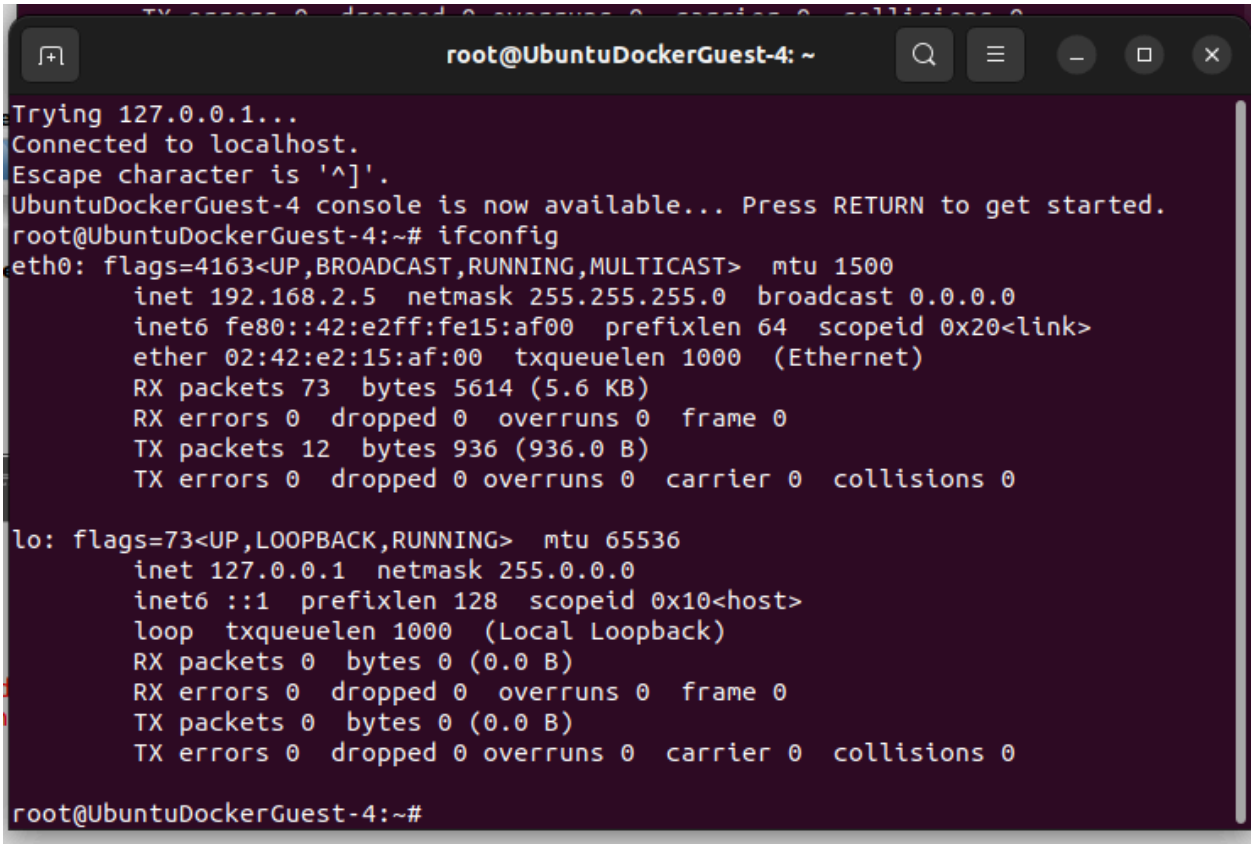
h3


root@UbuntuDockerGuest-3: ~
root@UbuntuDockerG...
root@UbuntuDockerG...
root@UbuntuDockerG...
GNU nano 7.2 /etc/network/interfaces
This is a sample network config, please uncomment lines to configure the netw
Uncomment this line to load custom interface files
source /etc/network/interfaces.d/*
Static config for eth0
auto eth0
iface eth0 inet static
address 192.163.2.4
netmask 255.255.252.0
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
[Read 19 lines]
^G Help ^O Write Out ^W Where Is ^K Cut ^T Execute ^C Location
^X Exit ^R Read File ^\ Replace ^U Paste ^J Justify ^/ Go To Line

