


RA5-EX1-EVA- JGarcia

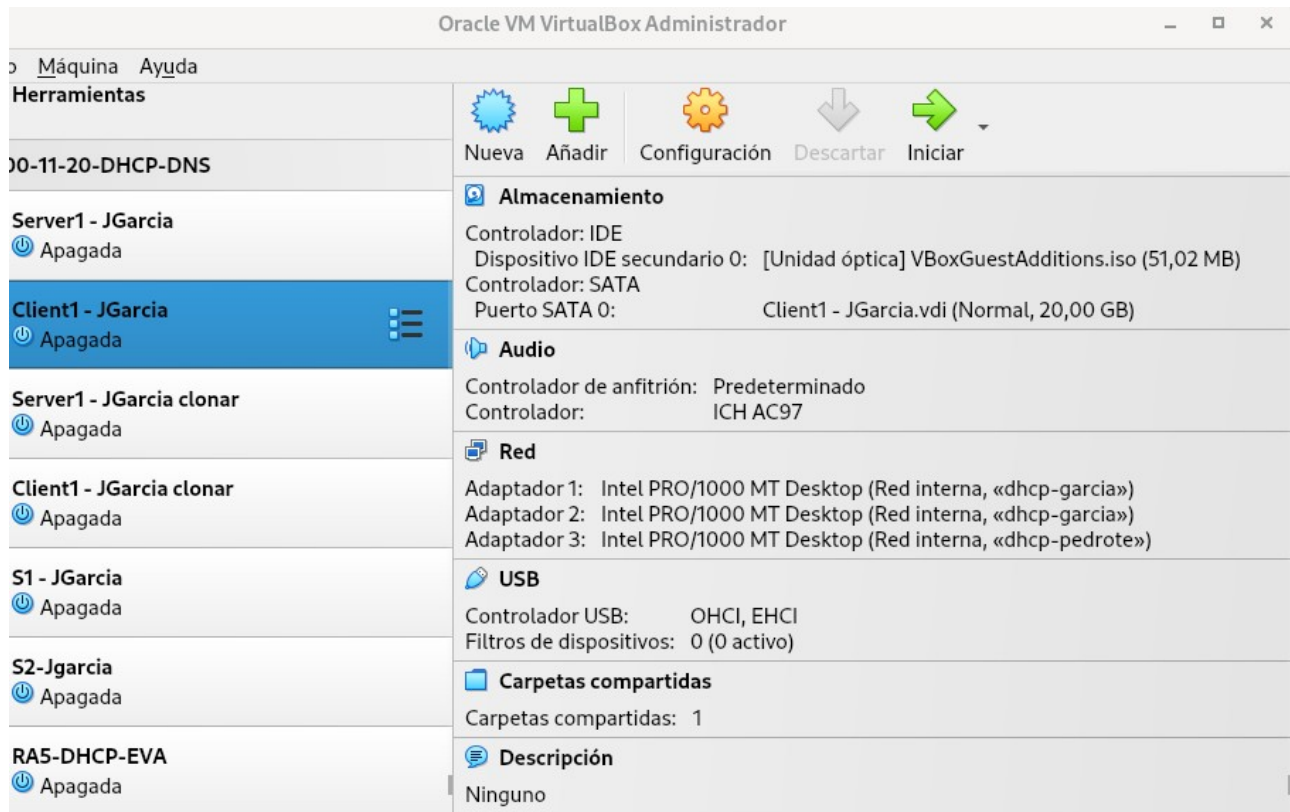
PARTE 1

a)

Servidor:

General Nombre: RA5-DHCP-EVA Sistema operativo: Ubuntu (64-bit)	Previsualización 
Sistema Memoria base: 2048 MB Orden de arranque: Disquete, Óptica, Disco duro EFI: Habilitado Aceleración: Paginación anidada, Paravirtualización KVM	
Pantalla Memoria de vídeo: 16 MB Controlador gráfico: VMSVGA Servidor de escritorio remoto: Inhabilitado Grabación: Inhabilitado	
Almacenamiento Controlador: IDE Dispositivo IDE secundario 0: [Unidad óptica] Vacío Controlador: SATA Puerto SATA 0: RA5-DHCP-EVA-disk001.vdi (Normal, 25,00 GB)	
Audio Controlador de anfitrión: Predeterminado Controlador: ICH AC97	
Red Adaptador 1: Intel PRO/1000 MT Desktop (Red NAT, «dhcp-5») Adaptador 2: Intel PRO/1000 MT Desktop (Red interna, «dhcp-garcia») Adaptador 3: Intel PRO/1000 MT Desktop (Red interna, «dhcp-pedrote»)	

