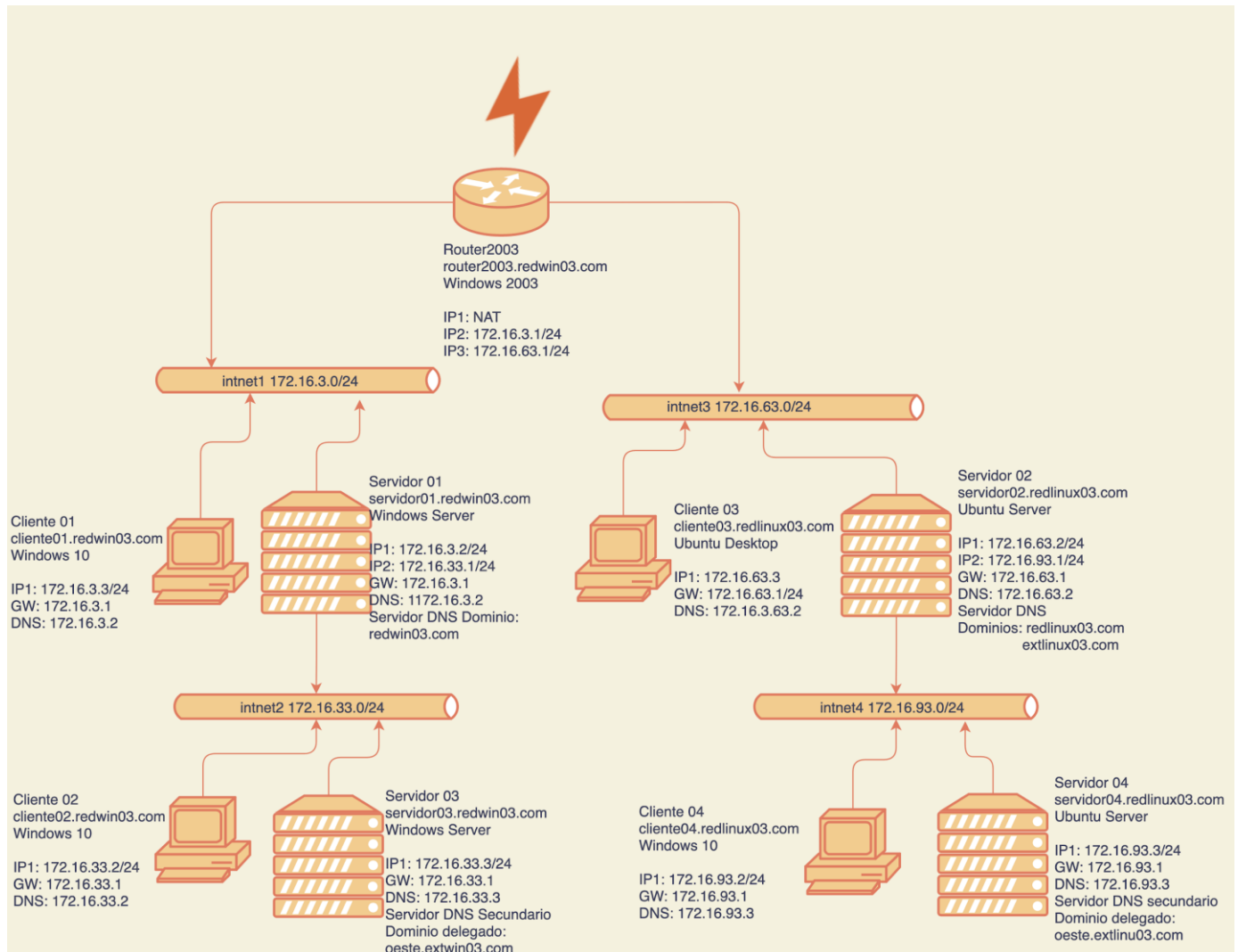