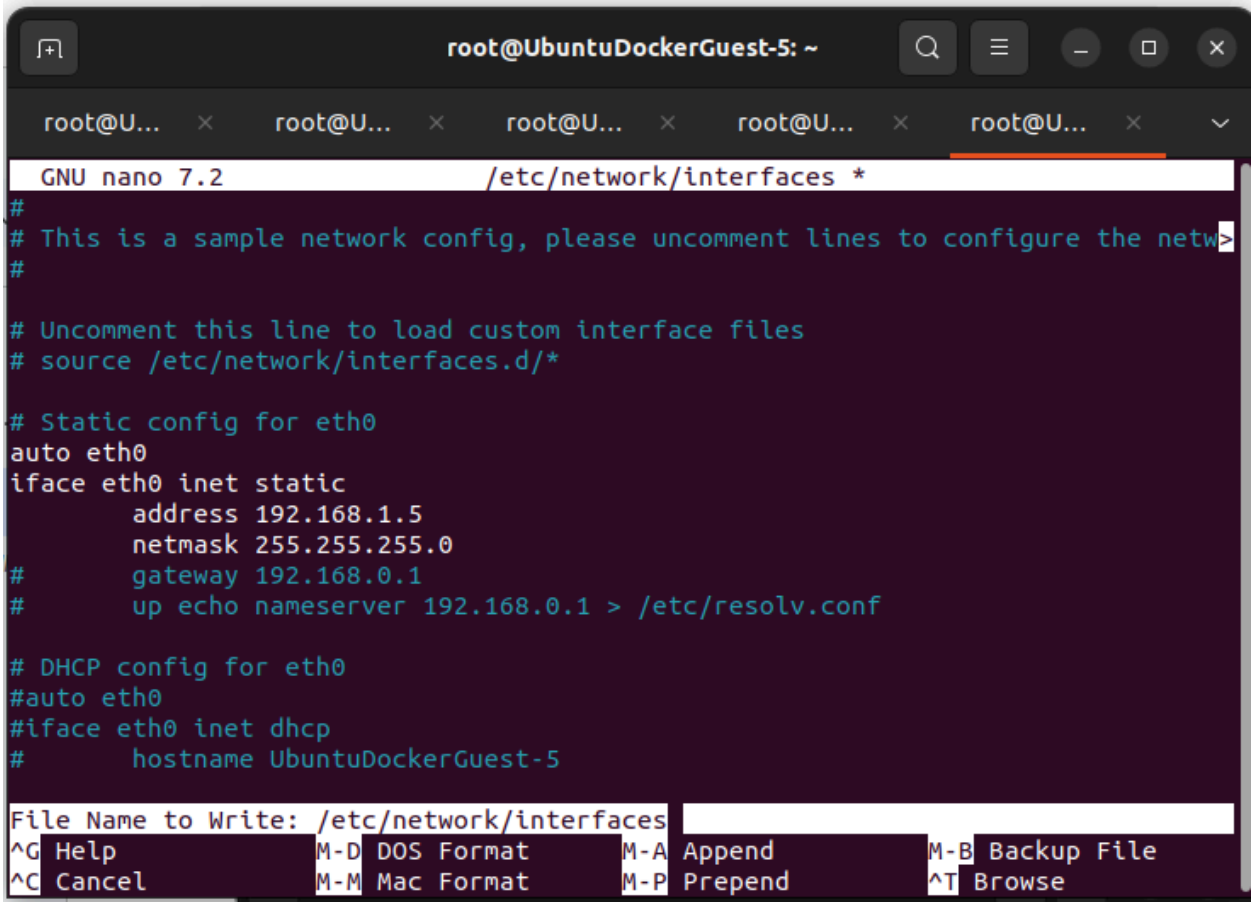

root@UbuntuDockerGuest-3: ~
root@UbuntuDockerG...
root@UbuntuDockerG...
root@UbuntuDockerG...
Trying 127.0.0.1...
Connected to localhost.
Escape character is '^]'.
UbuntuDockerGuest-3 console is now available... Press RETURN to get started.
root@UbuntuDockerGuest-3:~# ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
inet 192.163.2.4 netmask 255.255.252.0 broadcast 0.0.0.0
inet6 fe80::42:c1ff:fe5b:ee00 prefixlen 64 scopeid 0x20<link>
ether 02:42:c1:5b:ee:00 txqueuelen 1000 (Ethernet)
RX packets 77 bytes 6062 (6.0 KB)
RX errors 0 dropped 0 overruns 0 frame 0
TX packets 11 bytes 866 (866.0 B)
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-3:~#

