

ACTIVIDAD 3 Y 4 DNS

En primer lugar tenemos que tener internet en Ubuntu server para poder instalar bind9

```
Ubuntu 10.10 ubuntu tty1
ubuntu login: lales
Password:
Last login: Mon Nov 14 12:16:43 CET 2011 on tty1
Linux ubuntu 2.6.35-22-generic-pae #33-Ubuntu SMP Sun Sep 19 22:14:14 UTC 2010 i
686 GNU/Linux
Ubuntu 10.10

Welcome to Ubuntu!
 * Documentation: https://help.ubuntu.com/
lales@ubuntu:~$ sudo su
[sudo] password for lales:
root@ubuntu:/home/lales# nano /etc/network/interfaces_
```

```
GNU nano 2.2.4      File: /etc/network/interfaces      Modified
# This file describes the network interfaces available on your system
# and how to activate them. For more information, see interfaces(5).

# The loopback network interface
auto lo
iface lo inet loopback

# The primary network interface
auto eth0
iface eth0 inet static
address 192.168.2.198
netmask 255.255.255.0
gateway 192.168.2.4
network 8.8.8.8
#broadcast 10.33.10.255

^G Get Help  ^O WriteOut  ^R Read File  ^V Prev Page  ^K Cut Text   ^C Cur Pos
^X Exit      ^J Justify   ^W Where Is  ^U Next Page  ^U UnCut Text ^T To Spell
```

```
GNU nano 2.2.4      File: /etc/resolv.conf      Modified
nameserver 8.8.8.8
#domain localdomain
#search localdomain

^G Get Help  ^O WriteOut  ^R Read File  ^V Prev Page  ^K Cut Text   ^C Cur Pos
^X Exit      ^J Justify   ^W Where Is  ^U Next Page  ^U UnCut Text ^T To Spell
```

Cuando ya tenemos internet instalamos bind9 de la siguiente manera

Sudo apt-get install bind9

```
[ Wrote 3 lines ]
root@ubuntu:/home/lales# sudo apt-get install bind9
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following extra packages will be installed:
  bind9-host bind9utils dnstools libbind9-60 libdns66 libisc60 libisccc60
  libiscfg60 liblures60
Suggested packages:
  resolvconf rblcheck
The following packages will be upgraded:
  bind9 bind9-host bind9utils dnstools libbind9-60 libdns66 libisc60
  libisccc60 libiscfg60 liblures60
10 upgraded, 0 newly installed, 0 to remove and 173 not upgraded.
Need to get 1630kB of archives.
After this operation, 0B of additional disk space will be used.
Do you want to continue [Y/n]? _
```

```
Accept this solution? [Y/n/q/?] y
The following packages will be REMOVED:
  bind9-host{a} dnstools{a} ubuntu-standard{a}
The following packages will be upgraded:
  bind9 bind9utils libbind9-60 libdns66 libisc60 libisccc60 libiscfg60
  liblures60
8 packages upgraded, 0 newly installed, 3 to remove and 173 not upgraded.
Need to get 1413kB of archives. After unpacking 618kB will be freed.
Do you want to continue? [Y/n/?] y
Get:1 http://es.archive.ubuntu.com/ubuntu/ maverick-updates/main bind9 i386 1:9.
7.1.dfsg.P2-2ubuntu0.4 [324kB]
Get:2 http://es.archive.ubuntu.com/ubuntu/ maverick-updates/main libisc60 i386 1
:9.7.1.dfsg.P2-2ubuntu0.4 [157kB]
Get:3 http://es.archive.ubuntu.com/ubuntu/ maverick-updates/main libdns66 i386 1
:9.7.1.dfsg.P2-2ubuntu0.4 [655kB]
Get:4 http://es.archive.ubuntu.com/ubuntu/ maverick-updates/main libisccc60 i386
1:9.7.1.dfsg.P2-2ubuntu0.4 [30.2kB]
Get:5 http://es.archive.ubuntu.com/ubuntu/ maverick-updates/main libiscfg60 i38
6 1:9.7.1.dfsg.P2-2ubuntu0.4 [40.1kB]
Get:6 http://es.archive.ubuntu.com/ubuntu/ maverick-updates/main liblures60 i386
1:9.7.1.dfsg.P2-2ubuntu0.4 [49.8kB]
Get:7 http://es.archive.ubuntu.com/ubuntu/ maverick-updates/main bind9utils i386
1:9.7.1.dfsg.P2-2ubuntu0.4 [113kB]
90% [7 bind9utils 15020/113kB 13%] 95.6kB/s 1s
```