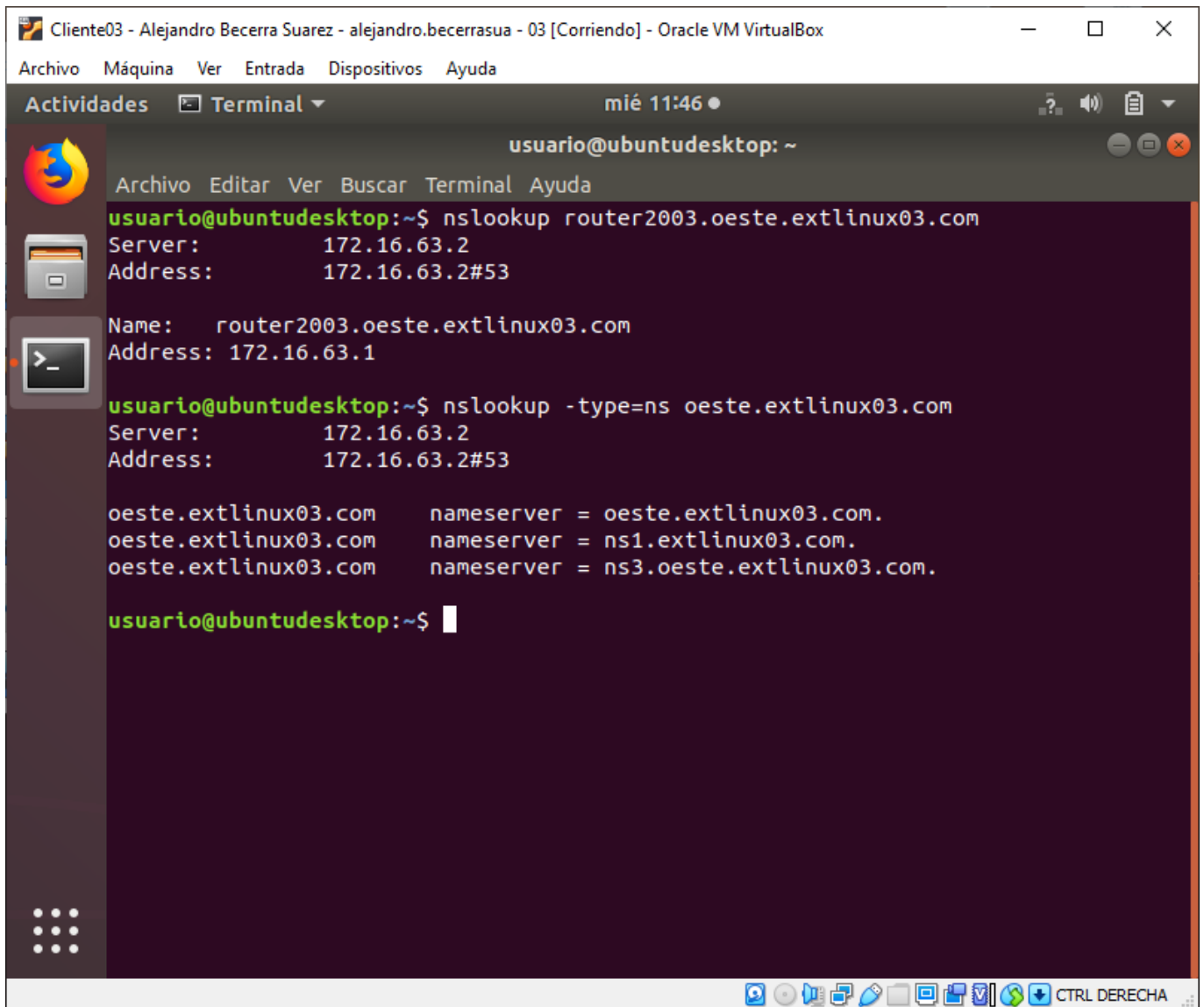


