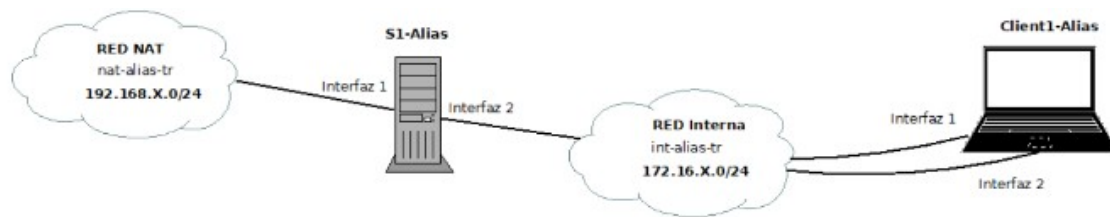


Examen:

T0 - RA5 - Examen - DHCP Práctico

Jesús Cordero Ávila



ENTREGA PARTE 1:

Captura de máquina servidor

<div>  Client1-JCordero  Apagada </div> <div>  Nuevo grupo 2 </div> <div>  RA5-DHCP-EVA  Apagada </div>	Controlador: ICH AC97
	<div>  Red </div> <div> Adaptador 1: Intel PRO/1000 MT Desktop (Red NAT, «dhcp-1») Adaptador 2: Intel PRO/1000 MT Desktop (Red interna, «dhcp-cordero») Adaptador 3: Intel PRO/1000 MT Desktop (Red interna, «dhcp-avila») </div>
	<div>  USB </div> <div> Controlador USB: OHCI, EHCI Filtros de dispositivos: 0 (0 activo) </div>

Captura máquina cliente

<div>  Client1-JCordero  Apagada </div> <div>  Nuevo grupo 2 </div> <div>  RA5-DHCP-EVA  Apagada </div>	Controlador de anfitrión: Predeterminado Controlador: ICH AC97
	<div>  Red </div> <div> Adaptador 1: Intel PRO/1000 MT Desktop (Red interna, «dhcp-cordero») Adaptador 2: Intel PRO/1000 MT Desktop (Red interna, «dhcp-cordero») Adaptador 3: Intel PRO/1000 MT Desktop (Red interna, «dhcp-avila») </div>
	<div>  USB </div> <div>Controlador USB: OHCI, EHCI</div>

ENTREGA PARTE 2:

A)

```
jcordero@ra5-dhcp-s1:/etc/netplan$ cat /etc/netplan/00-installer-config.yaml
# This is the network config written by 'subiquity'
network:
  ethernets:
    enp0s3:
      dhcp4: true
    enp0s8:
      dhcp4: false
      addresses: [172.16.1.10/24]
      nameservers:
        search: [cordero.tk]
        addresses: [8.8.8.8,8.8.4.4]
    enp0s9:
      dhcp4: false
      addresses: [192.168.1.10/24]
      gateway4: 192.168.1.255
      nameservers:
        search: [avila.tk]
        addresses: [8.8.8.8,8.8.4.4]
  version: 2
jcordero@ra5-dhcp-s1:/etc/netplan$ sudo netplan apply

** (generate:15976): WARNING **: 17:43:34.949: Permissions for /etc/netplan/00-installer-config.yaml are too open. Netplan configuration should NOT be accessible by others.

** (process:15976): WARNING **: 17:43:34.951: `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:15974): WARNING **: 17:43:35.361: Permissions for /etc/netplan/00-installer-config.yaml are too open. Netplan configuration should NOT be accessible by others.

** (process:15974): WARNING **: 17:43:35.364: `gateway4` has been deprecated, use default routes instead.
See the 'Default routes' section of the documentation for more details.

** (process:15974): WARNING **: 17:43:35.489: Permissions for /etc/netplan/00-installer-config.yaml are too open. Netplan configuration should NOT be accessible by others.

** (process:15974): WARNING **: 17:43:35.489: `gateway4` has been deprecated, use default routes instead.
See the 'Default routes' section of the documentation for more details.

** (process:15974): WARNING **: 17:43:35.490: Permissions for /etc/netplan/00-installer-config.yaml are too open. Netplan configuration should NOT be accessible by others.

** (process:15974): WARNING **: 17:43:35.490: `gateway4` has been deprecated, use default routes instead.
See the 'Default routes' section of the documentation for more details.
jcordero@ra5-dhcp-s1:/etc/netplan$
```