Tenemos que poner aptitude install bind9 para instalar algunos paquetes

```
1.dfsg.P2-2ubuntu0.4_i386.deb) ...
Unpacking replacement bind9utils ...
Preparing to replace libbind9-60 1:9.7.1.dfsg.P2-2 (using ../libbind9-60_1%3a9.
7.1.dfsg.P2-2ubuntu0.4_i386.deb) ...
Unpacking replacement libbind9-60 ...
Processing triggers for man-db ...
Processing triggers for ureadahead ...
ureadahead will be reprofiled on next reboot
Processing triggers for ufw ...
Setting up libisc60 (1:9.7.1.dfsg.P2-2ubuntu0.4) ...
Setting up libdns66 (1:9.7.1.dfsg.P2-2ubuntu0.4) ...
Setting up libisccc60 (1:9.7.1.dfsg.P2-2ubuntu0.4) ...
Setting up libiscfg60 (1:9.7.1.dfsg.P2-2ubuntu0.4) ...
Setting up libbind9-60 (1:9.7.1.dfsg.P2-2ubuntu0.4) ...
Setting up liblures60 (1:9.7.1.dfsg.P2-2ubuntu0.4) ...
Setting up bind9utils (1:9.7.1.dfsg.P2-2ubuntu0.4) ...
Setting up bind9 (1:9.7.1.dfsg.P2-2ubuntu0.4) ...
#
* Stopping domain name service... bind9 [ OK ]
* Starting domain name service... bind9 [ OK ]
Processing triggers for libc-bin ...
ldconfig deferred processing now taking place

Current status: 173 updates [-10].
root@ubuntu:/home/lales# aptitude install bind9_
```

Una vez instalado, ponemos las direcciones que nos pide en el ejercicio

```
GNU nano 2.2.4 File: /etc/network/interfaces Modified
# This file describes the network interfaces available on your system
# and how to activate them. For more information, see interfaces(5).

# The loopback network interface
auto lo
iface lo inet loopback

# The primary network interface
auto eth0
iface eth0 inet static
address 10.33.10.3
netmask 255.255.255.0
gateway 10.33.10.4
network 10.33.10.0
#broadcast 10.33.10.255

^G Get Help ^O WriteOut ^R Read File ^V Prev Page ^X Cut Text ^C Cur Pos
^X Exit ^J Justify ^W Where Is ^U Next Page ^U UnCut Text ^T To Spell
```

Y configuramos el fichero /etc/bind/named.conf.local poniendo la zona inversa y directa

```
GNU nano 2.2.4 File: /etc/bind/named.conf.local Modified
//
// 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 "asir10" {
type master;
file "db.asir10";
};

zone "10.33.10.in-addr.arpa" {
type master;
file "db.10.33.10";
};

^G Get Help ^O WriteOut ^R Read File ^V Prev Page ^X Cut Text ^C Cur Pos
^X Exit ^J Justify ^W Where Is ^U Next Page ^U UnCut Text ^T To Spell
```

Ahora nos vamos al fichero /var/cache/bind/db.asir10 para configurar la zona directa y ponemos los siguientes parámetros, tal y como está en la siguiente foto

```
GNU nano 2.2.4 File: /var/cache/bind/db.asir10
$ORIGIN asir10.
$TTL 1D
@ IN SOA SERVIDOR POSTMASTER (
1 ; serie
6H ; refresco (6 horas)
1H ; reintentos (1 hora)
2W ; expira (2 semanas)
3H ; minimo (3 horas)
)

NS SERVIDOR

servidor A 10.33.10.3
debian A 10.33.10.30
opensuse A 10.33.10.50
molinux A 10.33.10.60
fedora A 10.33.10.70

[ Read 19 lines ]
^G Get Help ^O WriteOut ^R Read File ^V Prev Page ^X Cut Text ^C Cur Pos
^X Exit ^J Justify ^W Where Is ^U Next Page ^U UnCut Text ^T To Spell
```

