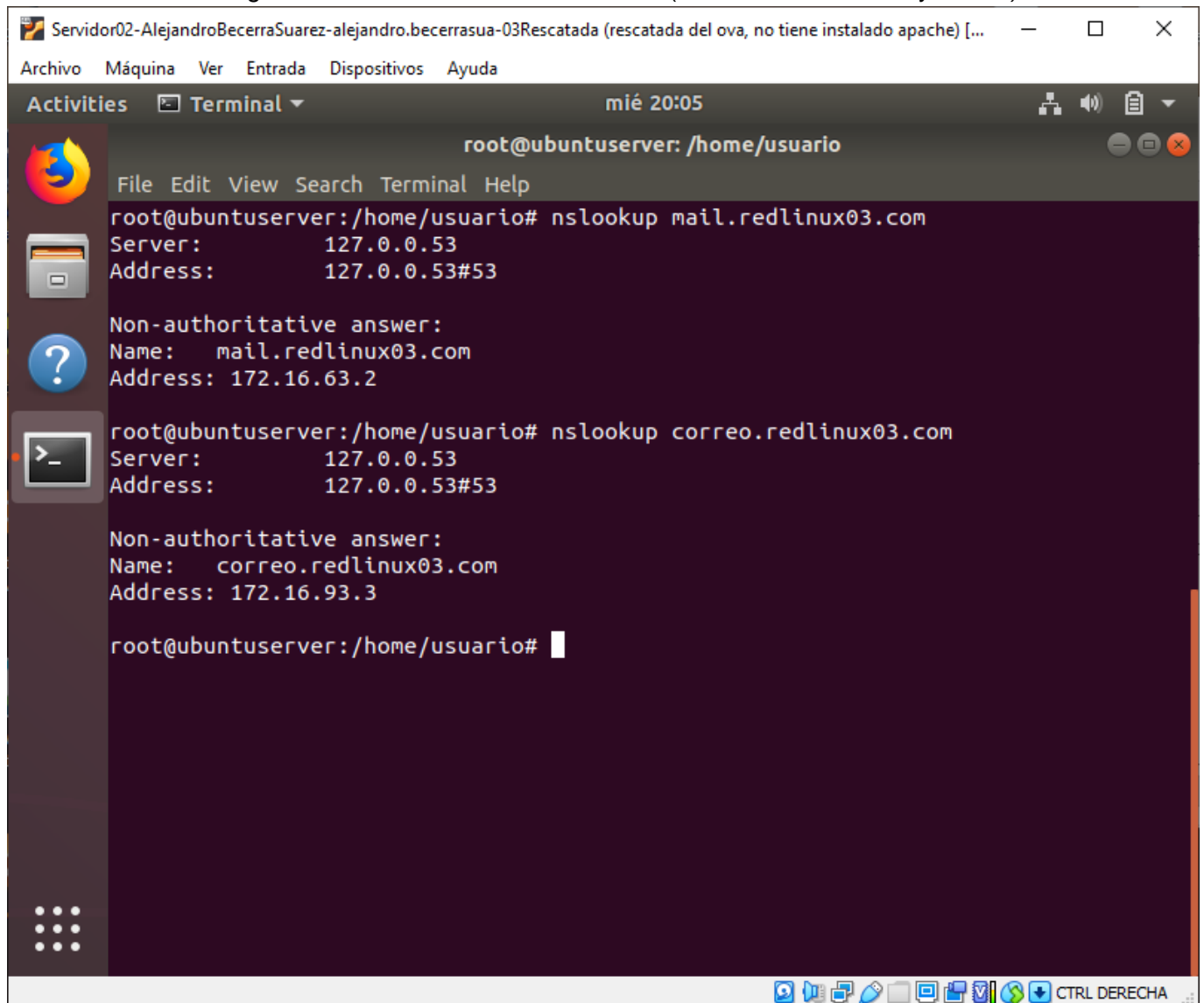


Actividad 1: Servicio de correo en Linux: Instalación, configuración y utilización.

Toda la actividad será realizada en **Servidor02**.

1. Capturar el resultado de realizar **nslookup** a:
 - a. *mail.redlinuxXY.com*
 - b. *correo.redlinuxXY.com*
 - c. Los registros de correo de *redlinuxXY.com* (deberían de ser *mail* y *correo*)



The screenshot shows a terminal window titled "Servidor02-AlejandroBecerraSuarez-alejandro.becerrasua-03Rescatada (rescatada del ova, no tiene instalado apache) [...]". The terminal is running as root on a machine named "root@ubuntuserver: /home/usuario". The user has executed two nslookup commands. The first command is "nslookup mail.redlinux03.com", which returns the server IP 127.0.0.53 and the address 127.0.0.53#53. The second command is "nslookup correo.redlinux03.com", which returns the same server IP and address. Both results indicate a non-authoritative answer with the domain name and its corresponding IP address.

```
root@ubuntuserver: /home/usuario# nslookup mail.redlinux03.com
Server:          127.0.0.53
Address:         127.0.0.53#53

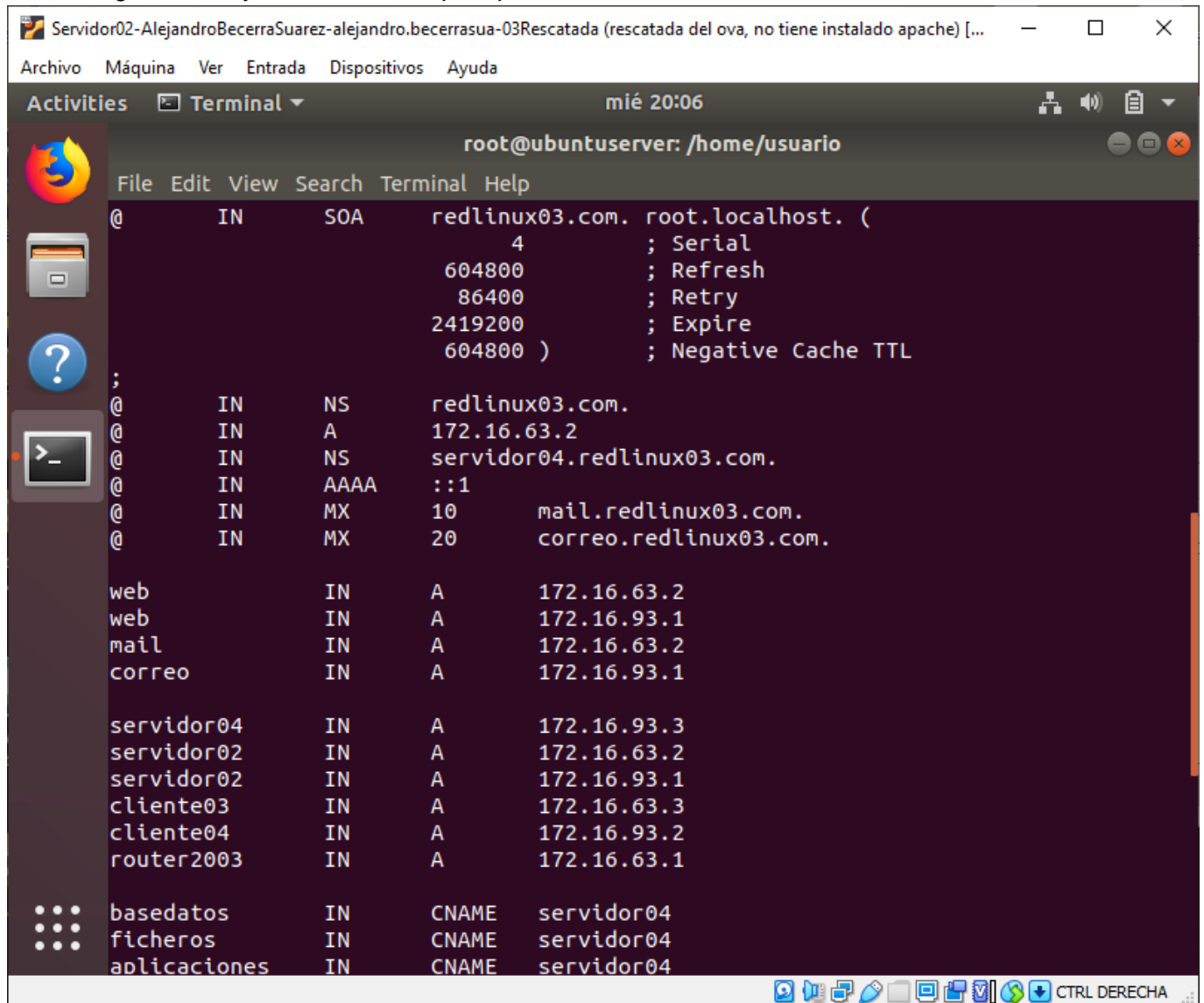
Non-authoritative answer:
Name:   mail.redlinux03.com
Address: 172.16.63.2

root@ubuntuserver: /home/usuario# nslookup correo.redlinux03.com
Server:          127.0.0.53
Address:         127.0.0.53#53

Non-authoritative answer:
Name:   correo.redlinux03.com
Address: 172.16.93.3

root@ubuntuserver: /home/usuario#
```

