

ACTIVIDAD 01 – CONFIGURACIÓN DNS I

(Definición de las zonas)

- cat del fichero de configuración de red de “S1-Alias”

```
jgarcia@S1:/etc/default$ sudo cat /etc/netplan/00-installer-config.yaml
# This is the network config written by 'subiquity'
network:
  ethernets:
    enp0s3:
      dhcp4: true
    enp0s8:
      addresses: [172.16.5.1/24]
      nameservers:
        search: [jaime-5.ca]
        addresses:
  version: 2
jgarcia@S1:/etc/default$ _
```

- cat del fichero de configuración de red de “S2-Alias”

```
jgarcia@s2-jgarcia:~$ sudo cat /etc/netplan/00-installer-config.yaml
[sudo] password for jgarcia:
# This is the network config written by 'subiquity'
network:
  ethernets:
    enp0s3:
      dhcp4: true
    enp0s8:
      dhcp4: true
  version: 2
jgarcia@s2-jgarcia:~$
```

- Consulta, por línea de comando, la configuración de red de la interfaz 2 de “S1-Alias” IP, puerta de enlace y DNS

Config:

```
jgarcia@S1:/etc/default$ 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:f7:ed:8e brd ff:ff:ff:ff:ff:ff
    inet 172.16.5.1/24 brd 172.16.5.255 scope global enp0s8
        valid_lft forever preferred_lft forever
    inet6 fe80::a00:27ff:fef7:ed8e/64 scope link
        valid_lft forever preferred_lft forever
jgarcia@S1:/etc/default$ _
```

Puerta de enlace:

```
jgarcia@S1:/etc/default$ ip route | grep enp0s8
172.16.5.0/24 dev enp0s8 proto kernel scope link src 172.16.5.1
jgarcia@S1:/etc/default$ _
```

DNS:

```
172.16.5.0/24 dev enp0s8 proto kernel scope link src 172.16.5.1
jgarcia@S1:/etc/default$ resolvectl status enp0s8
Link 3 (enp0s8)
    Current Scopes: DNS
        Protocols: +DefaultRoute +LLMNR -mDNS -DNSOverTLS DNSSEC=no/unsupported
Current DNS Server: 172.16.5.1
    DNS Servers: 172.16.5.1
jgarcia@S1:/etc/default$ _
```

- Consulta, por línea de comando, la configuración de red de la interfaz 2 de “S2-Alias” IP, puerta de enlace y DNS

Config:

```
jgarcia@s2-jgarcia:/etc/bind$ 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 08:00:27:2c:91:b7 brd ff:ff:ff:ff:ff:ff
    inet 172.16.5.2/24 metric 100 brd 172.16.5.255 scope global dynamic enp0s8
        valid_lft 893sec preferred_lft 893sec
    inet6 fe80::a00:27ff:fe2c:91b7/64 scope link
        valid_lft forever preferred_lft forever
jgarcia@s2-jgarcia:/etc/bind$
```

Puerta de enlace:

```
jgarcia@s2-jgarcia:/etc/bind$ ip route | grep enp0s8
default via 172.16.5.1 dev enp0s8 proto dhcp src 172.16.5.2 metric 100
172.16.5.0/24 dev enp0s8 proto kernel scope link src 172.16.5.2 metric 100
172.16.5.1 dev enp0s8 proto dhcp scope link src 172.16.5.2 metric 100
172.16.5.2 dev enp0s8 proto dhcp scope host src 172.16.5.2 metric 100
jgarcia@s2-jgarcia:/etc/bind$
```

DNS:

```
jgarcia@s2-jgarcia:~$ resolvectl status enp0s8
Link 3 (enp0s8)
  Current Scopes: DNS
    Protocols: +DefaultRoute +LLMNR -mDNS -DNSOverTLS DNSSEC=no/unsupported
Current DNS Server: 172.16.5.2
  DNS Servers: 172.16.5.1 172.16.5.2
  DNS Domain: jaime-5.ca
jgarcia@s2-jgarcia:~$
```