Ahora configuramos el fichero /var/cache/bind/db.10.33.10 para la zona inversa

```
GNU nano 2.2.4 File: /var/cache/bind/db.10.33.10
$ORIGIN 10.33.10.in-addr.arpa.
$TTL 1D ; 1 dia
@ IN SOA servidor.asir10. postmaster (
    1 ; serie
    6H ; refresco
    1H ; reintentos
    2W ; expire
    3H ; minimo
)
3 IN NS servidor.asir10.
30 IN PTR servidor.asir10.
50 IN PTR debian.asir10.
60 IN PTR opensuse.asir10.
70 IN PTR molinux.asir10.
   IN PTR fedora.asir10.

[ Read 18 lines ]
^G Get Help ^O WriteOut ^R Read File ^Y Prev Page ^K Cut Text ^C Cur Pos
^X Exit ^J Justify ^W Where Is ^U Next Page ^U UnCut Text ^T To Spell
```

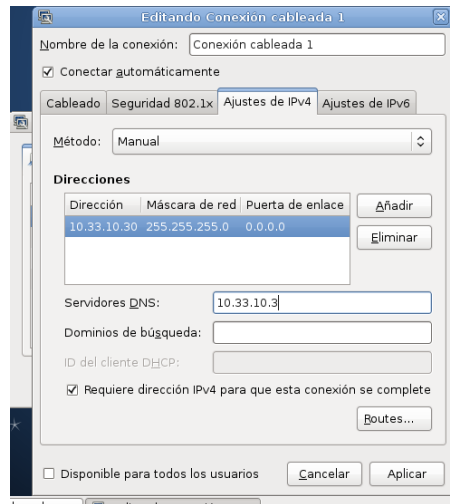
Ahora tenemos que configurar el fichero /etc/resolv.conf para poner de nameserver la dirección del servidor 10.33.10.3

```
GNU nano 2.2.4 File: /etc/resolv.conf Modified
nameserver 10.33.10.3_
#domain localdomain
#search localdomain

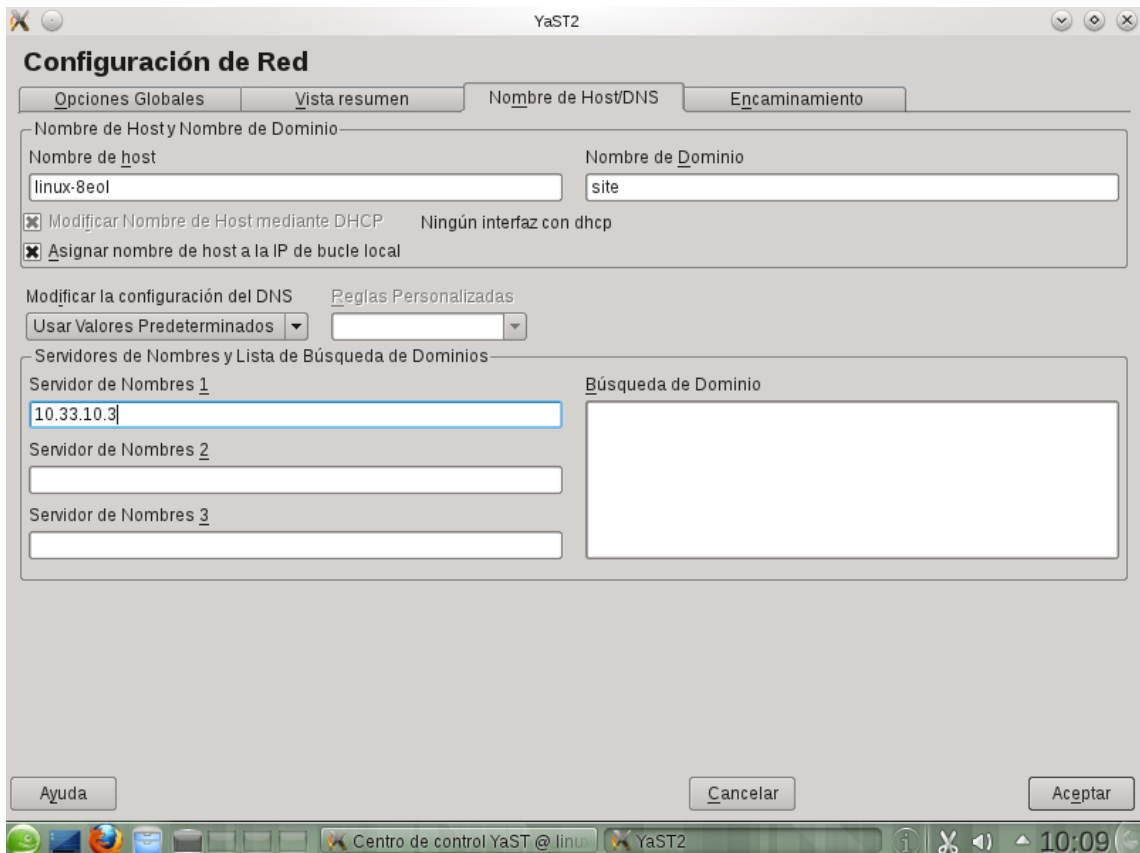
[ Read 3 lines ]
^G Get Help ^O WriteOut ^R Read File ^Y Prev Page ^K Cut Text ^C Cur Pos
^X Exit ^J Justify ^W Where Is ^U Next Page ^U UnCut Text ^T To Spell
```