2. Capturar el archivo de registros para el dominio *redlinuxXY.com* de manera que se muestren los registros MX y los hosts a los que apunta.



The screenshot shows a terminal window titled "Servidor02-AlejandroBecerraSuarez-alejandro.becerrasua-03Rescatada (rescatada del ova, no tiene instalado apache) [...]". The terminal is running as root on an Ubuntu server. The output of a command (likely 'dig') shows DNS records for the domain redlinux03.com. The records include SOA, NS, A, AAAA, and MX records, as well as hostnames pointing to specific IP addresses.

```
root@ubuntuserver: /home/usuario
File Edit View Search Terminal Help
@      IN      SOA      redlinux03.com. root.localhost. (
                        4          ; Serial
                        604800       ; Refresh
                        86400        ; Retry
                        2419200      ; Expire
                        604800 )     ; Negative Cache TTL
;
@      IN      NS       redlinux03.com.
@      IN      A        172.16.63.2
@      IN      NS       servidor04.redlinux03.com.
@      IN      AAAA     ::1
@      IN      MX       10      mail.redlinux03.com.
@      IN      MX       20      correo.redlinux03.com.

web    IN      A        172.16.63.2
web    IN      A        172.16.93.1
mail   IN      A        172.16.63.2
correo IN      A        172.16.93.1

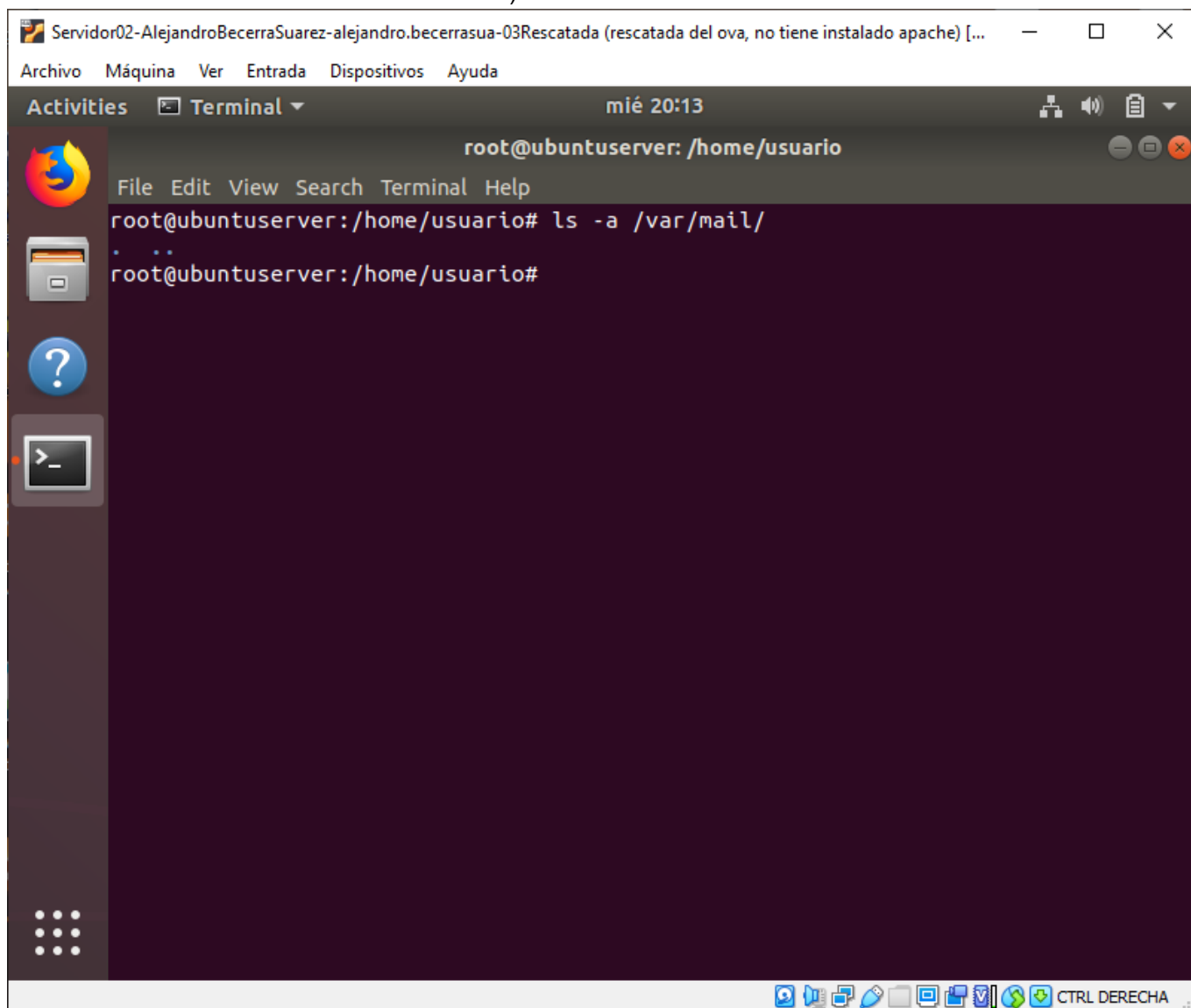
servidor04 IN A 172.16.93.3
servidor02 IN A 172.16.63.2
servidor02 IN A 172.16.93.1
cliente03  IN A 172.16.63.3
cliente04  IN A 172.16.93.2
router2003 IN A 172.16.63.1

basedatos IN CNAME servidor04
ficheros  IN CNAME servidor04
aplicaciones IN CNAME servidor04
```

3. Instalar Postfix para el dominio *redlinuxXY.com* siguiendo la misma configuración expuesta en la guía. Una vez finalizado lo anterior, realizar las siguientes capturas:
 - a. Ejecución del comando que permite visualizar que Postfix está ejecutándose como servicio de red (netstat).

```
root@ubuntuserver: /home/usuario
File Edit View Search Terminal Help
root@ubuntuserver:/home/usuario# netstat -tl
Active Internet connections (only servers)
Proto Recv-Q Send-Q Local Address           Foreign Address         State
tcp        0      0 servidor02.redli:domain 0.0.0.0:*               LISTEN
tcp        0      0 servidor02.redli:domain 0.0.0.0:*               LISTEN
tcp        0      0 localhost.locald:domain 0.0.0.0:*               LISTEN
tcp        0      0 localhost:domain       0.0.0.0:*               LISTEN
tcp        0      0 0.0.0.0:ssh            0.0.0.0:*               LISTEN
tcp        0      0 localhost.localdoma:ipp 0.0.0.0:*               LISTEN
tcp        0      0 0.0.0.0:smtp            0.0.0.0:*               LISTEN
tcp        0      0 localhost.localdoma:953 0.0.0.0:*               LISTEN
tcp6       0      0 [::]:domain            [::]:*                  LISTEN
tcp6       0      0 [::]:ssh                [::]:*                  LISTEN
tcp6       0      0 localhost6.localdom:ipp [::]:*                  LISTEN
tcp6       0      0 [::]:smtp                [::]:*                  LISTEN
tcp6       0      0 localhost6.localdom:953 [::]:*                  LISTEN
root@ubuntuserver:/home/usuario#
```

