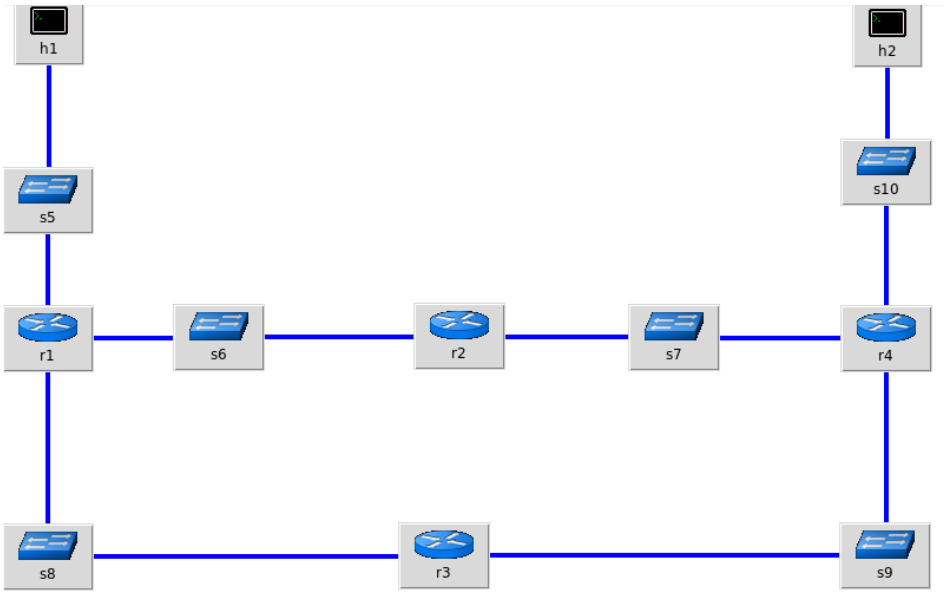
1. Esquema ESCENARIO 5



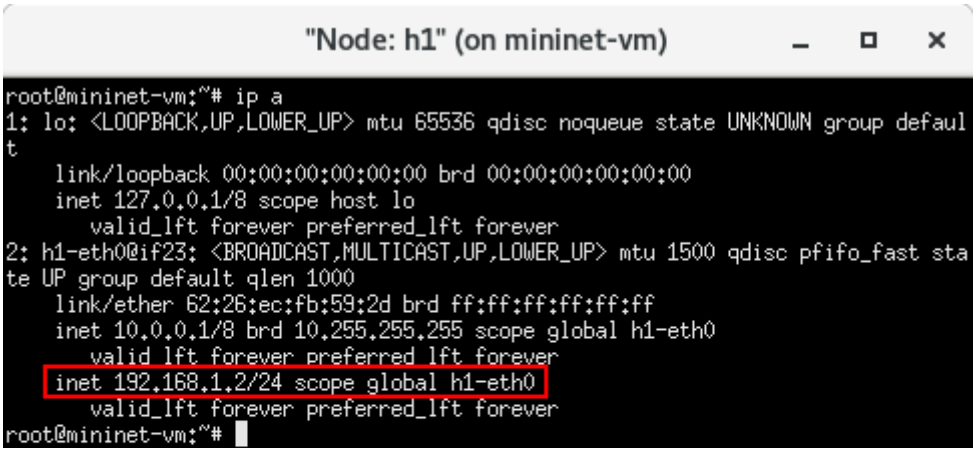
2. COMANDOS UTILIZADOS

ASIGNACIÓN DE IP´S Y RUTAS DE ENCAMINAMIENTO A LOS ELEMENTOS DE LA RED

- H1 -

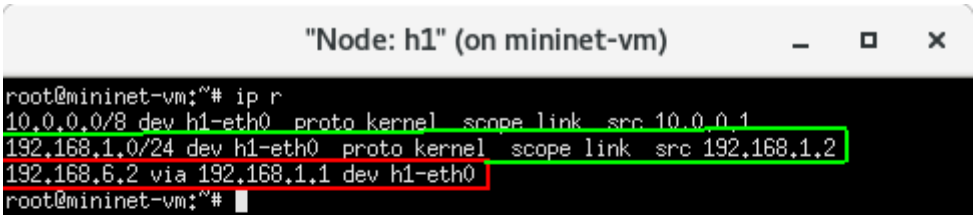
#ip a → Para comprobar las interfaces de red si tienen ip o en el caso de añadirla probar si se han añadido correctamente.