Cliente:



PARTE 2

a)

```
jgarcia@ra5-dhcp-s1:~$ cat /etc/netplan/00-installer-config.yaml
# This is the network config written by 'subiquity'
network:
  ethernets:
    enp0s3:
      dhcp4: true
    enp0s8:
      dhcp4: false
      addresses: [ 172.16.5.10/24 ]
      nameservers:
        search: [ garcia.tk ]
        addresses: [ 8.8.8.8, 8.8.4.4 ]
    enp0s9:
      dhcp4: false
      addresses: [ 192.168.5.10/24 ]
      gateway4: 192.168.5.255
      nameservers:
        search: [ pedrote.tk ]
        addresses: [ 8.8.8.8, 8.8.4.4 ]
  version: 2
jgarcia@ra5-dhcp-s1:~$ sudo netplan apply

** (generate:15211): WARNING **: 17:49:23.338: Permissions for /etc/netplan/00-installer-config.yaml are too open. Netplan configuration should NOT be accessible by others.

** (generate:15211): WARNING **: 17:49:23.338: `gateway4` has been deprecated, use default routes instead.
See the 'Default routes' section of the documentation for more details.
WARNING:root:Cannot call Open vSwitch: ovsdb-server.service is not running.

** (process:15209): WARNING **: 17:49:23.749: Permissions for /etc/netplan/00-installer-config.yaml are too open. Netplan configuration should NOT be accessible by others.

** (process:15209): WARNING **: 17:49:23.750: `gateway4` has been deprecated, use default routes instead.
See the 'Default routes' section of the documentation for more details.

** (process:15209): WARNING **: 17:49:23.874: Permissions for /etc/netplan/00-installer-config.yaml are too open. Netplan configuration should NOT be accessible by others.

** (process:15209): WARNING **: 17:49:23.874: `gateway4` has been deprecated, use default routes instead.
See the 'Default routes' section of the documentation for more details.

** (process:15209): WARNING **: 17:49:23.874: Permissions for /etc/netplan/00-installer-config.yaml are too open. Netplan configuration should NOT be accessible by others.

** (process:15209): WARNING **: 17:49:23.874: `gateway4` has been deprecated, use default routes instead.
See the 'Default routes' section of the documentation for more details.
jgarcia@ra5-dhcp-s1:~$
```

b)

- cat de /etc/default/isc-dhcp-server :

```
jgarcia@ra5-dhcp-s1:~$ cat /etc/default/isc-dhcp-server
INTERFACESv4="enp0s8 enp0s9"
INTERFACESv6=""
jgarcia@ra5-dhcp-s1:~$
```

-cat de /etc/dhcp/dhcpd.conf :

```
jgarcia@ra5-dhcp-s1:~$ cat /etc/dhcp/dhcpd.conf
ddns-update-style none;

subnet 172.16.5.0 netmask 255.255.255.0 {
    range 172.16.5.100 172.16.5.150;
    option domain-name-servers 172.16.5.10;
    option domain-name "garcia.tk";
    option subnet-mask 255.255.255.0;
    option routers 172.16.5.10;
    option broadcast-address 172.16.5.255;
    default-lease-time 1200;
    max-lease-time 10800;
}

host cliente-5 {
    hardware ethernet 08:00:27:e0:a1:db;
    fixed-address 172.16.5.200;
    option domain-name-servers 8.8.8.8, 8.8.4.4;
    default-lease-time 3600;
}

subnet 192.168.5.0 netmask 255.255.255.0 {
    range 192.168.5.100 192.168.5.150;
    option domain-name-servers 192.168.5.10, 8.8.8.8, 8.8.4.4;
    option domain-name "pedrote.tk";
    option subnet-mask 255.255.255.0;
    option routers 192.168.5.10;
    option broadcast-address 192.168.5.255;
    default-lease-time 1200;
}
jgarcia@ra5-dhcp-s1:~$
```

c)