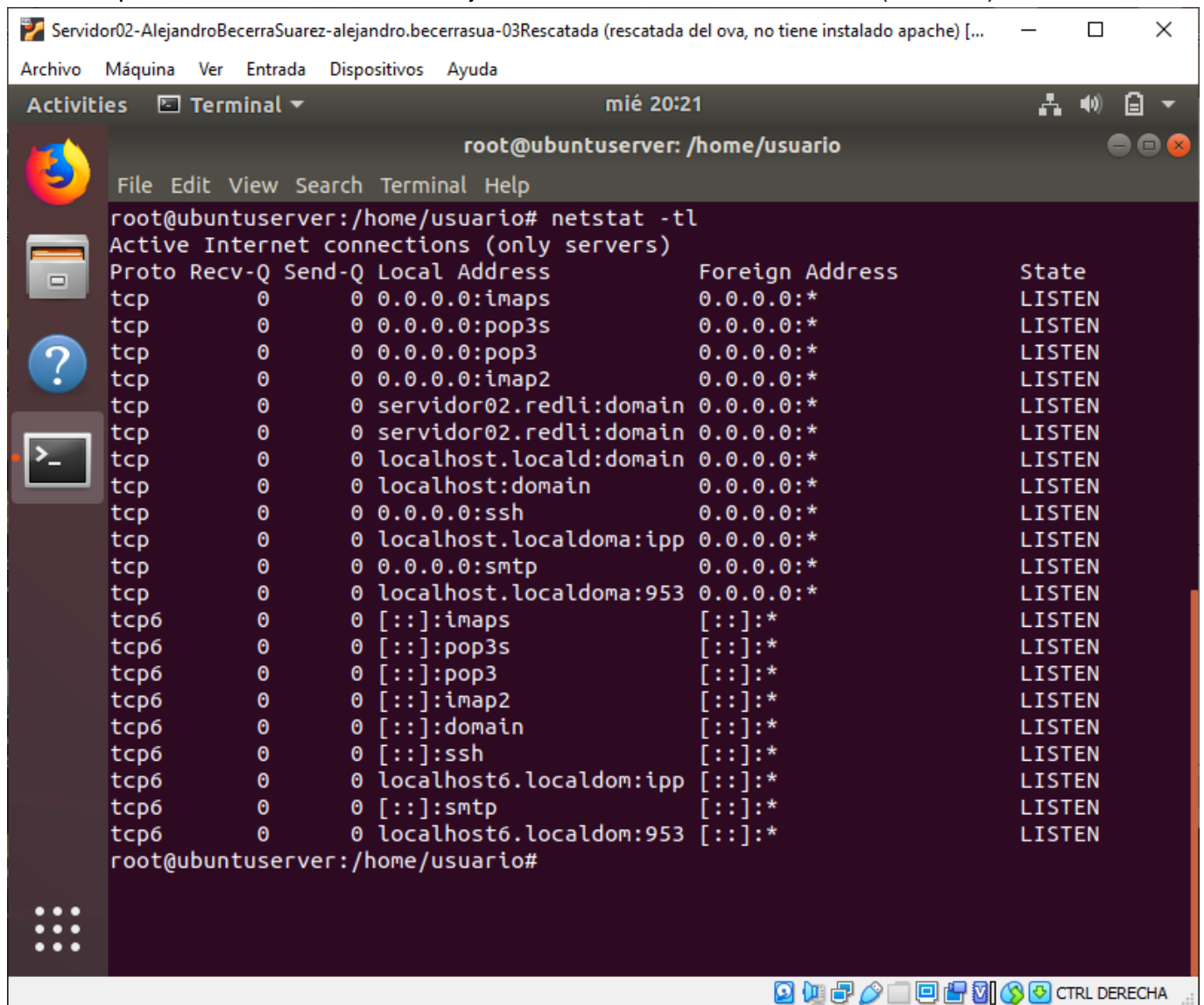
- b. Contenido del directorio en el que se almacenan los buzones de correo (en este momento debería estar vacío).



The screenshot shows a terminal window titled "Servidor02-AlejandroBecerraSuarez-alejandro.becerrasua-03Rescatada (rescatada del ova, no tiene instalado apache) [...]". The terminal is running as root at the prompt "root@ubuntuserver: /home/usuario". The command "ls -a /var/mail/" has been executed, and the output shows only "." and "..", indicating an empty directory. The terminal window has a menu bar with "Archivo", "Máquina", "Ver", "Entrada", "Dispositivos", and "Ayuda". The left sidebar shows icons for Firefox, a file manager, a help icon, and a terminal icon. The bottom status bar shows system icons and the text "CTRL DERECHA".

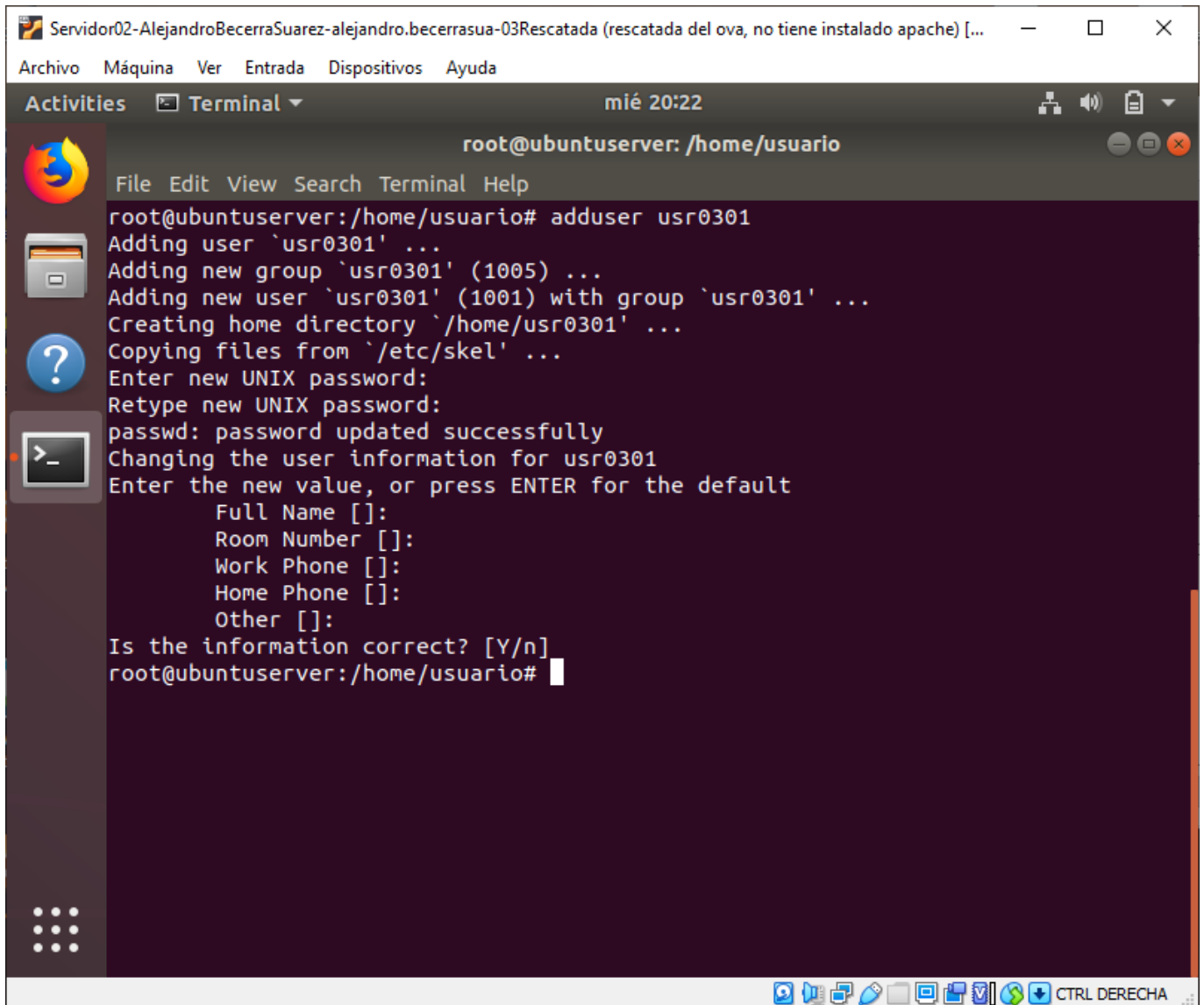
```
root@ubuntuserver: /home/usuario
File Edit View Search Terminal Help
root@ubuntuserver:/home/usuario# ls -a /var/mail/
.  ..
root@ubuntuserver:/home/usuario#
```