Ahora nos vamos a los clientes a poner de modo gráfico las direcciones ip y en el DNS preferido ponemos la dirección del servidor, así lo hacemos con Debian, OpenSUSE, Molinux y Fedora

EN DEBIAN



EN OPENSUSE



EN FEDORA

Editando Conexión cableada 1

Nombre de la conexión:

Conectar automáticamente

Cableado | Seguridad 802.1x | **Ajustes de IPv4** | Ajustes de IPv6

Método:

Dirección

Dirección	Máscara de red	Puerta de enlace	Añadir
10.33.10.70	255.255.255.0	0.0.0.0	Eliminar

Servidores DNS:

Dominios de búsqueda:

ID del cliente DHCP:

Requiere dirección IPv4 para que esta conexión se complete

Disponible para todos los usuarios

EN MOLINUX

Editando eth0

Nombre de la conexión:

Conectar automáticamente

Cableada | Seguridad 802.1x | **Ajustes de IPv4** | Ajustes de IPv6

Método:

Direcciones

Dirección	Máscara de red	Puerta de enlace	+ Añadir
10.33.10.60	255.255.255.0	0.0.0.0	Eliminar

Servidores DNS:

Dominios de búsqueda:

ID del cliente DHCP:

Requiere dirección IPv4 para que esta conexión se complete

Disponible para todos los usuarios

Ahora volvemos al servidor y ponemos nslookup y ponemos la dirección de Fedora por ejemplo 10.33.10.70 y nos aparece el nombre que le dimos Fedora.asir10., si ponemos el nombre del servidor servidor.asir10. nos aparece la dirección ip que tiene asignada 10.33.10.3

```
Address: 10.33.10.3#53
Name: servidor.asir10
Address: 10.33.10.3
> 10.33.10.70
Server: 10.33.10.3
Address: 10.33.10.3#53

70.10.33.10.in-addr.arpa name = fedora.asir10.
> fedora.asir10.
; connection timed out; no servers could be reached
^Croot@ubuntu:/home/lales#
root@ubuntu:/home/lales# nslookup
> 10.33.10.3
Server: 10.33.10.3
Address: 10.33.10.3#53

3.10.33.10.in-addr.arpa name = servidor.asir10.
> servidor.asir10.
Server: 10.33.10.3
Address: 10.33.10.3#53

Name: servidor.asir10
Address: 10.33.10.3
>
```

Así lo vamos haciendo con todos los clientes

```
root@ubuntu:/home/lales# nslookup
> 10.33.10.3
Server: 10.33.10.3
Address: 10.33.10.3#53

3.10.33.10.in-addr.arpa name = servidor.asir10.
> 10.33.10.30
Server: 10.33.10.3
Address: 10.33.10.3#53

30.10.33.10.in-addr.arpa name = debian.asir10.
> 10.33.10.60
Server: 10.33.10.3
Address: 10.33.10.3#53

60.10.33.10.in-addr.arpa name = molinux.asir10.
> 10.33.10.70
Server: 10.33.10.3
Address: 10.33.10.3#53

70.10.33.10.in-addr.arpa name = fedora.asir10.
> -
>
```