- IP interfaz1 servidor:

```
jgarcia@ra5-dhcp-s1:~$ ip -c a show enp0s3
2: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 08:00:27:f3:b5:bf brd ff:ff:ff:ff:ff:ff
    inet 10.5.0.4/16 metric 100 brd 10.5.255.255 scope global dynamic enp0s3
        valid_lft 592sec preferred_lft 592sec
    inet6 fe80::a00:27ff:fef3:b5bf/64 scope link
        valid_lft forever preferred_lft forever
jgarcia@ra5-dhcp-s1:~$
```

d)

-Interfaz2 servidor:

-IP:

```
jgarcia@ra5-dhcp-s1:~$ ip -c a show enp0s8
3: enp0s8: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 08:00:27:a6:ab:3c brd ff:ff:ff:ff:ff:ff
    inet 172.16.5.10/24 brd 172.16.5.255 scope global enp0s8
        valid_lft forever preferred_lft forever
    inet6 fe80::a00:27ff:fea6:ab3c/64 scope link
        valid_lft forever preferred_lft forever
jgarcia@ra5-dhcp-s1:~$
```

-DNS:

```
jgarcia@ra5-dhcp-s1:~$ resolvectl status enp0s8
Link 3 (enp0s8)
Current Scopes: DNS
    Protocols: +DefaultRoute +LLMNR -mDNS -DNSOverTLS DNSSEC=no/unsupported
    DNS Servers: 8.8.8.8 8.8.4.4
    DNS Domain: garcia.tk
jgarcia@ra5-dhcp-s1:~$
```

-Puerta de enlace:

```
jgarcia@ra5-dhcp-s1:~$ ip route list | grep enp0s8
172.16.5.0/24 dev enp0s8 proto kernel scope link src 172.16.5.10
jgarcia@ra5-dhcp-s1:~$
```

e)

-Interfaz3 servidor:

-IP:

```
jgarcia@ra5-dhcp-s1:~$ ip -c a show enp0s9
4: enp0s9: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 08:00:27:fe:be:a4 brd ff:ff:ff:ff:ff:ff
    inet 192.168.5.10/24 brd 192.168.5.255 scope global enp0s9
        valid_lft forever preferred_lft forever
    inet6 fe80::a00:27ff:fefe:bea4/64 scope link
        valid_lft forever preferred_lft forever
jgarcia@ra5-dhcp-s1:~$
```

-DNS:

```
jgarcia@ra5-dhcp-s1:~$ resolvectl status enp0s9
Link 4 (enp0s9)
Current Scopes: DNS
    Protocols: +DefaultRoute +LLMNR -mDNS -DNSOverTLS DNSSEC=no/unsupported
    DNS Servers: 8.8.8.8 8.8.4.4
    DNS Domain: pedrote.tk
jgarcia@ra5-dhcp-s1:~$
```

-Puerta de enlace:

```
jgarcia@ra5-dhcp-s1:~$ ip route list | grep enp0s9
192.168.5.0/24 dev enp0s9 proto kernel scope link src 192.168.5.10
jgarcia@ra5-dhcp-s1:~$
```


f)

-Interfaz1 cliente:

-IP:

```
jgarcia@client1:~$ ip -c a show enp0s3
2: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 08:00:27:e0:a1:db brd ff:ff:ff:ff:ff:ff
    inet 172.16.5.200/24 brd 172.16.5.255 scope global dynamic noprefixroute enp0s3
        valid_lft 2646sec preferred_lft 2646sec
    inet6 fe80::e6b9:e7a7:ce10:5635/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
jgarcia@client1:~$
```

-DNS:

```
jgarcia@client1:~$ resolvectl status enp0s3
Link 2 (enp0s3)
  Current Scopes: DNS
    Protocols: +DefaultRoute +LLMNR -mDNS -DNSOverTLS DNSSEC=no/unsupported
  Current DNS Server: 8.8.8.8
    DNS Servers: 8.8.8.8 8.8.4.4
    DNS Domain: garcia.tk
jgarcia@client1:~$
```