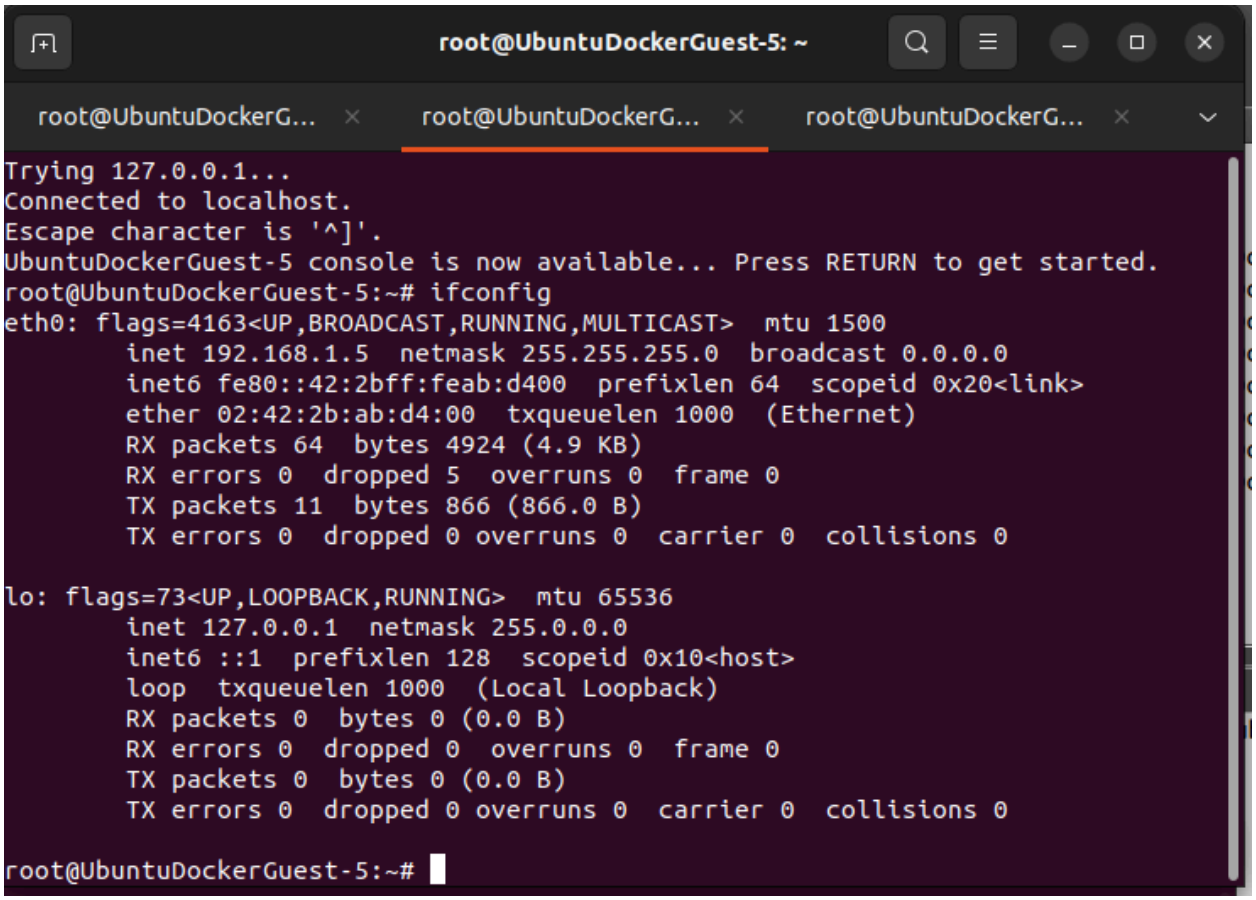
h4


root@UbuntuDockerGuest-4: ~
root@Ubuntu...
root@Ubuntu...
root@Ubuntu...
root@Ubuntu...
GNU nano 7.2 /etc/network/interfaces *
This is a sample network config, please uncomment lines to configure the netw
Uncomment this line to load custom interface files
source /etc/network/interfaces.d/*
Static config for eth0
auto eth0
iface eth0 inet static
address 192.168.2.5
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
File Name to Write: /etc/network/interfaces
^G Help
M-D DOS Format
M-A Append
M-B Backup File
^C Cancel
M-M Mac Format
M-P Prepend
^T Browse