B)

```
jcordero@ra5-dhcp-s1:/etc/netplan$ cat /etc/dhcp/dhcpd.conf
option domain-name "example.org";
option domain-name-servers ns1.example.org, ns2.example.org;

default-lease-time 600;
max-lease-time 7200;

ddns-update-style none;

subnet 172.16.1.0 netmask 255.255.255.0 {
    range 172.16.1.100 172.16.1.150;
    option domain-name-servers 172.16.1.10;
    option domain-name "cordero.tk";
    option broadcast-address 172.16.1.255;
    option subnet-mask 255.255.255.0;
    option routers 172.16.1.10;
    default-lease-time 1200;
    option subnet-mask 255.255.255.0;
    max-lease-time 10800;
}

subnet 192.168.1.0 netmask 255.255.255.0 {
    range 192.168.1.100 192.168.1.150;
    option domain-name-servers 192.168.1.10, 8.8.8.8, 8.8.4.4;
    option domain-name "avila.tk";
    option broadcast-address 192.168.1.255;
    option subnet-mask 255.255.255.0;
    option routers 172.16.1.10;
    default-lease-time 600;
    max-lease-time 7200;
}

host cliente {
    hardware ethernet 08:00:27:81:16:59;
    fixed-address 172.16.1.200;
    default-lease-time 3600;
}

jcordero@ra5-dhcp-s1:/etc/netplan$
```

C)

```
jcordero@ra5-dhcp-s1:/etc/netplan$ 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 10.1.0.4/16 metric 100 brd 10.1.255.255 scope global dynamic enp0s3
        valid_lft 513sec preferred_lft 513sec
    inet6 fe80::a00:27ff:fe77:6faf/64 scope link
        valid_lft forever preferred_lft forever
jcordero@ra5-dhcp-s1:/etc/netplan$
```

D)

-IP, BROADCAST

```
jcordero@ra5-dhcp-s1:/etc/netplan$ 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 08:00:27:77:6f:af brd ff:ff:ff:ff:ff:ff
    inet 172.16.1.10/24 brd 172.16.1.255 scope global enp0s8
        valid_lft forever preferred_lft forever
    inet6 fe80::a00:27ff:fe77:6faf/64 scope link
        valid_lft forever preferred_lft forever
jcordero@ra5-dhcp-s1:/etc/netplan$
```

-PUERTA DE ENLACE

```
valid_lft forever preferred_lft forever
jcordero@ra5-dhcp-s1:/etc/netplan$ ip route list | grep "enp0s8"
172.16.1.0/24 dev enp0s8 proto kernel scope link src 172.16.1.10
jcordero@ra5-dhcp-s1:/etc/netplan$
```

-DNS

```
valid_lft forever preferred_lft forever
jcordero@ra5-dhcp-s1:/etc/netplan$ 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: cordero.tk
jcordero@ra5-dhcp-s1:/etc/netplan$
```

E)

-IP, BROADCAST

```
jcordero@ra5-dhcp-s1:/etc/netplan$ 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 08:00:27:4a:b5:9d brd ff:ff:ff:ff:ff:ff
    inet 192.168.1.10/24 brd 192.168.1.255 scope global enp0s9
        valid_lft forever preferred_lft forever
    inet6 fe80::a00:27ff:fe4a:b59d/64 scope link
        valid_lft forever preferred_lft forever
jcordero@ra5-dhcp-s1:/etc/netplan$
```

-PUERTA DE ENLACE

```
valid_lft forever preferred_lft forever
jcordero@ra5-dhcp-s1:/etc/netplan$ ip route list | grep "enp0s9"
192.168.1.0/24 dev enp0s9 proto kernel scope link src 192.168.1.10
jcordero@ra5-dhcp-s1:/etc/netplan$
```

-DNS

```
valid_lft forever preferred_lft forever
jcordero@ra5-dhcp-s1:/etc/netplan$ 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: avila.tk
jcordero@ra5-dhcp-s1:/etc/netplan$
```

-

F)

-IP, BROADCAST

```
jcordero@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 08:00:27:81:16:59 brd ff:ff:ff:ff:ff:ff
    inet 172.16.1.200/24 brd 172.16.1.255 scope global dynamic noprefixroute enp0s3
        valid_lft 2573sec preferred_lft 2573sec
    inet6 fe80::93d9:1aa6:35ef:4336/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
jcordero@client1:~$
```