#ip a add → Para añadir ip a la interfaz.



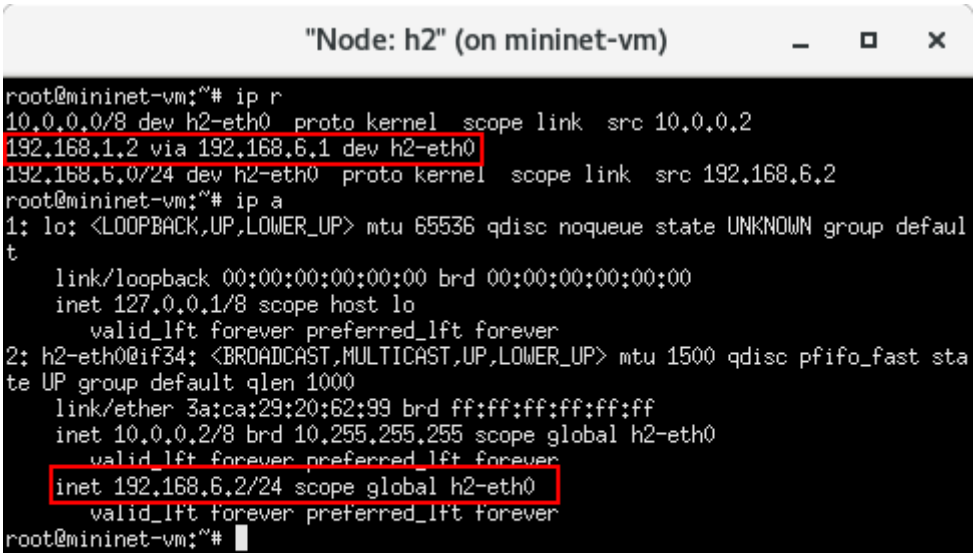
#ip r → Para comprobar la tabla de encaminamiento