Y si ponemos el nombre asignado al cliente, pues nos aparece la ip que tiene cada uno

```
> servidor.asir10.
Server: 10.33.10.3
Address: 10.33.10.3#53

Name: servidor.asir10
Address: 10.33.10.3
> debian.asir10.
Server: 10.33.10.3
Address: 10.33.10.3#53

Name: debian.asir10
Address: 10.33.10.30
> opensuse.asir10.
Server: 10.33.10.3
Address: 10.33.10.3#53

Name: opensuse.asir10
Address: 10.33.10.50
> molinux.asir10.
Server: 10.33.10.3
Address: 10.33.10.3#53

Name: molinux.asir10
Address: 10.33.10.60
>
```

Ahora lo hacemos al revés, desde los clientes ponemos nslookup y ponemos tanto la inversa como la directa

EN DEBIAN

```
Terminal (como superusuario)
Archivo Editar Ver Terminal Ayuda
root@debian:/home/lales#
root@debian:/home/lales# nslookup
> 10.33.10.3
Server:      10.33.10.3
Address:    10.33.10.3#53

3.10.33.10.in-addr.arpa name = servidor.asir10.
> 10.33.10.30
Server:      10.33.10.3
Address:    10.33.10.3#53

30.10.33.10.in-addr.arpa      name = debian.asir10.
> 10.33.10.70
Server:      10.33.10.3
Address:    10.33.10.3#53

70.10.33.10.in-addr.arpa      name = fedora.asir10.
> 10.33.10.60
Server:      10.33.10.3
Address:    10.33.10.3#53

60.10.33.10.in-addr.arpa      name = molinux.asir10.
>
```

```
Terminal (como superusuario)
Archivo Editar Ver Terminal Ayuda
Address:    10.33.10.3#53

70.10.33.10.in-addr.arpa      name = fedora.asir10.
> 10.33.10.60
Server:      10.33.10.3
Address:    10.33.10.3#53

60.10.33.10.in-addr.arpa      name = molinux.asir10.
> servidor.asir10.
Server:      10.33.10.3
Address:    10.33.10.3#53

Name:  servidor.asir10
Address: 10.33.10.3
> debian.asir10.
;; connection timed out; no servers could be reached
> ^Croot@debian:/home/lales# nslookup
> servidor.asir10.
Server:      10.33.10.3
Address:    10.33.10.3#53

Name:  servidor.asir10
Address: 10.33.10.3
>
```

```
Terminal (como superusuario)
Archivo Editar Ver Terminal Ayuda
Server:      10.33.10.3
Address:    10.33.10.3#53

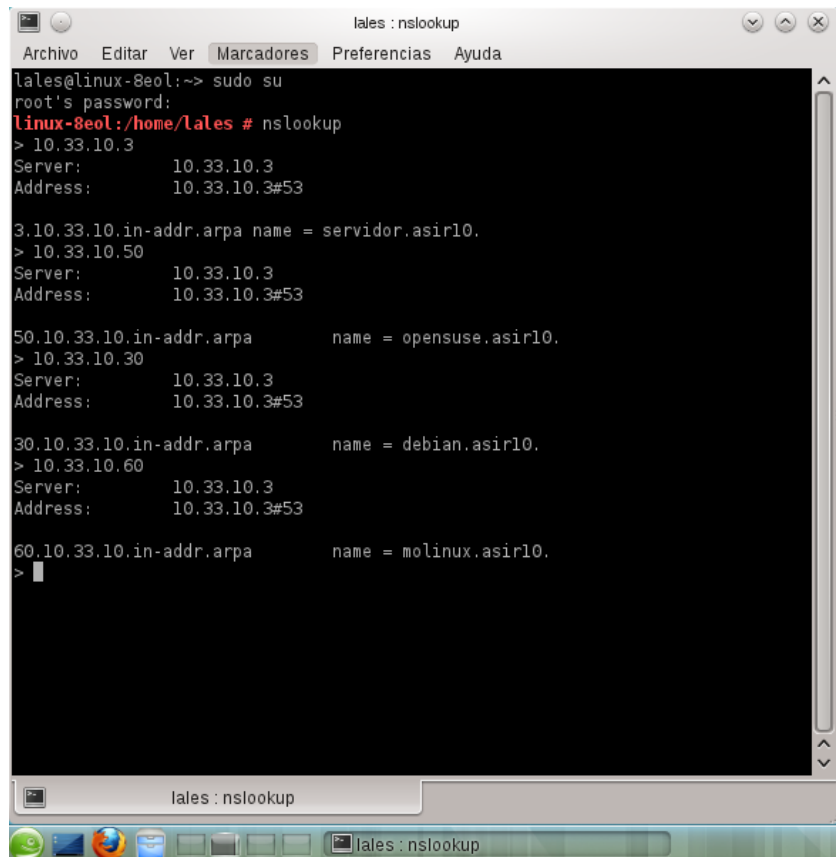
Name:  servidor.asir10
Address: 10.33.10.3
> debian.asir10.
Server:      10.33.10.3
Address:    10.33.10.3#53

Name:  debian.asir10
Address: 10.33.10.30
> molinux.asir10.
Server:      10.33.10.3
Address:    10.33.10.3#53

Name:  molinux.asir10
Address: 10.33.10.60
> opensuse.asir10.
Server:      10.33.10.3
Address:    10.33.10.3#53

Name:  opensuse.asir10
Address: 10.33.10.50
>
```