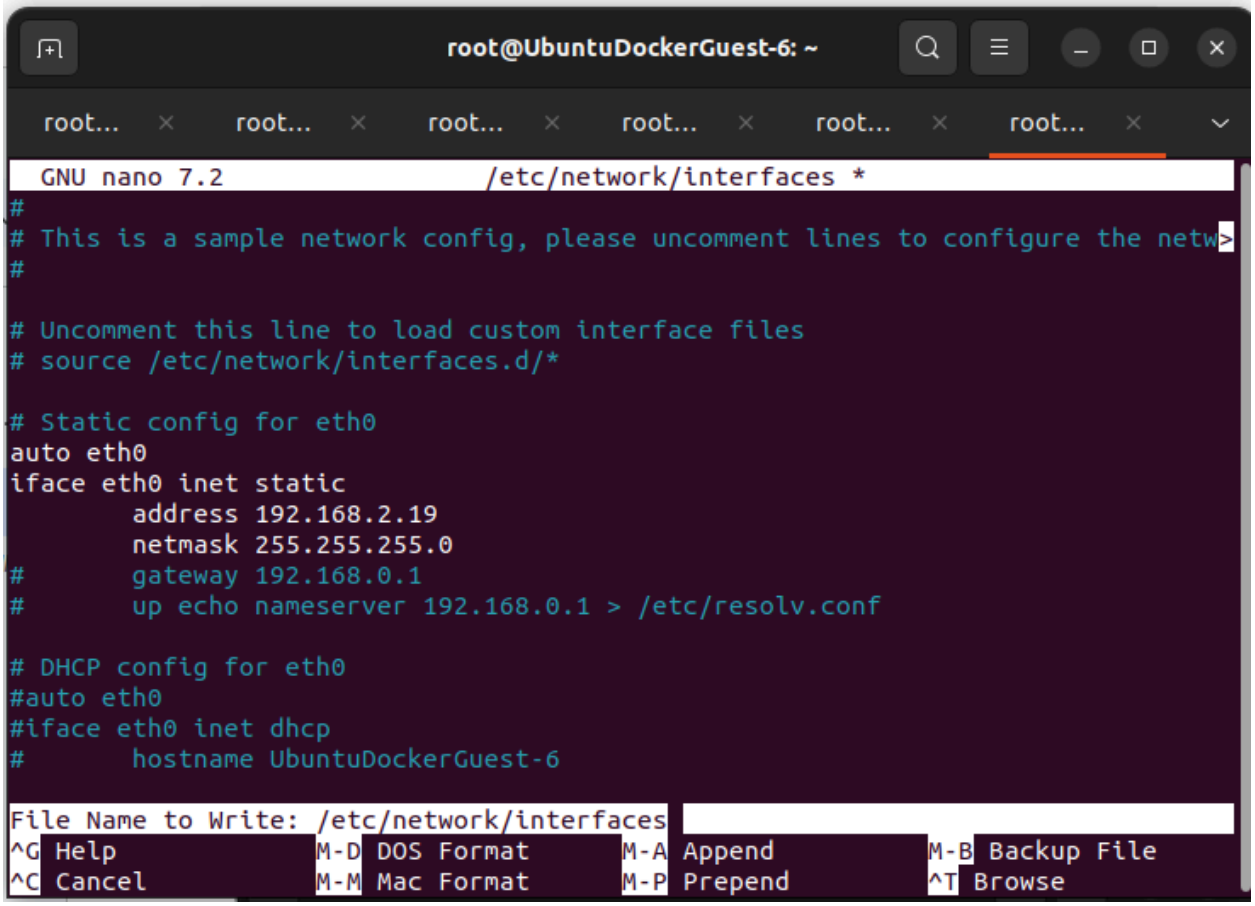

root@UbuntuDockerGuest-4: ~
Trying 127.0.0.1...
Connected to localhost.
Escape character is '^]'.
UbuntuDockerGuest-4 console is now available... Press RETURN to get started.
root@UbuntuDockerGuest-4:~# ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
inet 192.168.2.5 netmask 255.255.255.0 broadcast 0.0.0.0
inet6 fe80::42:e2ff:fe15:af00 prefixlen 64 scopeid 0x20<link>
ether 02:42:e2:15:af:00 txqueuelen 1000 (Ethernet)
RX packets 73 bytes 5614 (5.6 KB)
RX errors 0 dropped 0 overruns 0 frame 0
TX packets 12 bytes 936 (936.0 B)
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-4:~#