## Actividad 9: Delegación de zona en Linux.

1. En Servidor02 crear el dominio extlinuxXY.com (XY es el número de xade de cada alumno) y delegar el subdominio oeste.extlinuxXY.com en Servidor04.
2. Crear en oeste.extlinuxXY.com registros de host para router2003, servidor02 y servidor04.
3. Captura del diagrama de red actualizado en el que se muestre el nuevo dominio en Servidor02 y el nuevo dominio en Servidor04.



4. Desde Cliente03, capturar el resultado de hacer:
  - a. nslookup a Router2003 en el subdominio oeste.extlinuxXY.com
  - b. nslookup que permita obtener los servidores de nombre del subdominio oeste.extlinuxXY.com



The screenshot shows a terminal window titled "Cliente03 - Alejandro Becerra Suarez - alejandro.becerrasua - 03 [Corriendo] - Oracle VM VirtualBox". The terminal is running on a system with the prompt "usuario@ubuntudesktop: ~". The user has executed the following commands and received the following output:

```
usuario@ubuntudesktop:~$ nslookup router2003.oeste.extlinux03.com
Server:      172.16.63.2
Address:     172.16.63.2#53

Name:   router2003.oeste.extlinux03.com
Address: 172.16.63.1

usuario@ubuntudesktop:~$ nslookup -type=ns oeste.extlinux03.com
Server:      172.16.63.2
Address:     172.16.63.2#53

oeste.extlinux03.com    nameserver = oeste.extlinux03.com.
oeste.extlinux03.com    nameserver = ns1.extlinux03.com.
oeste.extlinux03.com    nameserver = ns3.oeste.extlinux03.com.

usuario@ubuntudesktop:~$
```

5. En Servidor02, capturar el archivo de zona (oeste) transferido en formato legible.

Servidor02 - Alejandro Becerra Suarez - alejandro.becerrasua - 03 [Corriendo] - Oracle VM VirtualBox