4. Instalar Dovecot siguiendo la misma configuración que en la guía. Una vez finalizado lo anterior capturar los servicios de red en ejecución relacionados con el correo (netstat).



```
root@ubuntuserver: /home/usuario# netstat -tl
Active Internet connections (only servers)
Proto Recv-Q Send-Q Local Address           Foreign Address         State
tcp        0      0 0.0.0.0:imaps            0.0.0.0:*               LISTEN
tcp        0      0 0.0.0.0:pop3s            0.0.0.0:*               LISTEN
tcp        0      0 0.0.0.0:pop3             0.0.0.0:*               LISTEN
tcp        0      0 0.0.0.0:imap2            0.0.0.0:*               LISTEN
tcp        0      0 servidor02.redli:domain 0.0.0.0:*               LISTEN
tcp        0      0 servidor02.redli:domain 0.0.0.0:*               LISTEN
tcp        0      0 localhost.locald:domain 0.0.0.0:*               LISTEN
tcp        0      0 localhost:domain        0.0.0.0:*               LISTEN
tcp        0      0 0.0.0.0:ssh              0.0.0.0:*               LISTEN
tcp        0      0 localhost.localdoma:ipp 0.0.0.0:*               LISTEN
tcp        0      0 0.0.0.0:smtp              0.0.0.0:*               LISTEN
tcp        0      0 localhost.localdoma:953 0.0.0.0:*               LISTEN
tcp6       0      0 [::]:imaps              [::]:*                  LISTEN
tcp6       0      0 [::]:pop3s               [::]:*                  LISTEN
tcp6       0      0 [::]:pop3                [::]:*                  LISTEN
tcp6       0      0 [::]:imap2               [::]:*                  LISTEN
tcp6       0      0 [::]:domain              [::]:*                  LISTEN
tcp6       0      0 [::]:ssh                  [::]:*                  LISTEN
tcp6       0      0 localhost6.localdom:ipp [::]:*                  LISTEN
tcp6       0      0 [::]:smtp                 [::]:*                  LISTEN
tcp6       0      0 localhost6.localdom:953 [::]:*                  LISTEN
root@ubuntuserver: /home/usuario#
```

5. Capturar la consola mostrando el proceso de creación del usuario *usrXY01*, donde XY es el número de xade de cada alumno.

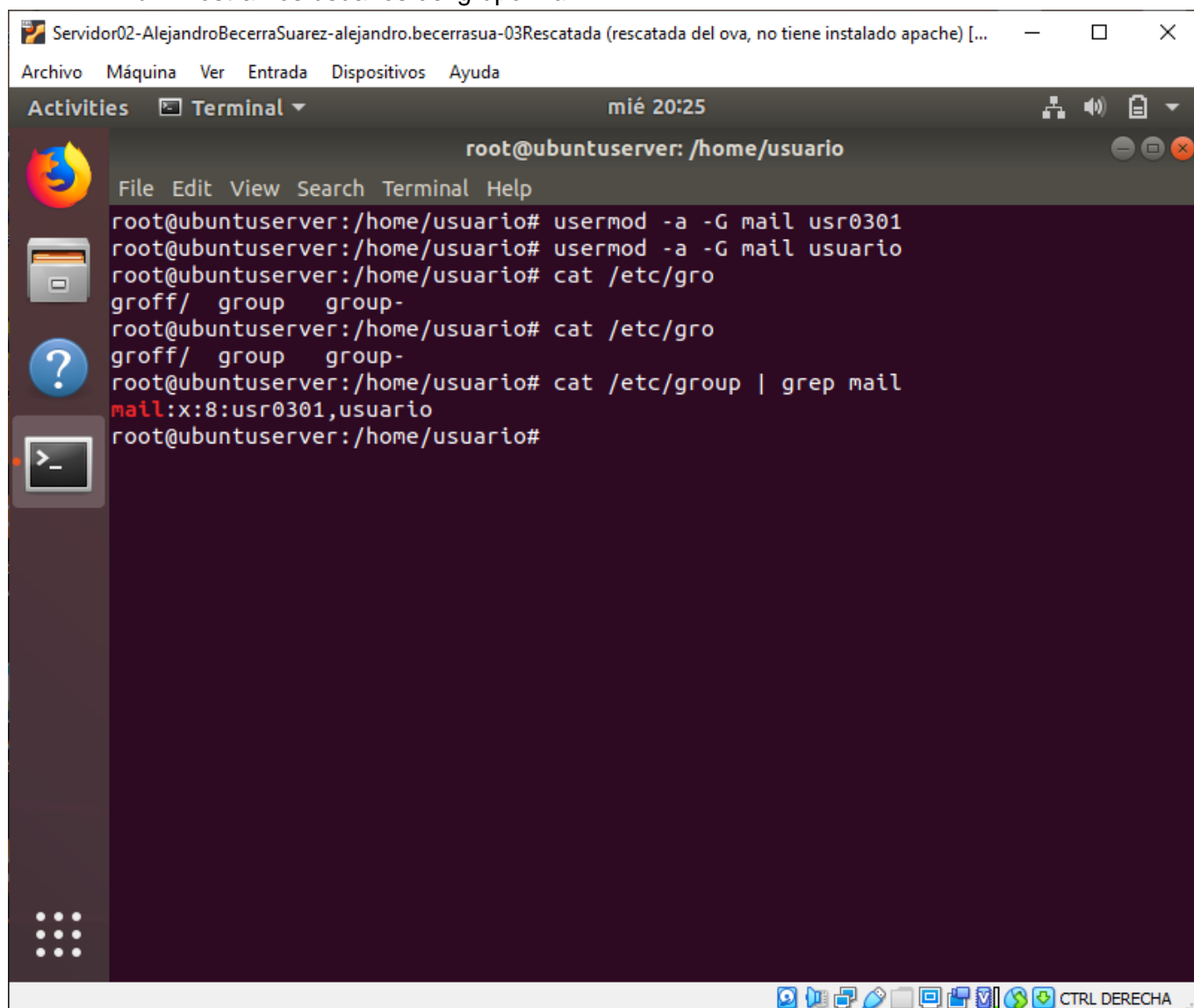


The screenshot shows a terminal window titled "Servidor02-AlejandroBecerraSuarez-alejandro.becerrasua-03Rescatada (rescatada del ova, no tiene instalado apache) [...]". The terminal is running as root at the prompt "root@ubuntuserver: /home/usuario". The user has executed the command "adduser usr0301". The terminal output shows the steps of adding a new user: adding the user, adding a new group "usr0301" (1005), adding a new user "usr0301" (1001) with the group "usr0301", creating the home directory "/home/usr0301", and copying files from "/etc/skel". The user is prompted to enter a new UNIX password and to retype it. The password is successfully updated. The user is then prompted to change the user information for "usr0301". The prompts are: "Enter the new value, or press ENTER for the default", "Full Name []:", "Room Number []:", "Work Phone []:", "Home Phone []:", and "Other []:". The user is asked "Is the information correct? [Y/n]". The terminal prompt is now "root@ubuntuserver: /home/usuario#".

```
root@ubuntuserver: /home/usuario# adduser usr0301
Adding user `usr0301' ...
Adding new group `usr0301' (1005) ...
Adding new user `usr0301' (1001) with group `usr0301' ...
Creating home directory `/home/usr0301' ...
Copying files from `/etc/skel' ...
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
Changing the user information for usr0301
Enter the new value, or press ENTER for the default
  Full Name []:
  Room Number []:
  Work Phone []:
  Home Phone []:
  Other []:
Is the information correct? [Y/n]
root@ubuntuserver: /home/usuario#
```

6. Capturar la consola mostrando los comandos que permitan:

- a. Añadir tanto *usrXY01* como *usuario* al grupo *mail*.
- b. Mostrar los usuarios del grupo *mail*.