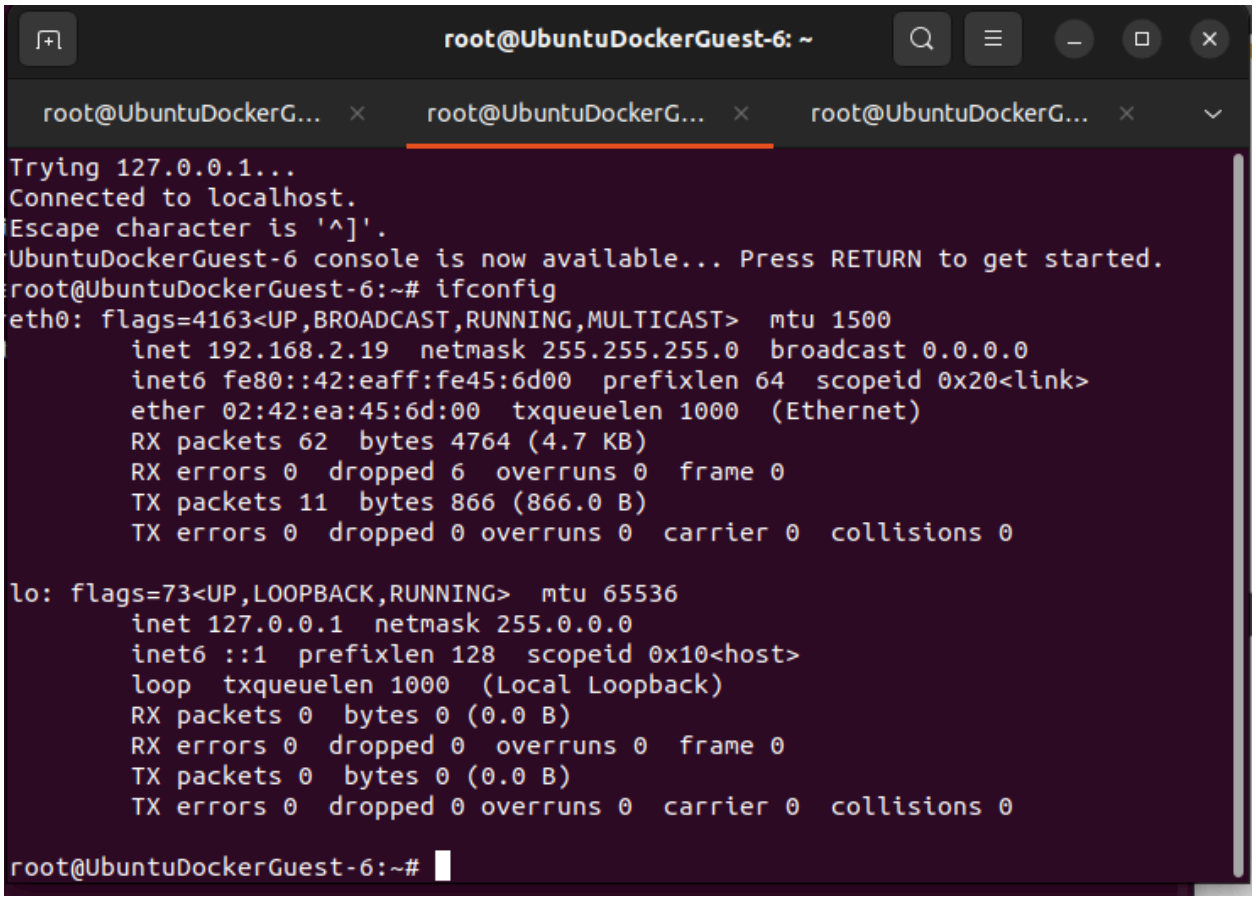
h5

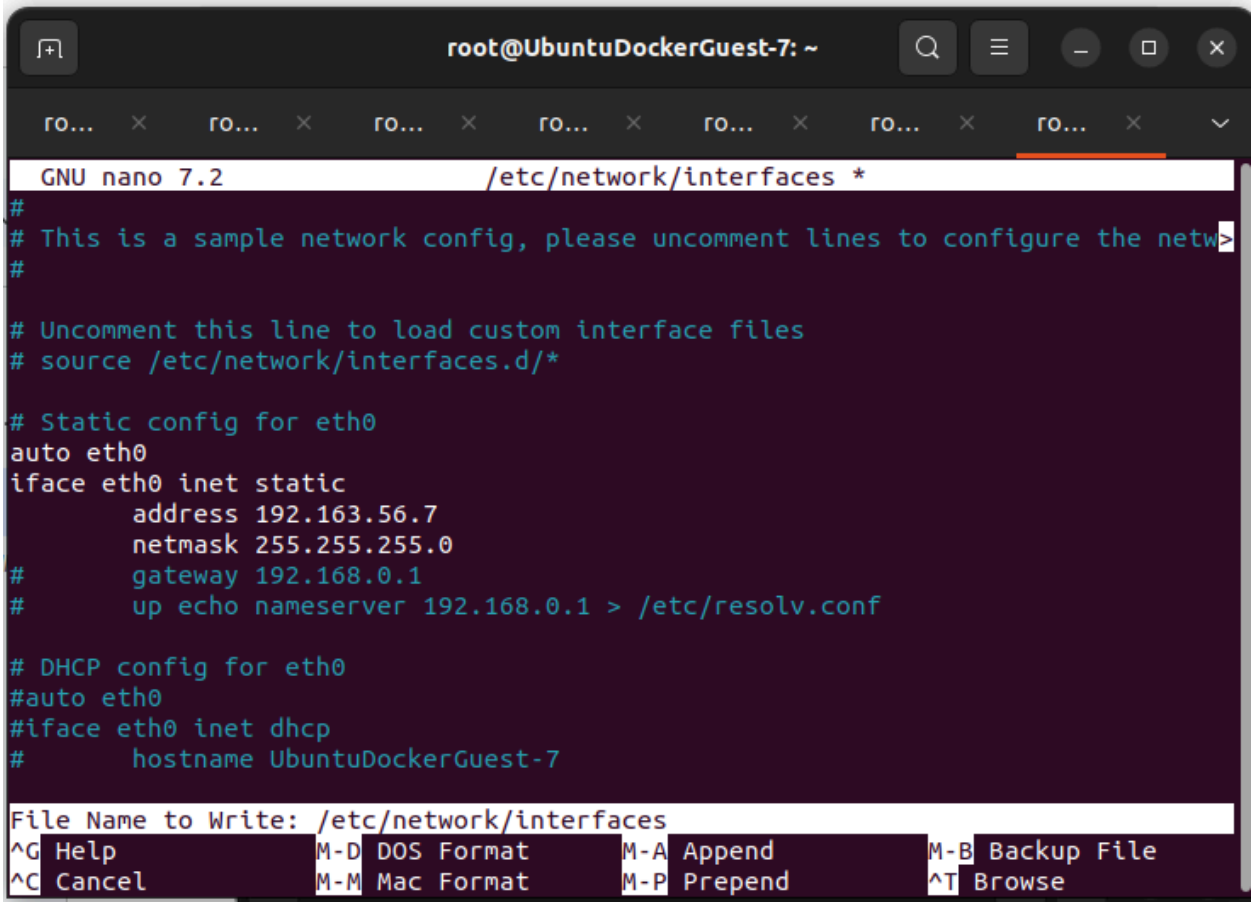

root@UbuntuDockerGuest-5: ~
root@U...
root@U...
root@U...
root@U...
root@U...
GNU nano 7.2 /etc/network/interfaces *
#
This is a sample network config, please uncomment lines to configure the netw>
#
Uncomment this line to load custom interface files
source /etc/network/interfaces.d/*
Static config for eth0
auto eth0
iface eth0 inet static
address 192.168.1.5
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-5
File Name to Write: /etc/network/interfaces
^G Help
M-D DOS Format
M-A Append
M-B Backup File
^C Cancel
M-M Mac Format
M-P Prepend
^T Browse