#ip r add → Para añadir ruta de encaminamiento

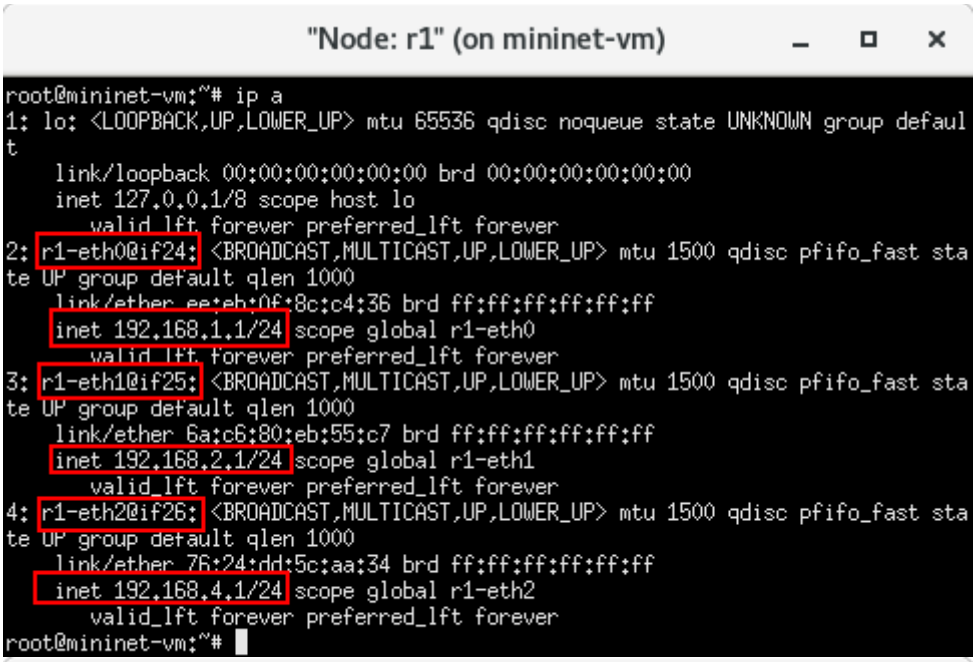


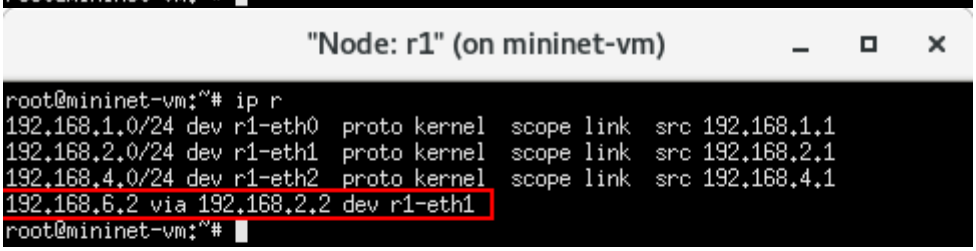
La ruta de encaminamiento que esta subrayada de verde es la que se pone por defecto al asignarle una ip a la interfaz de red. Y la subrayada de rojo es la que hemos añadido nosotros