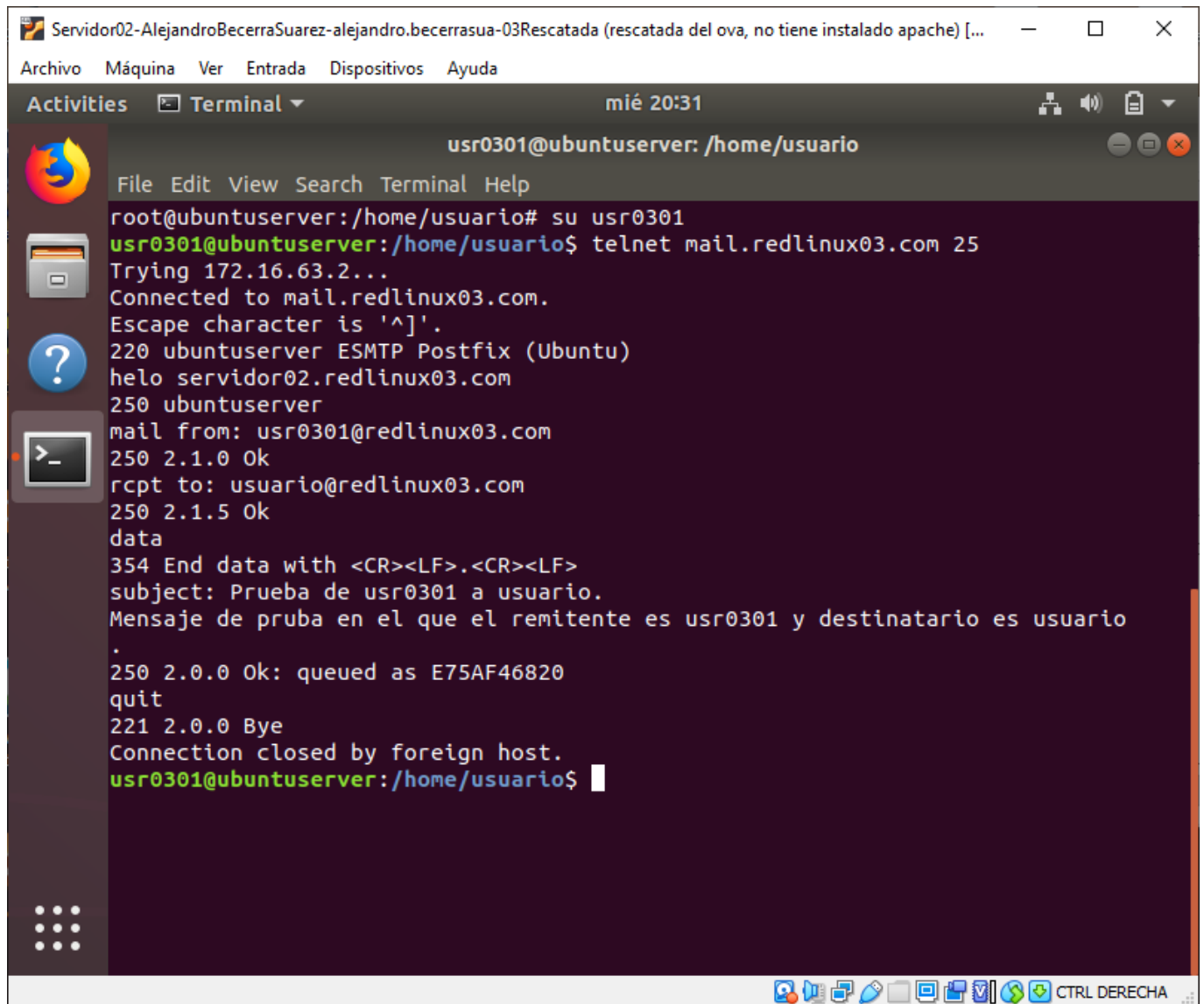
The screenshot shows a terminal window titled "Servidor02-AlejandroBecerraSuarez-alejandro.becerrasua-03Rescatada (rescatada del ova, no tiene instalado apache) [...]". The terminal is running as root at the prompt "root@ubuntuserver: /home/usuario". The commands and their outputs are as follows:

```
root@ubuntuserver:/home/usuario# usermod -a -G mail usr0301
root@ubuntuserver:/home/usuario# usermod -a -G mail usuario
root@ubuntuserver:/home/usuario# cat /etc/gro
groff/ group group-
root@ubuntuserver:/home/usuario# cat /etc/gro
groff/ group group-
root@ubuntuserver:/home/usuario# cat /etc/group | grep mail
mail:x:8:usr0301,usuario
root@ubuntuserver:/home/usuario#
```

The terminal window includes a menu bar with "File", "Edit", "View", "Search", "Terminal", and "Help". The left sidebar shows icons for Firefox, a file manager, a help icon, and a terminal icon. The bottom status bar displays system icons and the text "CTRL DERECHA".

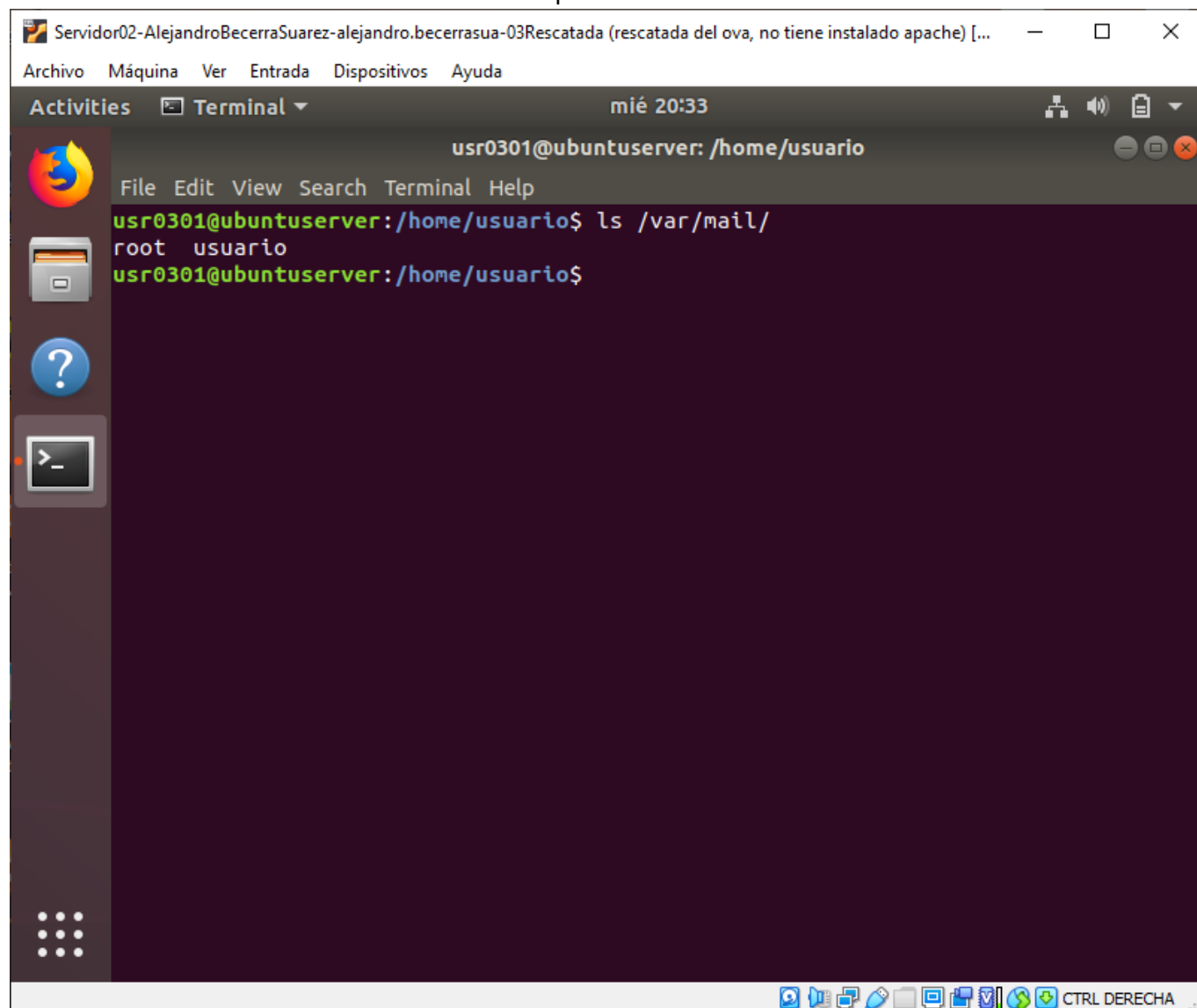
7. Capturar:

- a. El proceso completo de telnet en el que se **envíe** un correo del usuario *usrXY01* al usuario *usuario*.



```
Servidor02-AlejandroBecerraSuarez-alejandro.becerrasua-03Rescatada (rescatada del ova, no tiene instalado apache) [...]  
Archivo  Máquina  Ver  Entrada  Dispositivos  Ayuda  
mié 20:31  
usr0301@ubuntuserver: /home/usuario  
File Edit View Search Terminal Help  
root@ubuntuserver:/home/usuario# su usr0301  
usr0301@ubuntuserver:/home/usuario$ telnet mail.redlinux03.com 25  
Trying 172.16.63.2...  
Connected to mail.redlinux03.com.  
Escape character is '^]'.  
220 ubuntuserver ESMTP Postfix (Ubuntu)  
helo servidor02.redlinux03.com  
250 ubuntuserver  
mail from: usr0301@redlinux03.com  
250 2.1.0 Ok  
rcpt to: usuario@redlinux03.com  
250 2.1.5 Ok  
data  
354 End data with <CR><LF>.<CR><LF>  
subject: Prueba de usr0301 a usuario.  
Mensaje de prueba en el que el remitente es usr0301 y destinatario es usuario  
.  
250 2.0.0 Ok: queued as E75AF46820  
quit  
221 2.0.0 Bye  
Connection closed by foreign host.  
usr0301@ubuntuserver:/home/usuario$
```

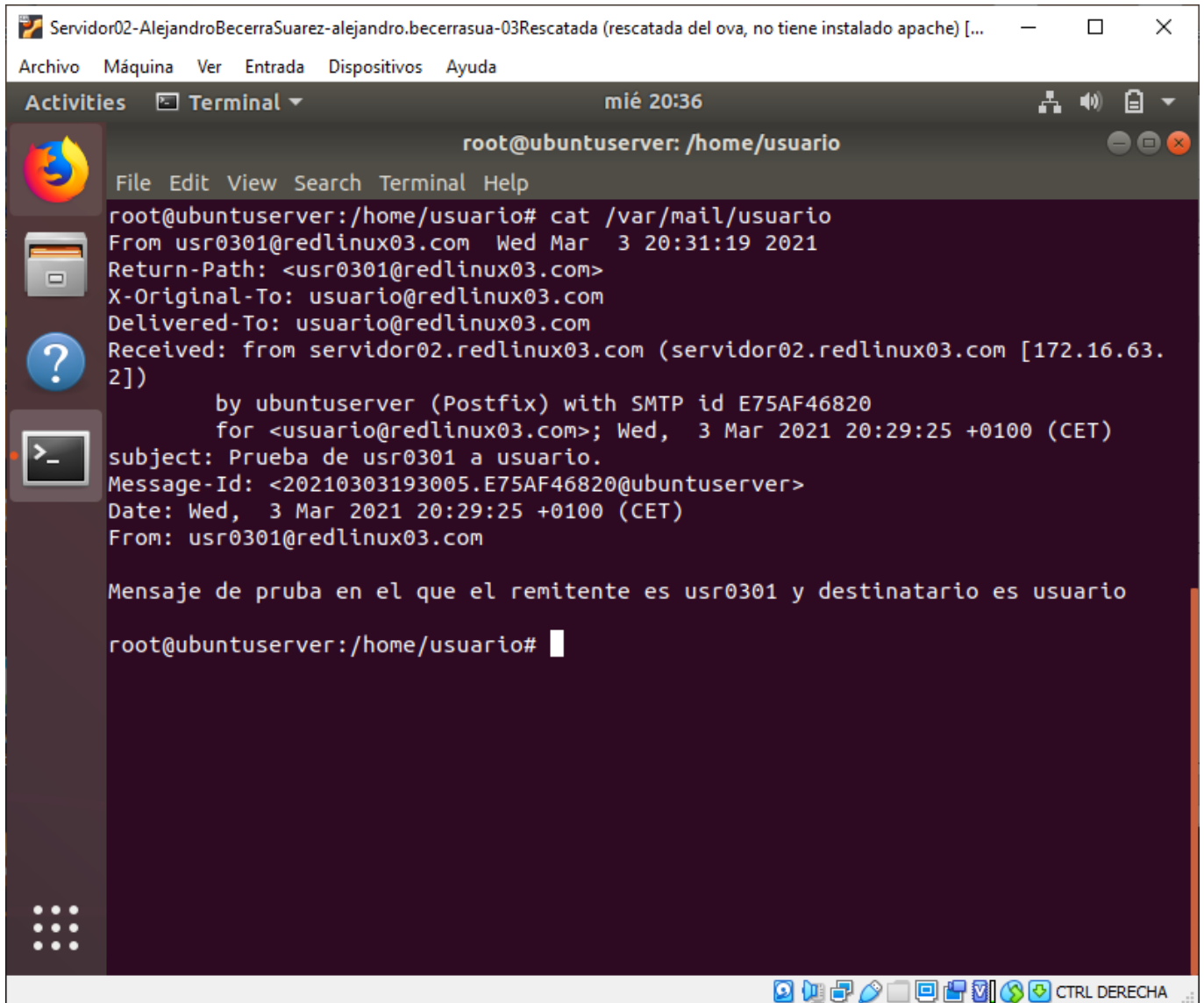

b. El contenido del directorio en el que se almacenan los buzones de correo.



The image shows a terminal window titled "Servidor02-AlejandroBecerraSuarez-alejandro.becerrasua-03Rescatada (rescatada del ova, no tiene instalado apache) [...]". The terminal is running on a system with the username "usr0301" and the hostname "ubuntuserver". The user is currently in the directory "/home/usuario". The terminal output shows the command "ls /var/mail/" being executed, which returns the output "root usuario". The terminal window has a menu bar with "File", "Edit", "View", "Search", "Terminal", and "Help". The terminal window is part of a desktop environment with a sidebar on the left containing icons for Firefox, a file manager, a help icon, and a terminal icon. The bottom of the screen shows a taskbar with various application icons and a system tray on the right with a "CTRL DERECHA" button.

```
Servidor02-AlejandroBecerraSuarez-alejandro.becerrasua-03Rescatada (rescatada del ova, no tiene instalado apache) [...]  
Archivo  Máquina  Ver  Entrada  Dispositivos  Ayuda  
Activities  Terminal  mié 20:33  
usr0301@ubuntuserver: /home/usuario  
File Edit View Search Terminal Help  
usr0301@ubuntuserver:/home/usuario$ ls /var/mail/  
root  usuario  
usr0301@ubuntuserver:/home/usuario$
```

c. El resultado de hacer un cat del único buzón que debería haber.