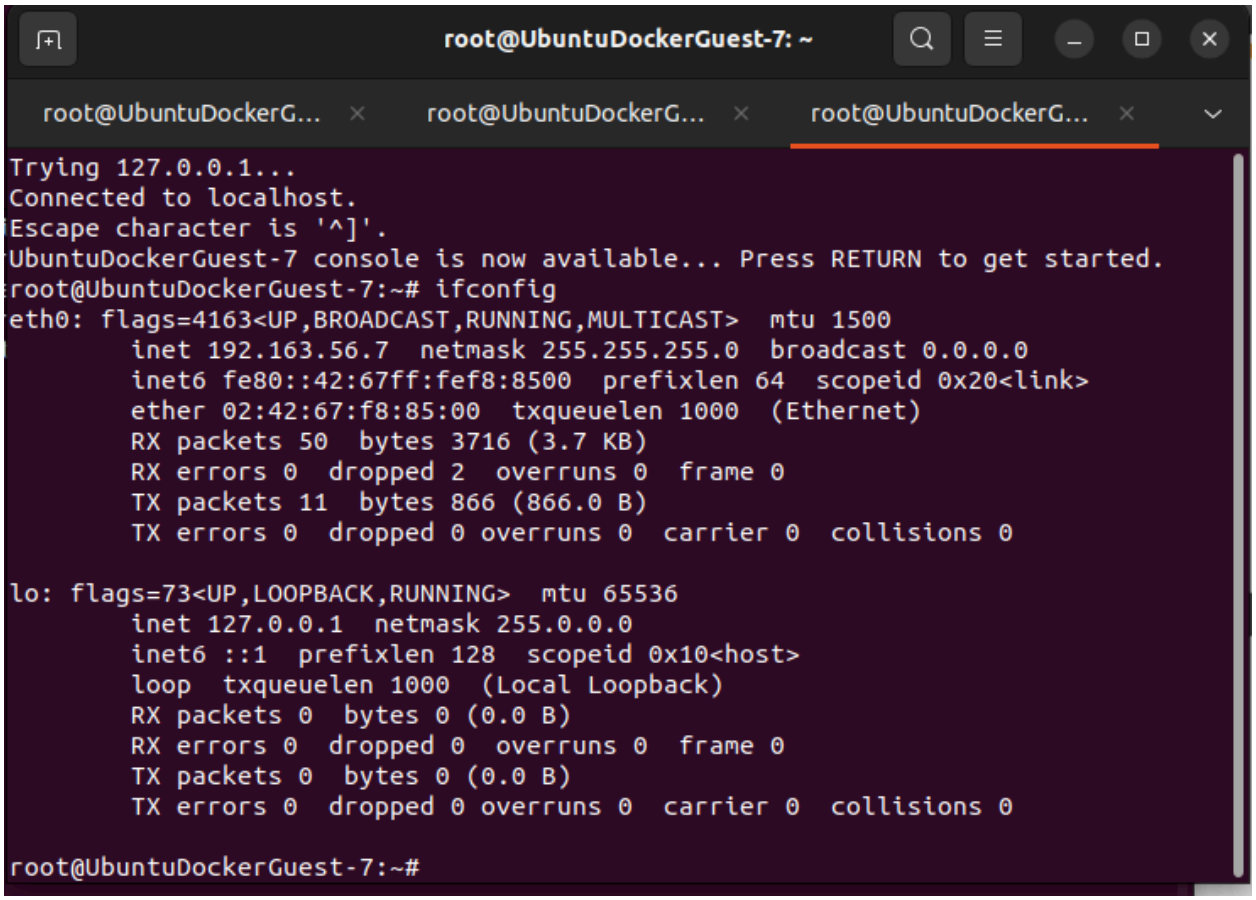

root@UbuntuDockerGuest-5: ~
root@UbuntuDockerG...
root@UbuntuDockerG...
root@UbuntuDockerG...
Trying 127.0.0.1...
Connected to localhost.
Escape character is '^]'.
UbuntuDockerGuest-5 console is now available... Press RETURN to get started.
root@UbuntuDockerGuest-5:~# ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
inet 192.168.1.5 netmask 255.255.255.0 broadcast 0.0.0.0
inet6 fe80::42:2bff:feab:d400 prefixlen 64 scopeid 0x20<link>
ether 02:42:2b:ab:d4:00 txqueuelen 1000 (Ethernet)
RX packets 64 bytes 4924 (4.9 KB)
RX errors 0 dropped 5 overruns 0 frame 0
TX packets 11 bytes 866 (866.0 B)
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-5:~#