- H2 -

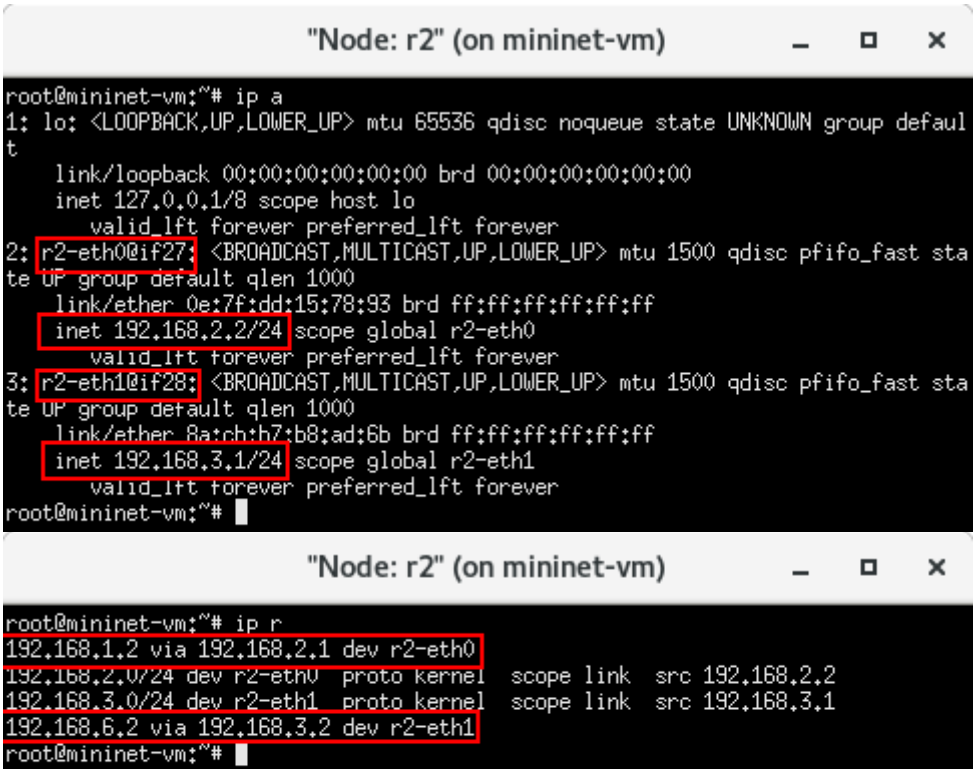


- R1 -

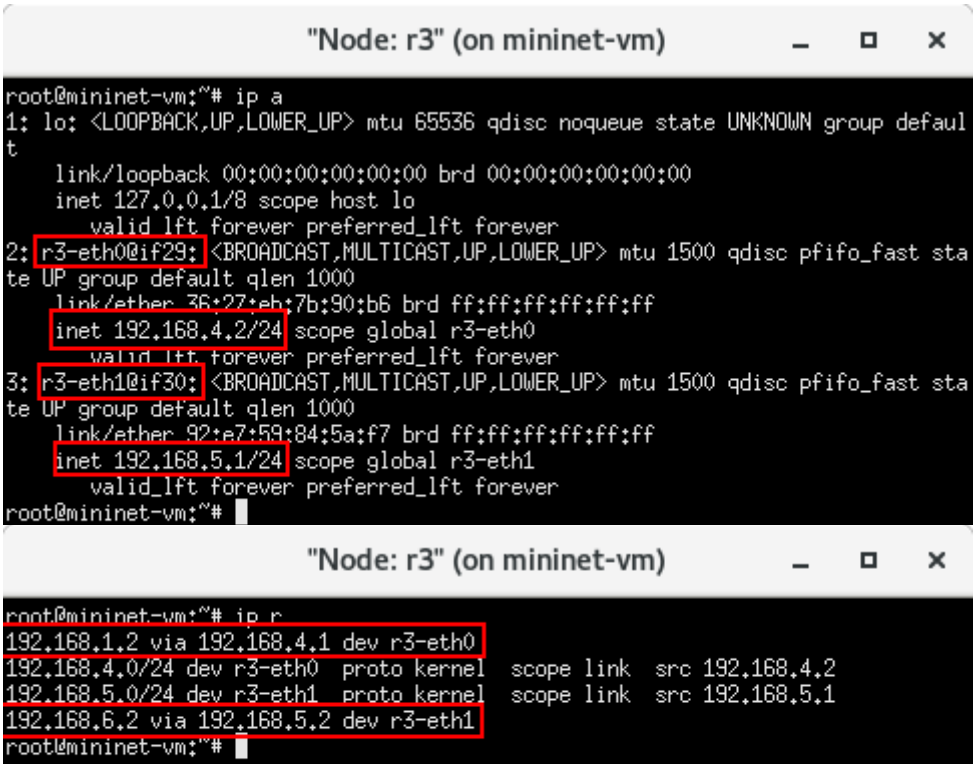




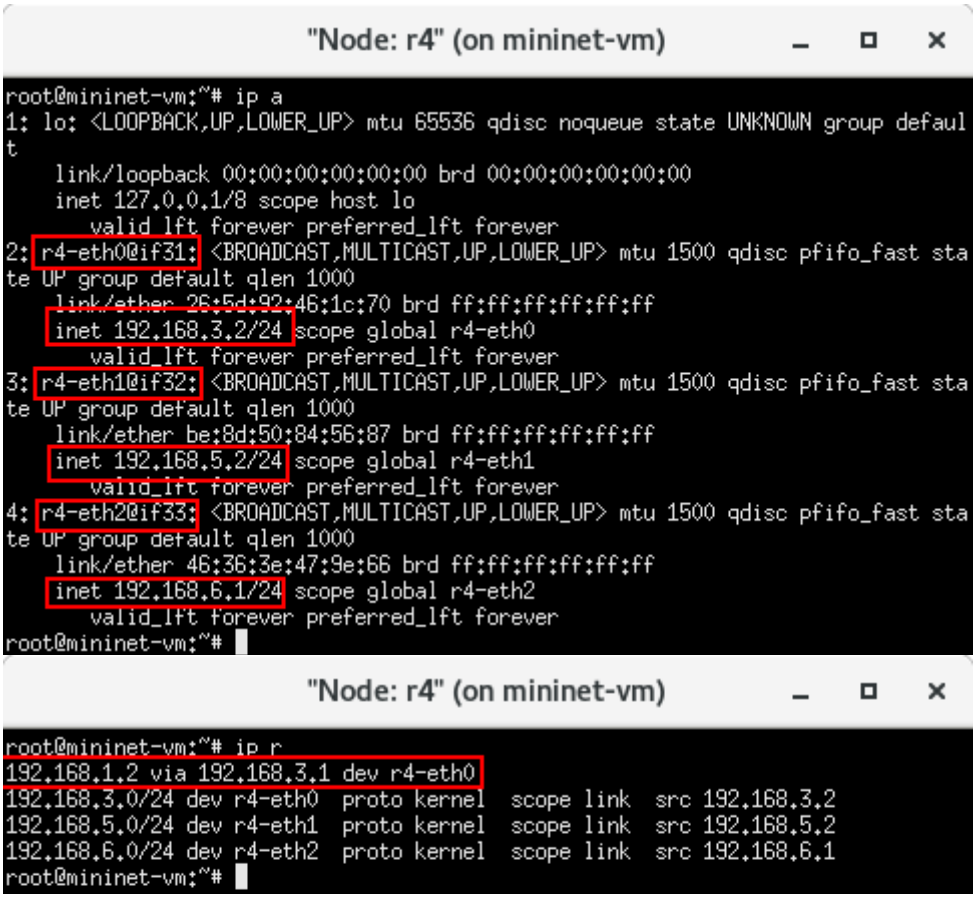
- R2 -


"Node: r2" (on mininet-vm)
root@mininet-vm:~# ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group defaul
t
link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
inet 127.0.0.1/8 scope host lo
valid_lft forever preferred_lft forever
2: r2-eth0@if27: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast sta
te UP group default qlen 1000
link/ether 0e:7f:dd:15:78:93 brd ff:ff:ff:ff:ff:ff
inet 192.168.2.2/24 scope global r2-eth0
valid_lft forever preferred_lft forever
3: r2-eth1@if28: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast sta
te UP group default qlen 1000
link/ether 8a:cb:b7:b8:ad:6b brd ff:ff:ff:ff:ff:ff
inet 192.168.3.1/24 scope global r2-eth1
valid_lft forever preferred_lft forever
root@mininet-vm:~#
"Node: r2" (on mininet-vm)
root@mininet-vm:~# ip r
192.168.1.2 via 192.168.2.1 dev r2-eth0
192.168.2.0/24 dev r2-eth0 proto kernel scope link src 192.168.2.2
192.168.3.0/24 dev r2-eth1 proto kernel scope link src 192.168.3.1
192.168.6.2 via 192.168.3.2 dev r2-eth1
root@mininet-vm:~#

- R3 -

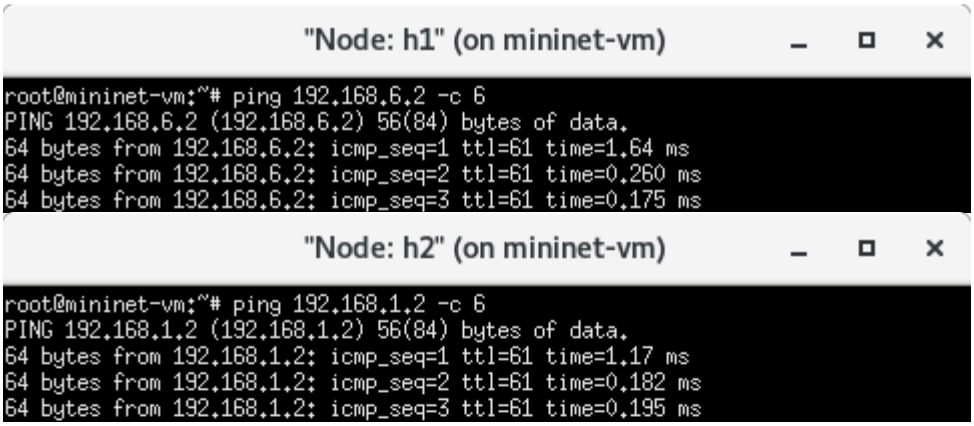

"Node: r3" (on mininet-vm)