Archivo Máquina Ver Entrada Dispositivos Ayuda

Activities Terminal mar 10:17

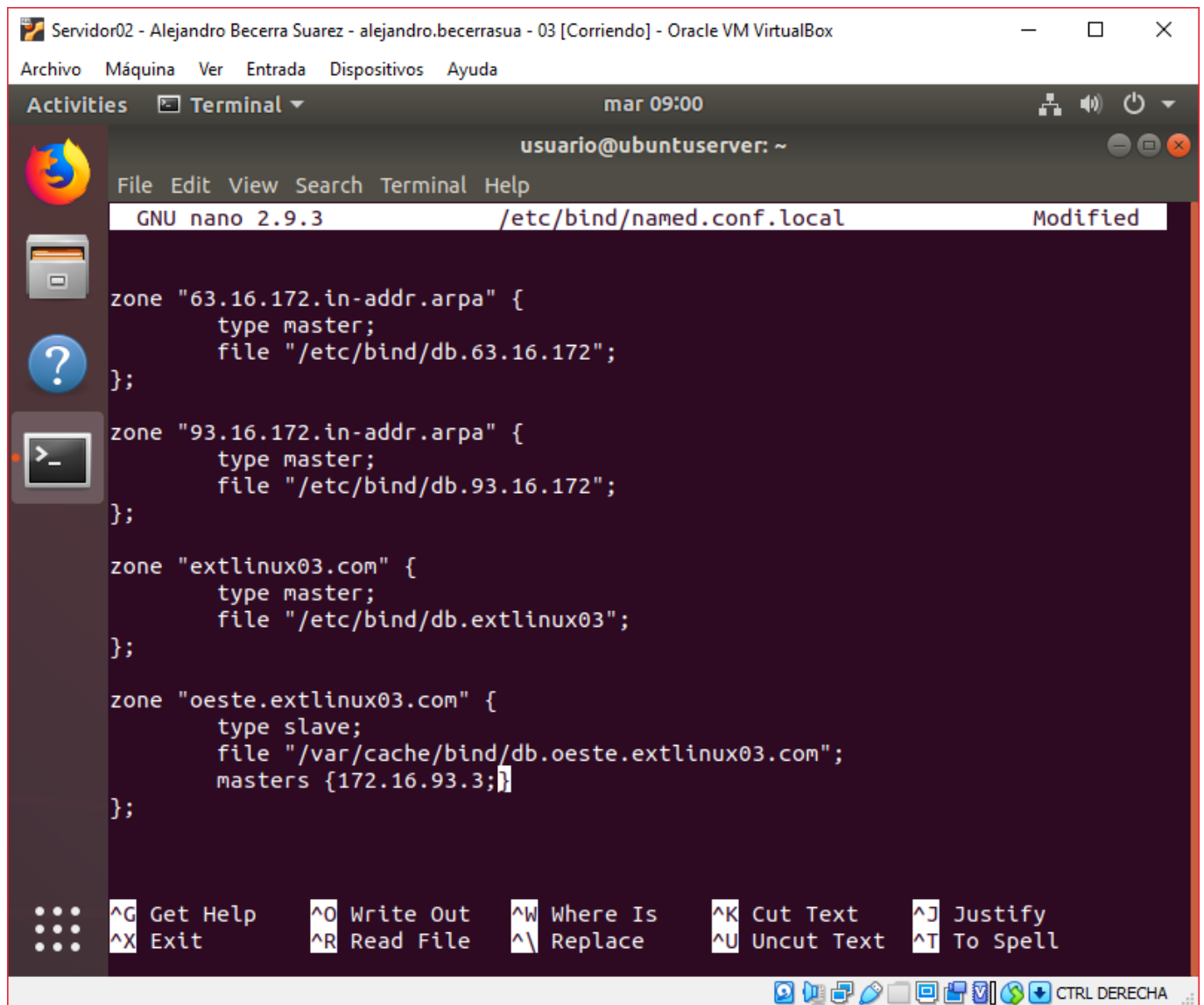
usuario@ubuntuserver: ~

```
File Edit View Search Terminal Help
usuario@ubuntuserver:~$ named-compilezone -f raw -F text -o prueba oeste.extlin
ux03.com /var/cache/bind/db.oeste.extlinux03.com
zone oeste.extlinux03.com/IN: loaded serial 4
dump zone to prueba...done
OK
usuario@ubuntuserver:~$ cat prueba
oeste.extlinux03.com.                604800 IN SOA      oeste.extlinux0
3.com. root.oeste.extlinux03.com. 4 604800 86400 2419200 604800
oeste.extlinux03.com.                604800 IN NS      ns1.extlinux03.
com.
oeste.extlinux03.com.                604800 IN NS      ns3.oeste.extli
nux03.com.
oeste.extlinux03.com.                604800 IN NS      oeste.extlinux0
3.com.
oeste.extlinux03.com.                604800 IN A        172.16.93.3
oeste.extlinux03.com.                604800 IN AAAA    ::1
ftp.oeste.extlinux03.com.            604800 IN A        172.16.93.1
ns3.oeste.extlinux03.com.            604800 IN A        172.16.93.3
router2003.oeste.extlinux03.com.     604800 IN A        172.16.63.1
servidor02.oeste.extlinux03.com.     604800 IN A        172.16.63.2
servidor02.oeste.extlinux03.com.     604800 IN A        172.16.93.1
servidor04.oeste.extlinux03.com.     604800 IN A        172.16.93.3
usuario@ubuntuserver:~$
```

CTRL DERECHA

6. En Servidor02, capturar:

a. el contenido del archivo named.conf.local



The screenshot shows a terminal window titled "Servidor02 - Alejandro Becerra Suarez - alejandro.becerrasua - 03 [Corriendo] - Oracle VM VirtualBox". The terminal is running the nano 2.9.3 text editor, editing the file /etc/bind/named.conf.local. The content of the file is as follows:

```
zone "63.16.172.in-addr.arpa" {
    type master;
    file "/etc/bind/db.63.16.172";
};

zone "93.16.172.in-addr.arpa" {
    type master;
    file "/etc/bind/db.93.16.172";
};

zone "extlinux03.com" {
    type master;
    file "/etc/bind/db.extlinux03";
};

zone "oeste.extlinux03.com" {
    type slave;
    file "/var/cache/bind/db.oeste.extlinux03.com";
    masters {172.16.93.3;};
};
```

The terminal window also displays a sidebar with icons for Activities, Terminal, and a search icon. The bottom status bar shows various keyboard shortcuts: ^G Get Help, ^O Write Out, ^W Where Is, ^K Cut Text, ^J Justify, ^X Exit, ^R Read File, ^\ Replace, ^U Uncut Text, ^T To Spell, and CTRL DERECHA.