h6

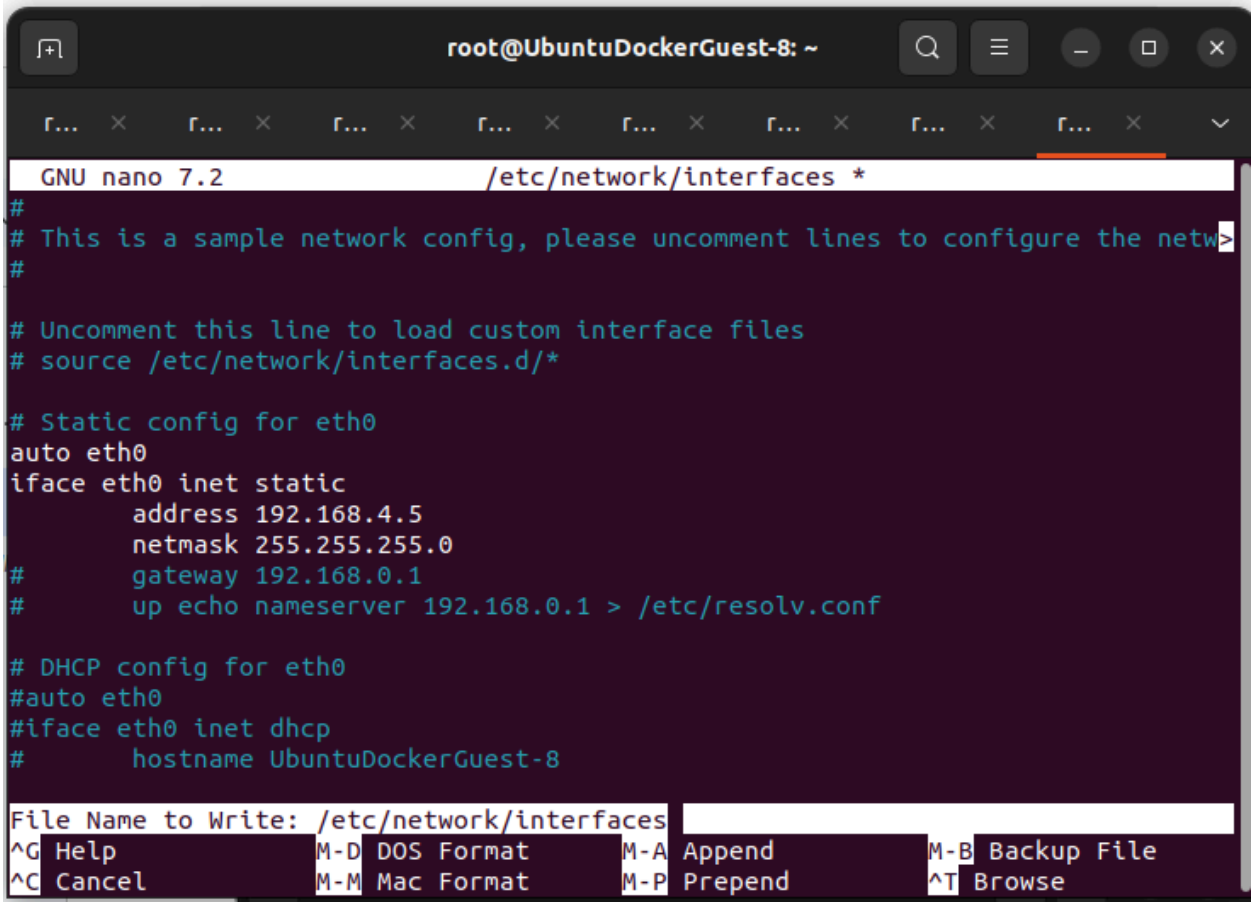

root@UbuntuDockerGuest-6: ~
root...
root...
root...
root...
root...
root...
GNU nano 7.2 /etc/network/interfaces *
#
This is a sample network config, please uncomment lines to configure the netw>
#
Uncomment this line to load custom interface files
source /etc/network/interfaces.d/*
Static config for eth0
auto eth0
iface eth0 inet static
address 192.168.2.19
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-6
File Name to Write: /etc/network/interfaces
^G Help
M-D DOS Format
M-A Append
M-B Backup File
^C Cancel
M-M Mac Format
M-P Prepend
^T Browse