-Puerta de enlace:

```
jgarcia@client1:~$ ip route list | grep enp0s3
default via 172.16.5.10 dev enp0s3 proto dhcp metric 20100
169.254.0.0/16 dev enp0s3 scope link metric 1000
172.16.5.0/24 dev enp0s3 proto kernel scope link src 172.16.5.200 metric 100
jgarcia@client1:~$
```

g)

-Interfaz2 cliente:

-IP:

```
jgarcia@client1:~$ ip -c a show enp0s8
3: enp0s8: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 08:00:27:1c:f7:4b brd ff:ff:ff:ff:ff:ff
    inet 172.16.5.100/24 brd 172.16.5.255 scope global dynamic noprefixroute enp0s8
        valid_lft 791sec preferred_lft 791sec
    inet6 fe80::d72b:68e1:8f2f:ceae/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
jgarcia@client1:~$
```

-DNS:

```
jgarcia@client1:~$ resolvectl status enp0s8
Link 3 (enp0s8)
  Current Scopes: DNS
    Protocols: +DefaultRoute +LLMNR -mDNS -DNSOverTLS DNSSEC=no/unsupported
Current DNS Server: 172.16.5.10
  DNS Servers: 172.16.5.10
  DNS Domain: garcia.tk
jgarcia@client1:~$
```

-Puerta de enlace:

```
jgarcia@client1:~$ ip route list | grep enp0s8
default via 172.16.5.10 dev enp0s8 proto dhcp metric 20101
172.16.5.0/24 dev enp0s8 proto kernel scope link src 172.16.5.100 metric 101
jgarcia@client1:~$
```

h)

-Interfaz3 cliente:

-IP:

```
jgarcia@client1:~$ ip -c a show enp0s9
4: enp0s9: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 08:00:27:cf:9a:bb brd ff:ff:ff:ff:ff:ff
    inet 192.168.5.100/24 brd 192.168.5.255 scope global dynamic noprefixroute enp0s9
        valid_lft 690sec preferred_lft 690sec
    inet6 fe80::7db:228d:da3f:fff2/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
jgarcia@client1:~$
```

-DNS:

```
jgarcia@client1:~$ resolvectl status enp0s9
Link 4 (enp0s9)
  Current Scopes: DNS
    Protocols: +DefaultRoute +LLMNR -mDNS -DNSOverTLS DNSSEC=no/unsupported
  Current DNS Server: 192.168.5.10
    DNS Servers: 192.168.5.10 8.8.8.8 8.8.4.4
    DNS Domain: pedrote.tk
jgarcia@client1:~$
```

-Puerta de enlace:

```
jgarcia@client1:~$ ip route list | grep enp0s9
default via 192.168.5.10 dev enp0s9 proto dhcp metric 20102
192.168.5.0/24 dev enp0s9 proto kernel scope link src 192.168.5.100 metric 102
jgarcia@client1:~$
```

i)

Liberar interfaz2 del servidor:

```
jgarcia@ra5-dhcp-s1:~$ sudo dhclient -r enp0s8  
jgarcia@ra5-dhcp-s1:~$
```

j)

Apagar interfaz3 del cliente:

```
jgarcia@client1:~$ sudo ip link set enp0s9 down
[sudo] contraseña para jgarcia:
jgarcia@client1:~$ ip -c a show enp0s9
4: enp0s9: <BROADCAST,MULTICAST> mtu 1500 qdisc fq_codel state DOWN group default qlen 1000
    link/ether 08:00:27:cf:9a:bb brd ff:ff:ff:ff:ff:ff
    inet 192.168.5.100/24 brd 192.168.5.255 scope global dynamic noprefixroute enp0s9
        valid_lft 766sec preferred_lft 766sec
    inet6 fe80::a156:9916:69f6:d4a1/64 scope link tentative noprefixroute
        valid_lft forever preferred_lft forever
jgarcia@client1:~$
```

k)

Encender interfaz3 del cliente:

```
jgarcia@client1:~$ sudo ip link set enp0s9 up
jgarcia@client1:~$ ip -c a show enp0s9
4: enp0s9: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 08:00:27:cf:9a:bb brd ff:ff:ff:ff:ff:ff
    inet 192.168.5.100/24 brd 192.168.5.255 scope global dynamic noprefixroute enp0s9
        valid_lft 1197sec preferred_lft 1197sec
    inet6 fe80::7db:228d:da3f:fff2/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
jgarcia@client1:~$
```