b. el archivo del dominio extlinuxXY.com

Servidor02 - Alejandro Becerra Suarez - alejandro.becerrasua - 03 [Corriendo] - Oracle VM VirtualBox

Archivo Máquina Ver Entrada Dispositivos Ayuda

Activities Terminal mar 10:20

usuario@ubuntuserver: ~

File Edit View Search Terminal Help

GNU nano 2.9.3 /etc/bind/db.extlinux03

```
@      IN      A       172.16.63.2
@      IN      NS      ns1.extlinux03.com.
@      IN      NS      ns2.extlinux03.com.
@      IN      AAAA     ::1

ns1     IN      A       172.16.63.2
ns1     IN      A       172.16.93.1
ns2     IN      A       172.16.93.3

$ORIGIN oeste.extlinux03.com.
@      IN      NS      ns3.oeste.extlinux03.com.
@      IN      NS      ns1.extlinux03.com.
ns3     IN      A       172.16.93.3
```

[ Read 25 lines ]

^G Get Help    ^O Write Out    ^W Where Is    ^K Cut Text    ^J Justify  
^X Exit        ^R Read File    ^\ Replace     ^U Uncut Text ^T To Spell

CTRL DERECHA

7. En Servidor04, capturar:
  - a. el contenido del archivo named.conf.local

Servidor04 - Alejandro Becerra Suarez - alejandro.becerrasua - 03 [Corriendo] - Oracle VM VirtualBox

Archivo Máquina Ver Entrada Dispositivos Ayuda

Activities Terminal mar 09:25

usuario@ubuntuserver: /etc/bind

File Edit View Search Terminal Help

GNU nano 2.9.3 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 "redlinux03.com" {  
    type slave;  
    file "/var/cache/bind/db.redlinux03";  
    masters { 172.16.93.1; };  
};  
  
zone "oeste.extlinux03.com" {  
    type master;  
    file "/etc/bind/db.oeste.extlinux03";  
};
```

[ Read 18 lines ]

^G Get Help	^O Write Out	^W Where Is	^K Cut Text	^J Justify
^X Exit	^R Read File	^_ Replace	^U Uncut Text	^T To Spell

CTRL DERECHA

b. el archivo del dominio oeste.extlinuxXY.com

Servidor04 - Alejandro Becerra Suarez - alejandro.becerrasua - 03 [Corriendo] - Oracle VM VirtualBox

Archivo Máquina Ver Entrada Dispositivos Ayuda

Activities Terminal mar 10:21

usuario@ubuntuserver: /etc/bind

File Edit View Search Terminal Help

GNU nano 2.9.3 db.oeste.extlinux03

```
;
; BIND data file for local loopback interface
;
$TTL      604800
@         IN      SOA      oeste.extlinux03.com. root.oeste.extlinux03.com. (
                                4             ; Serial
                                604800        ; Refresh
                                86400         ; Retry
                                2419200      ; Expire
                                604800 )     ; Negative Cache TTL
;
@         IN      NS       oeste.extlinux03.com.
@         IN      NS       ns3.oeste.extlinux03.com.
@         IN      NS       ns1.extlinux03.com.
@         IN      A        172.16.93.3
@         IN      AAAA     ::1