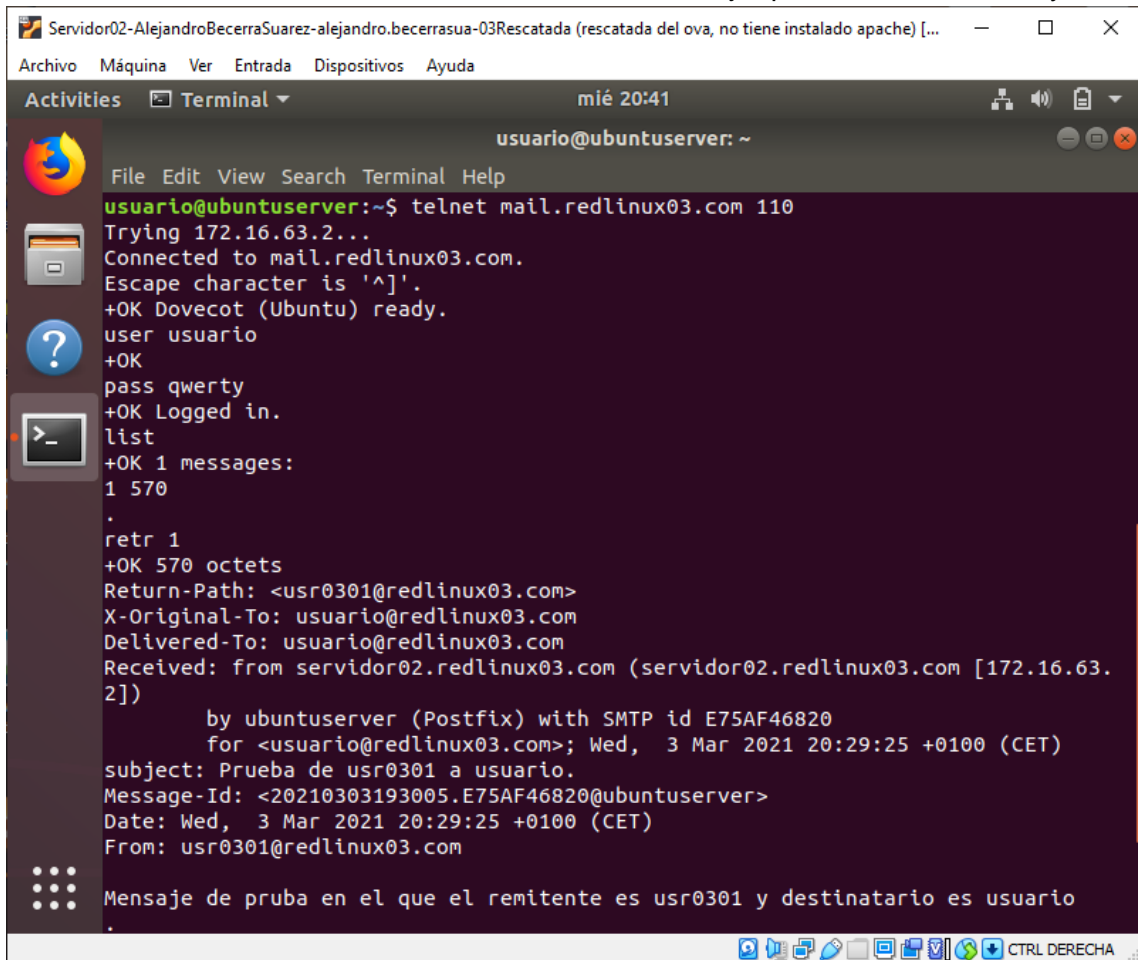
The screenshot shows a terminal window titled "Servidor02-AlejandroBecerraSuarez-alejandro.becerrasua-03Rescatada (rescatada del ova, no tiene instalado apache) [...]". The terminal is running as root at the prompt "root@ubuntuserver: /home/usuario". The command "cat /var/mail/usuario" has been executed, displaying the contents of a mail file. The output shows a message header and body. The header includes "From: usr0301@redlinux03.com", "Return-Path: <usr0301@redlinux03.com>", "X-Original-To: usuario@redlinux03.com", "Delivered-To: usuario@redlinux03.com", "Received: from servidor02.redlinux03.com (servidor02.redlinux03.com [172.16.63.2])", "by ubuntuserver (Postfix) with SMTP id E75AF46820", "for <usuario@redlinux03.com>; Wed, 3 Mar 2021 20:29:25 +0100 (CET)", "subject: Prueba de usr0301 a usuario.", "Message-Id: <20210303193005.E75AF46820@ubuntuserver>", "Date: Wed, 3 Mar 2021 20:29:25 +0100 (CET)", and "From: usr0301@redlinux03.com". The body of the message is "Mensaje de prueba en el que el remitente es usr0301 y destinatario es usuario". The terminal prompt "root@ubuntuserver: /home/usuario#" is visible at the bottom of the output.

```
root@ubuntuserver: /home/usuario# cat /var/mail/usuario
From usr0301@redlinux03.com Wed Mar 3 20:31:19 2021
Return-Path: <usr0301@redlinux03.com>
X-Original-To: usuario@redlinux03.com
Delivered-To: usuario@redlinux03.com
Received: from servidor02.redlinux03.com (servidor02.redlinux03.com [172.16.63.2])
        by ubuntuserver (Postfix) with SMTP id E75AF46820
        for <usuario@redlinux03.com>; Wed, 3 Mar 2021 20:29:25 +0100 (CET)
subject: Prueba de usr0301 a usuario.
Message-Id: <20210303193005.E75AF46820@ubuntuserver>
Date: Wed, 3 Mar 2021 20:29:25 +0100 (CET)
From: usr0301@redlinux03.com

Mensaje de prueba en el que el remitente es usr0301 y destinatario es usuario

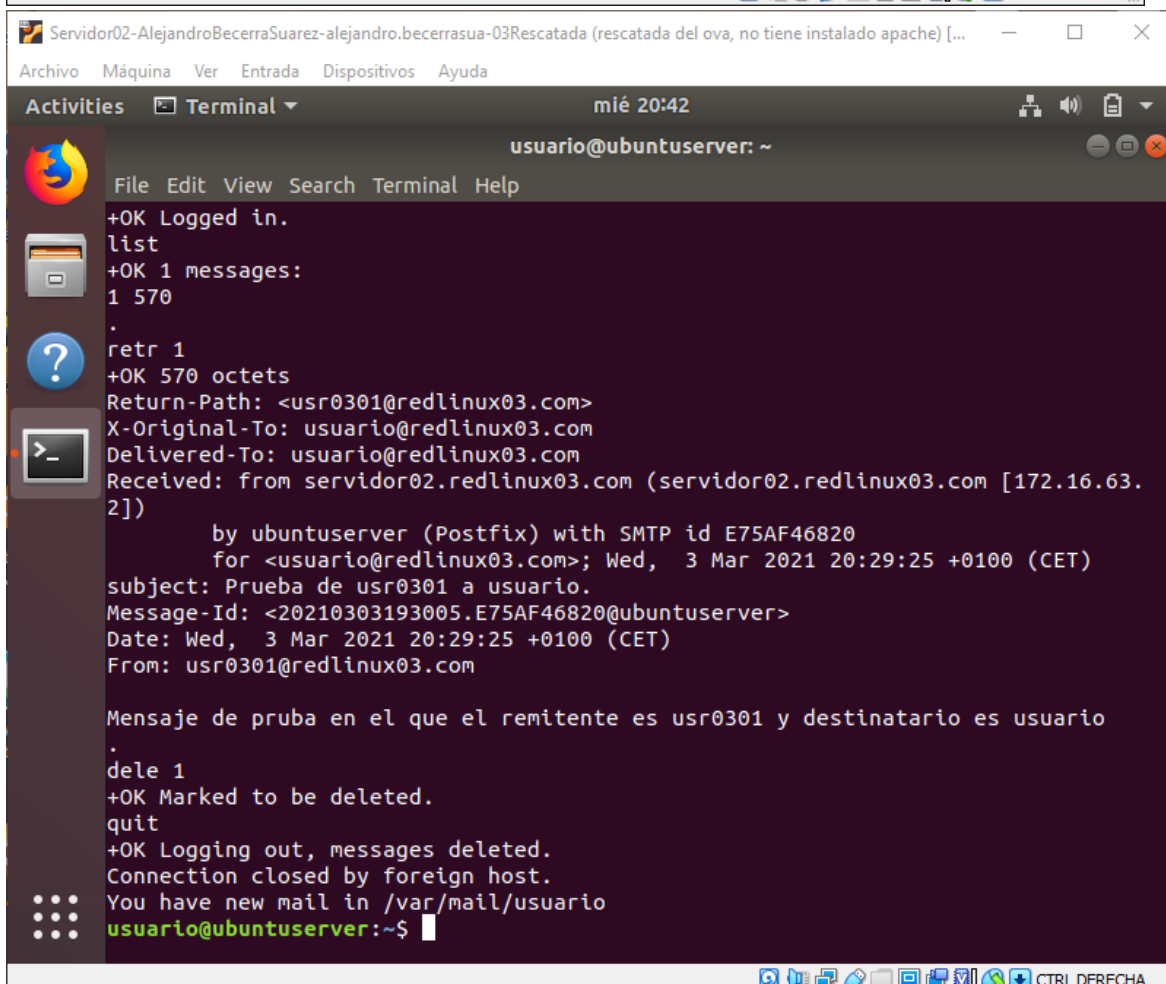
root@ubuntuserver: /home/usuario#
```