root@mininet-vm:~# ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group defaul
t
link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
inet 127.0.0.1/8 scope host lo
valid_lft forever preferred_lft forever
2: r3-eth0@if29: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast sta
te UP group default qlen 1000
link/ether 36:27:eb:7b:90:b6 brd ff:ff:ff:ff:ff:ff
inet 192.168.4.2/24 scope global r3-eth0
valid_lft forever preferred_lft forever
3: r3-eth1@if30: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast sta
te UP group default qlen 1000
link/ether 92:e7:59:84:5a:f7 brd ff:ff:ff:ff:ff:ff
inet 192.168.5.1/24 scope global r3-eth1
valid_lft forever preferred_lft forever
root@mininet-vm:~#
"Node: r3" (on mininet-vm)
root@mininet-vm:~# ip r
192.168.1.2 via 192.168.4.1 dev r3-eth0
192.168.4.0/24 dev r3-eth0 proto kernel scope link src 192.168.4.2
192.168.5.0/24 dev r3-eth1 proto kernel scope link src 192.168.5.1
192.168.6.2 via 192.168.5.2 dev r3-eth1
root@mininet-vm:~#

- R4 -



CONECTIVIDAD ENTRE NODOS

Para comprobar conectividad e introducido el comando ***#ping*** y la ip donde quiero del host al que quiero hacer ping. Y para capturar el trafico he usado ***#tcpdump -i*** nombre_del_host–nombre de la interfaz.



CAPTURA DE TRÁFICO