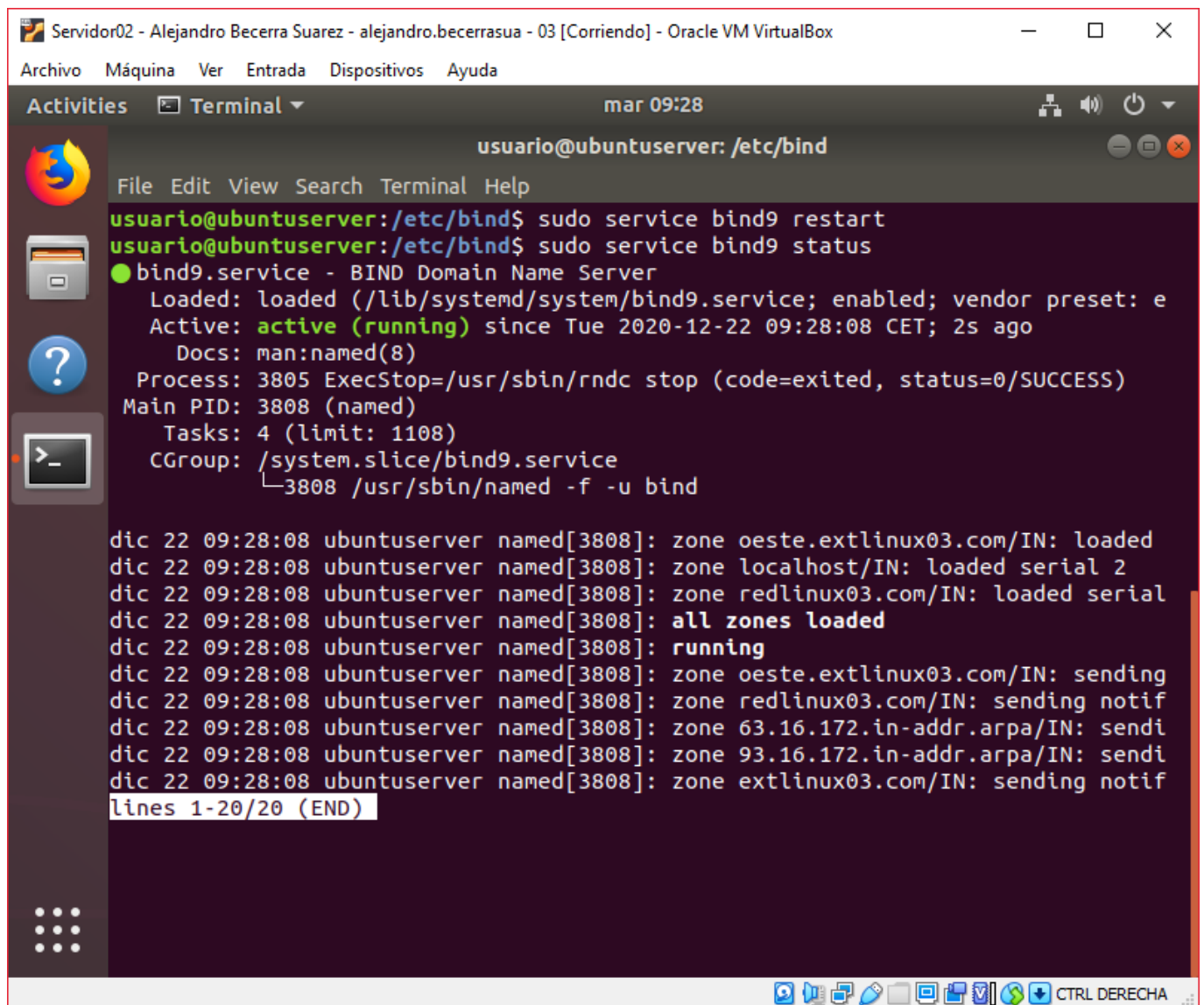
ns3       IN      A        172.16.93.3
ftp       IN      A        172.16.93.1
router2003 IN      A        172.16.63.1
servidor02 IN      A        172.16.63.2
servidor02 IN      A        172.16.93.1
servidor04 IN      A        172.16.93.3
```

Get Help Write Out Where Is Cut Text Justify  
Exit Read File Replace Uncut Text To Spell

CTRL DERECHA

8. En servidor02, capturar:
  - a. service bind9 restart

b. service bind9 status



The screenshot shows a terminal window titled "Servidor02 - Alejandro Becerra Suarez - alejandro.becerrasua - 03 [Corriendo] - Oracle VM VirtualBox". The terminal is running as "usuario@ubuntuserver: /etc/bind". The user has executed the following commands:

```
usuario@ubuntuserver:/etc/bind$ sudo service bind9 restart
usuario@ubuntuserver:/etc/bind$ sudo service bind9 status
```

The output of the status command is as follows:

```
● bind9.service - BIND Domain Name Server
   Loaded: loaded (/lib/systemd/system/bind9.service; enabled; vendor preset: e
   Active: active (running) since Tue 2020-12-22 09:28:08 CET; 2s ago
     Docs: man:named(8)
   Process: 3805 ExecStop=/usr/sbin/rndc stop (code=exited, status=0/SUCCESS)
    Main PID: 3808 (named)
      Tasks: 4 (limit: 1108)
     CGroup: /system.slice/bind9.service
             └─3808 /usr/sbin/named -f -u bind
```

Below the service status, there are several log messages from the named daemon:

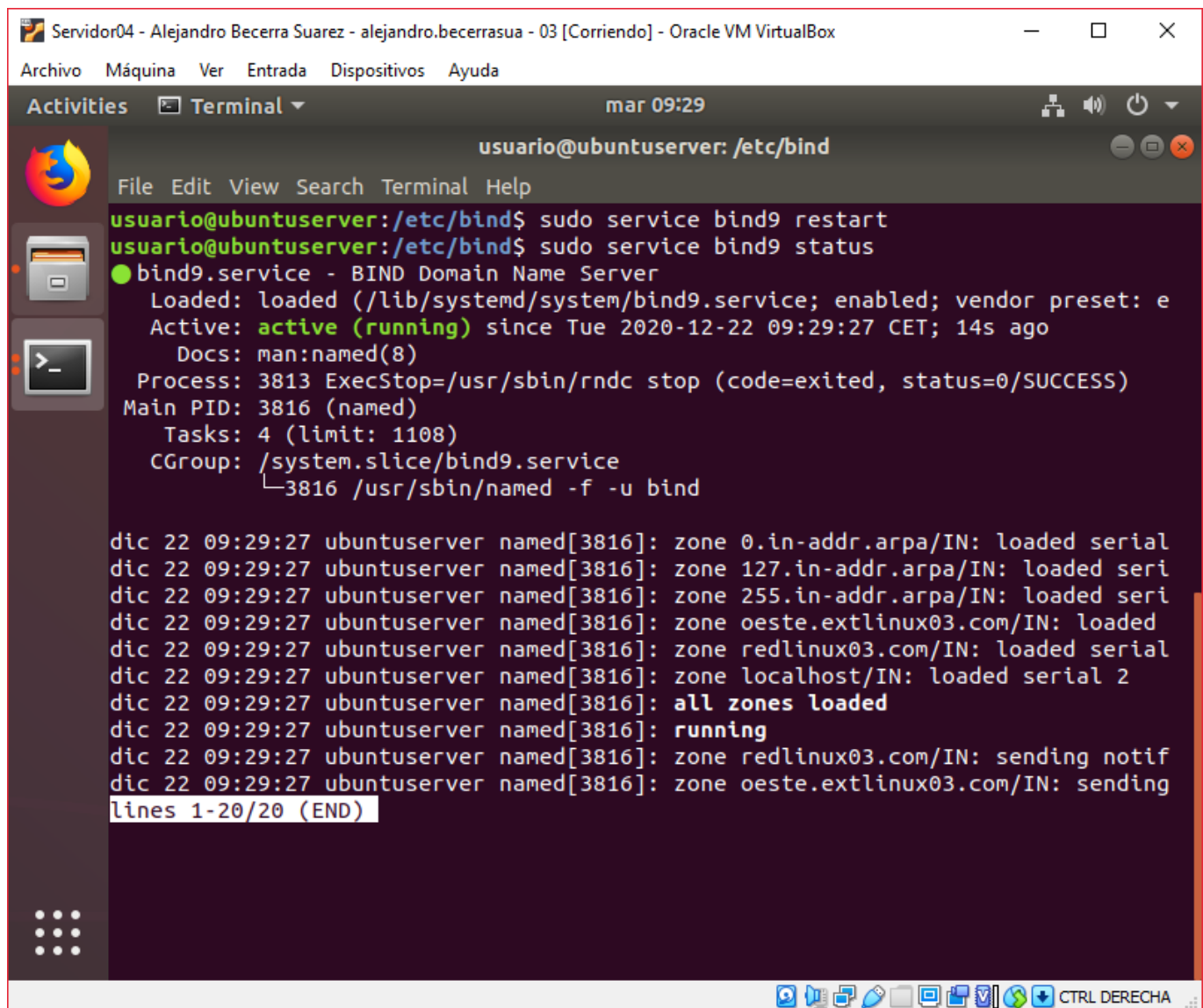
```
dic 22 09:28:08 ubuntuserver named[3808]: zone oeste.extlinux03.com/IN: loaded
dic 22 09:28:08 ubuntuserver named[3808]: zone localhost/IN: loaded serial 2
dic 22 09:28:08 ubuntuserver named[3808]: zone redlinux03.com/IN: loaded serial
dic 22 09:28:08 ubuntuserver named[3808]: all zones loaded
dic 22 09:28:08 ubuntuserver named[3808]: running
dic 22 09:28:08 ubuntuserver named[3808]: zone oeste.extlinux03.com/IN: sending
dic 22 09:28:08 ubuntuserver named[3808]: zone redlinux03.com/IN: sending notif
dic 22 09:28:08 ubuntuserver named[3808]: zone 63.16.172.in-addr.arpa/IN: sendi
dic 22 09:28:08 ubuntuserver named[3808]: zone 93.16.172.in-addr.arpa/IN: sendi
dic 22 09:28:08 ubuntuserver named[3808]: zone extlinux03.com/IN: sending notif
```

The terminal output ends with "lines 1-20/20 (END)".

9. En servidor04, capturar:
- a. service bind9 restart



## b. service bind9 status



The screenshot shows a terminal window titled "Servidor04 - Alejandro Becerra Suarez - alejandro.becerrasua - 03 [Corriendo] - Oracle VM VirtualBox". The terminal is running the command `sudo service bind9 status` from the directory `/etc/bind`. The output shows that the `bind9.service` is active and running. It lists various configuration details such as the loaded file, active status, process ID, and tasks. A log of zone loading messages follows, indicating that all zones are loaded and the service is running. The terminal window includes a menu bar with "File", "Edit", "View", "Search", "Terminal", and "Help". The bottom status bar shows system icons and the text "CTRL DERECHA".