-PUERTA DE ENLACE

```
jcordero@client1:~$ ip route list | grep "enp0s3"
default via 172.16.1.10 dev enp0s3 proto dhcp metric 20100
169.254.0.0/16 dev enp0s3 scope link metric 1000
Terminal 0/24 dev enp0s3 proto kernel scope link src 172.16.1.200 metric 100
jcordero@client1:~$
```

-DNS

```
jcordero@client1:~$ resolvectl status enp0s3
Link 2 (enp0s3)
  Current Scopes: DNS
    Protocols: +DefaultRoute +LLMNR -mDNS -DNSOverTLS DNSSEC=no/unsupported
  Current DNS Server: 172.16.1.10
    DNS Servers: 172.16.1.10
    DNS Domain: cordero.tk
jcordero@client1:~$
```

G)

-IP, BROADCAST

```
jcordero@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 08:00:27:31:87:c9 brd ff:ff:ff:ff:ff:ff
    inet 172.16.1.100/24 brd 172.16.1.255 scope global dynamic noprefixroute enp0s8
        valid_lft 1095sec preferred_lft 1095sec
    inet6 fe80::5ad:665d:ec7f:5016/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
jcordero@client1:~$
```

-PUERTA DE ENLACE

```
jcordero@client1:~$ ip route list | grep "enp0s8"
default via 172.16.1.10 dev enp0s8 proto dhcp metric 20101
172.16.1.0/24 dev enp0s8 proto kernel scope link src 172.16.1.100 metric 101
jcordero@client1:~$
```

-DNS

```
jcordero@client1:~$ resolvectl status enp0s8
Link 3 (enp0s8)
  Current Scopes: DNS
    Protocols: +DefaultRoute +LLMNR -mDNS -DNSOverTLS DNSSEC=no/unsupported
  Current DNS Server: 172.16.1.10
    DNS Servers: 172.16.1.10
    DNS Domain: cordero.tk
jcordero@client1:~$
```

H)

-IP, BROADCAST

```
jcordero@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 08:00:27:69:4c:19 brd ff:ff:ff:ff:ff:ff
    inet 192.168.1.100/24 brd 192.168.1.255 scope global dynamic noprefixroute enp0s9
        valid_lft 389sec preferred_lft 389sec
    inet6 fe80::aa:c1b5:6f4e:cb84/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
jcordero@client1:~$
```

-PUERTA DE ENLACE

```
valid_lft forever preferred_lft forever
jcordero@client1:~$ ip route list | grep "enp0s9"
default via 172.16.1.10 dev enp0s9 proto dhcp metric 20102
172.16.1.10 dev enp0s9 proto dhcp scope link metric 20102
192.168.1.0/24 dev enp0s9 proto kernel scope link src 192.168.1.100 metric 102
jcordero@client1:~$
```

-DNS

```
jcordero@client1:~$ resolvectl status enp0s9
Link 4 (enp0s9)
  Current Scopes: DNS
    Protocols: +DefaultRoute +LLMNR -mDNS -DNSOverTLS DNSSEC=no/unsupported
  Current DNS Server: 192.168.1.10
    DNS Servers: 192.168.1.10 8.8.8.8 8.8.4.4
    DNS Domain: avila.tk
jcordero@client1:~$
```

I)

```
jcordero@ra5-dhcp-s1:/etc/netplan$ sudo dhclient -r enp0s8
[sudo] password for jcordero:
jcordero@ra5-dhcp-s1:/etc/netplan$
```

J)

```
jcordero@client1:~$ sudo ip link set enp0s9 down
jcordero@client1:~$ ip -c a show enp0s9
4: enp0s9: <BROADCAST,MULTICAST> mtu 1500 qdisc fq_codel state DOWN group default qlen 1000
    link/ether 08:00:27:69:4c:19 brd ff:ff:ff:ff:ff:ff
jcordero@client1:~$
```

K)

```
jcordero@client1:~$ sudo ip link set enp0s9 up
jcordero@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 08:00:27:69:4c:19 brd ff:ff:ff:ff:ff:ff
    inet 192.168.1.100/24 brd 192.168.1.255 scope global dynamic noprefixroute enp0s9
        valid_lft 598sec preferred_lft 598sec
    inet6 fe80::aa:c1b5:6f4e:cb84/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
jcordero@client1:~$
```