- cat de los ficheros de configuración del servicio de DHCP

/etc/default/isc-dhcp-server:

```
jgarcia@S1:/etc/default$ sudo cat isc-dhcp-server
# Defaults for isc-dhcp-server (sourced by /etc/init.d/isc-dhcp-server)

# Path to dhcpd's config file (default: /etc/dhcp/dhcpd.conf).
#DHCPDv4_CONF=/etc/dhcp/dhcpd.conf
#DHCPDv6_CONF=/etc/dhcp/dhcpd6.conf

# Path to dhcpd's PID file (default: /var/run/dhcpd.pid).
#DHCPDv4_PID=/var/run/dhcpd.pid
#DHCPDv6_PID=/var/run/dhcpd6.pid

# Additional options to start dhcpd with.
# Don't use options -cf or -pf here; use DHCPD_CONF/ DHCPD_PID instead
#OPTIONS=""

# On what interfaces should the DHCP server (dhcpd) serve DHCP requests?
# Separate multiple interfaces with spaces, e.g. "eth0 eth1".
INTERFACESv4="enp0s8"
INTERFACESv6=""
jgarcia@S1:/etc/default$
```

/etc/dhcp/dhcpd.conf:

```
jgarcia@S1:/etc/default$ sudo tail -25 /etc/dhcp/dhcpd.conf

subnet 172.16.5.0 netmask 255.255.255.0 {
    range 172.16.5.100 172.16.5.150;
    option domain-name-servers 172.16.5.1, 172.16.5.2;
    option domain-name "jaime-5.ca";
    option subnet-mask 255.255.255.0;
    option routers 172.16.5.1;
    option broadcast-address 172.16.5.255;
    default-lease-time 900;
    max-lease-time 1800;
}

host s2-jgarcia {
    hardware ethernet 08:00:27:2c:91:b7;
    fixed-address 172.16.5.2;
}

host client1-jgarcia {
    hardware ethernet 08:00:27:E0:A1:DB;
    fixed-address 172.16.5.10;
    default-lease-time 3600;
    max-lease-time 10800;
}

jgarcia@S1:/etc/default$
```

- Consulta, por línea de comando, la configuración de red de la interfaz 1 de “Client1- Alias” IP, puerta de enlace y DNS

Config:

```
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 688sec preferred_lft 688sec
    inet6 fe80::d72b:68e1:8f2f:ceae/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
jgarcia@client1:~$
```

Puerta de enlace:

```
jgarcia@client1:~$ ip route | grep enp0s3
default via 172.16.5.1 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 172.16.5.10 metric 100
jgarcia@client1:~$ ip route | grep enp0s8
default via 172.16.5.1 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:~$
```

DNS:

```
jgarcia@client1:~$ resolvectl status enp0s8
Link 3 (enp0s8)
    Current Scopes: DNS
    Protocols: +DefaultRoute +LLMNR -mDNS -DNSOverTLS DNSSEC=no/unsupported
Current DNS Server: 172.16.5.2
    DNS Servers: 172.16.5.1 172.16.5.2
    DNS Domain: jaime-5.ca
jgarcia@client1:~$
```

- Consulta, por línea de comando, la configuración de red de la interfaz 2 de “Client1- Alias”: Sólo 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 172.16.5.10/24 brd 172.16.5.255 scope global dynamic noprefixroute enp0s3
        valid_lft 3481sec preferred_lft 3481sec
    inet6 fe80::e6b9:e7a7:ce10:5635/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
jgarcia@client1:~$
```

- cat del fichero de zonas de S1-Alias

```
jgarcia@S1:/etc/default$ sudo cat /etc/bind/named.conf.local
//
// Do any local configuration here
//
// Consider adding the 1918 zones here, if they are not used in your
// organization
//include "/etc/bind/zones.rfc1918";

zone "jaime-5.ca" {
    type master;
    notify yes;
    allow-transfer { 172.16.5.2; };
    file "/etc/bind/db.jaime-5.ca";
};

zone "5.16.172.jaime-5.ca" {
    type master;
    notify yes;
    allow-transfer { 172.16.5.2 };
    file "/etc/bind/db.jaime-5.ca.rev";
};
jgarcia@S1:/etc/default$
```

- cat del fichero de zonas de S2-Alias

```
DNS Domain: jaime-5.ca
jgarcia@s2-jgarcia:~$ cat /etc/bind/named.conf.local
//
// Do any local configuration here
//
// Consider adding the 1918 zones here, if they are not used in your
// organization
//include "/etc/bind/zones.rfc1918";

zone "jaime-5.ca" {
    type slave;
    master { 192.168.5.1; };
    allow-notify { 192.168.0.1 ;; };
    file "db.jaime-5.ca";
};

zone "5.16.172.jaime-5.ca" {
    type slave;
    master { 192.168.5.1; };
    allow-notify { 192.168.0.1 ;; };
    file "db.jaime-5.ca";
};
jgarcia@s2-jgarcia:~$ _
```