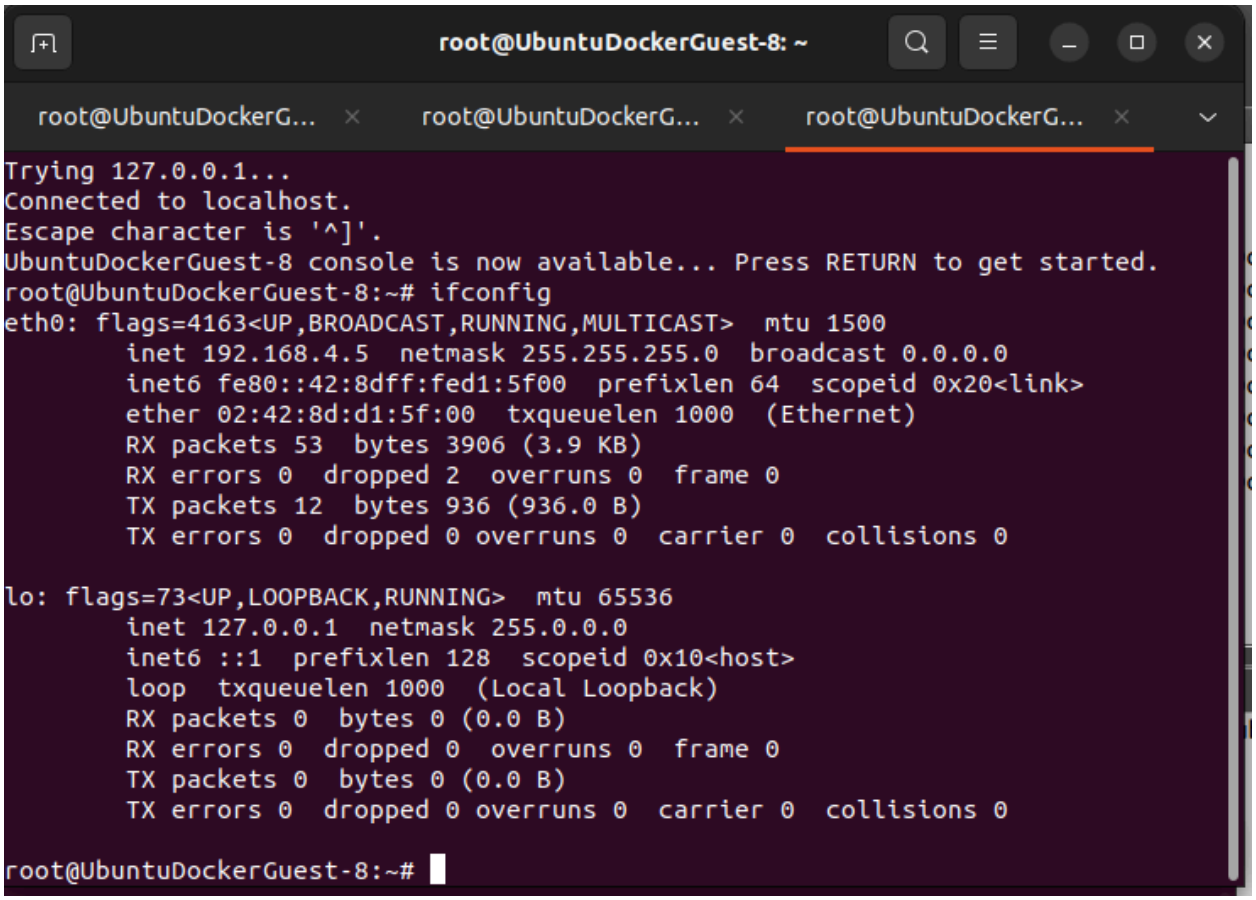

root@UbuntuDockerGuest-6: ~
root@UbuntuDockerG...
root@UbuntuDockerG...
root@UbuntuDockerG...
Trying 127.0.0.1...
Connected to localhost.
Escape character is '^]'.
UbuntuDockerGuest-6 console is now available... Press RETURN to get started.
root@UbuntuDockerGuest-6:~# ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
inet 192.168.2.19 netmask 255.255.255.0 broadcast 0.0.0.0
inet6 fe80::42:eaff:fe45:6d00 prefixlen 64 scopeid 0x20<link>
ether 02:42:ea:45:6d:00 txqueuelen 1000 (Ethernet)
RX packets 62 bytes 4764 (4.7 KB)
RX errors 0 dropped 6 overruns 0 frame 0
TX packets 11 bytes 866 (866.0 B)
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-6:~#
h7


root@UbuntuDockerGuest-7: ~
GNU nano 7.2 /etc/network/interfaces *
#
This is a sample network config, please uncomment lines to configure the netw
#
Uncomment this line to load custom interface files
source /etc/network/interfaces.d/*
Static config for eth0
auto eth0
iface eth0 inet static
address 192.163.56.7
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-7
File Name to Write: /etc/network/interfaces
^G Help
M-D DOS Format
M-A Append
M-B Backup File
^C Cancel
M-M Mac Format
M-P Prepend
^T Browse


root@UbuntuDockerGuest-7: ~
root@UbuntuDockerG...
root@UbuntuDockerG...
root@UbuntuDockerG...
Trying 127.0.0.1...
Connected to localhost.
Escape character is '^]'.
UbuntuDockerGuest-7 console is now available... Press RETURN to get started.
root@UbuntuDockerGuest-7:~# ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
inet 192.163.56.7 netmask 255.255.255.0 broadcast 0.0.0.0
inet6 fe80::42:67ff:fef8:8500 prefixlen 64 scopeid 0x20<link>
ether 02:42:67:f8:85:00 txqueuelen 1000 (Ethernet)
RX packets 50 bytes 3716 (3.7 KB)
RX errors 0 dropped 2 overruns 0 frame 0
TX packets 11 bytes 866 (866.0 B)
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-7:~#

h8


root@UbuntuDockerGuest-8: ~
GNU nano 7.2 /etc/network/interfaces *
#
This is a sample network config, please uncomment lines to configure the netw
#
Uncomment this line to load custom interface files
source /etc/network/interfaces.d/*
Static config for eth0
auto eth0
iface eth0 inet static
address 192.168.4.5
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-8
File Name to Write: /etc/network/interfaces
^G Help M-D DOS Format M-A Append M-B Backup File
^C Cancel M-M Mac Format M-P Prepend ^T Browse



2) What systems can each system communicate with? Please explain why a system can or cannot communicate with the system in question.

Systems can communicate with each other if they are on the same subnet. For example, UbuntuDockerGuest-1 can communicate with UbuntuDockerGuest-5 because they are under the same subnet 192.168.1.0/24.
So, UbuntuDockerGuest-1 and UbuntuDockerGuest-5 can communicate.
UbuntuDockerGuest-2, UbuntuDockerGuest-4, UbuntuDockerGuest-6 can communicate under the same subnet, 192.168.2.0/24.
UbuntuDockerGuest-8 is alone in its subnet, so it is unable to communicate.
UbuntuDockerGuest-3 is alone in its subnet, so it is unable to communicate.
UbuntuDockerGuest-7 is alone in its subnet, so it is unable to communicate.