EN OPENSUSE



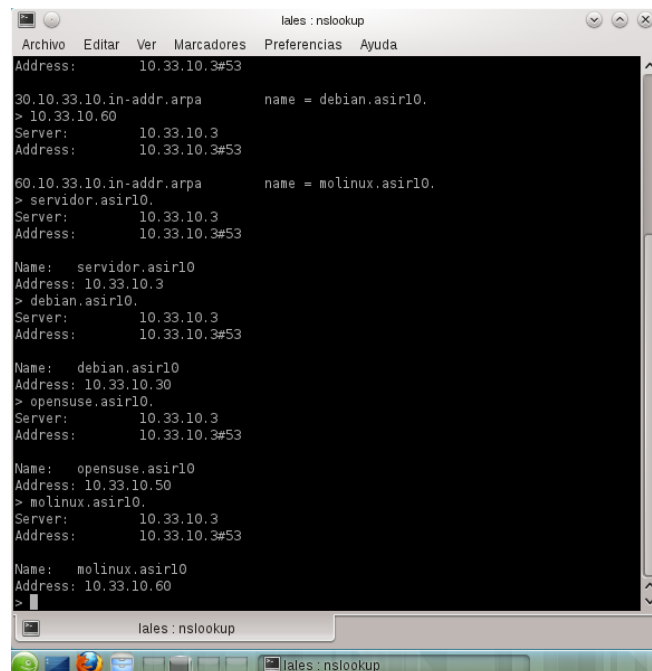
```
lales@linux-8eol:~> sudo su
root's password:
linux-8eol:/home/Lales # nslookup
> 10.33.10.3
Server:          10.33.10.3
Address:         10.33.10.3#53

3.10.33.10.in-addr.arpa name = servidor.asir10.
> 10.33.10.50
Server:          10.33.10.3
Address:         10.33.10.3#53

50.10.33.10.in-addr.arpa      name = opensuse.asir10.
> 10.33.10.30
Server:          10.33.10.3
Address:         10.33.10.3#53

30.10.33.10.in-addr.arpa      name = debian.asir10.
> 10.33.10.60
Server:          10.33.10.3
Address:         10.33.10.3#53

60.10.33.10.in-addr.arpa      name = molinux.asir10.
>
```



```
Address:         10.33.10.3#53

30.10.33.10.in-addr.arpa      name = debian.asir10.
> 10.33.10.60
Server:          10.33.10.3
Address:         10.33.10.3#53

60.10.33.10.in-addr.arpa      name = molinux.asir10.
> servidor.asir10.
Server:          10.33.10.3
Address:         10.33.10.3#53

Name:   servidor.asir10
Address: 10.33.10.3
> debian.asir10.
Server:          10.33.10.3
Address:         10.33.10.3#53

Name:   debian.asir10
Address: 10.33.10.30
> opensuse.asir10.
Server:          10.33.10.3
Address:         10.33.10.3#53

Name:   opensuse.asir10
Address: 10.33.10.50
> molinux.asir10.
Server:          10.33.10.3
Address:         10.33.10.3#53

Name:   molinux.asir10
Address: 10.33.10.60
>
```

MARÍA ÁNGELES PEÑASCO SÁNCHEZ - ACTIVIDAD 3 Y 4 DNS - SRI -2º ASIR