```
usuario@ubuntuserver: /etc/bind
File Edit View Search Terminal Help
usuario@ubuntuserver:/etc/bind$ sudo service bind9 restart
usuario@ubuntuserver:/etc/bind$ sudo service bind9 status
● bind9.service - BIND Domain Name Server
   Loaded: loaded (/lib/systemd/system/bind9.service; enabled; vendor preset: e
   Active: active (running) since Tue 2020-12-22 09:29:27 CET; 14s ago
     Docs: man:named(8)
  Process: 3813 ExecStop=/usr/sbin/rndc stop (code=exited, status=0/SUCCESS)
 Main PID: 3816 (named)
    Tasks: 4 (limit: 1108)
   CGroup: /system.slice/bind9.service
           └─3816 /usr/sbin/named -f -u bind

dic 22 09:29:27 ubuntuserver named[3816]: zone 0.in-addr.arpa/IN: loaded serial
dic 22 09:29:27 ubuntuserver named[3816]: zone 127.in-addr.arpa/IN: loaded seri
dic 22 09:29:27 ubuntuserver named[3816]: zone 255.in-addr.arpa/IN: loaded seri
dic 22 09:29:27 ubuntuserver named[3816]: zone oeste.extlinux03.com/IN: loaded
dic 22 09:29:27 ubuntuserver named[3816]: zone redlinux03.com/IN: loaded serial
dic 22 09:29:27 ubuntuserver named[3816]: zone localhost/IN: loaded serial 2
dic 22 09:29:27 ubuntuserver named[3816]: all zones loaded
dic 22 09:29:27 ubuntuserver named[3816]: running
dic 22 09:29:27 ubuntuserver named[3816]: zone redlinux03.com/IN: sending notif
dic 22 09:29:27 ubuntuserver named[3816]: zone oeste.extlinux03.com/IN: sending
lines 1-20/20 (END)
```