8. Capturar el proceso de telnet para que el usuario *usuario* acceda a su listado de correos recibidos, muestre el contenido del único mensaje que debería de tener, y finalmente lo elimine.



A terminal window titled 'Servidor02-AlejandroBecerraSuarez-alejandrobecerrasua-03Rescatada (rescatada del ova, no tiene instalado apache) [...]' with a menu bar (Archivo, Máquina, Ver, Entrada, Dispositivos, Ayuda) and a status bar (mié 20:41). The terminal shows a telnet session to mail.redlinux03.com on port 110. The user 'usuario' logs in with password 'qwerty'. They use the 'list' command to see one message (ID 570) and the 'retr 1' command to view its details. The message is a test email from 'usr0301@redlinux03.com' to 'usuario@redlinux03.com' with subject 'Prueba de usr0301 a usuario'.

```
usuario@ubuntuserver: ~  
File Edit View Search Terminal Help  
usuario@ubuntuserver:~$ telnet mail.redlinux03.com 110  
Trying 172.16.63.2...  
Connected to mail.redlinux03.com.  
Escape character is '^]'.  
+OK Dovecot (Ubuntu) ready.  
user usuario  
+OK  
pass qwerty  
+OK Logged in.  
list  
+OK 1 messages:  
1 570  
.  
retr 1  
+OK 570 octets  
Return-Path: <usr0301@redlinux03.com>  
X-Original-To: usuario@redlinux03.com  
Delivered-To: usuario@redlinux03.com  
Received: from servidor02.redlinux03.com (servidor02.redlinux03.com [172.16.63.2])  
        by ubuntuserver (Postfix) with SMTP id E75AF46820  
        for <usuario@redlinux03.com>; Wed,  3 Mar 2021 20:29:25 +0100 (CET)  
subject: Prueba de usr0301 a usuario.  
Message-Id: <20210303193005.E75AF46820@ubuntuserver>  
Date: Wed,  3 Mar 2021 20:29:25 +0100 (CET)  
From: usr0301@redlinux03.com  
Mensaje de prueba en el que el remitente es usr0301 y destinatario es usuario  
.
```

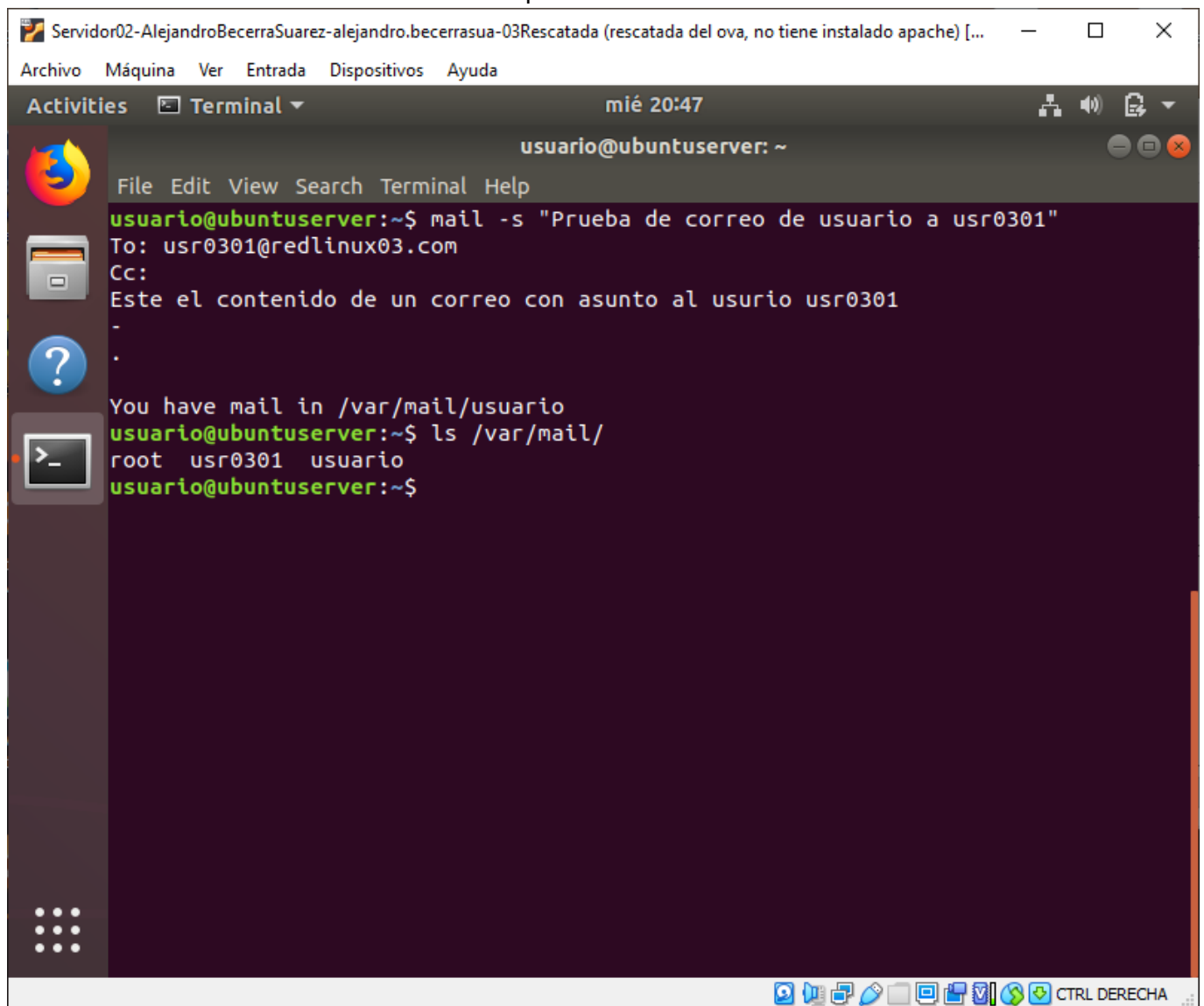


The same terminal window at 20:42 shows the continuation of the telnet session. The user uses 'dele 1' to delete the message, followed by 'quit' to end the session. The server responds with 'Connection closed by foreign host.' and a notification that new mail is in the mailbox.

```
usuario@ubuntuserver: ~  
File Edit View Search Terminal Help  
+OK Logged in.  
list  
+OK 1 messages:  
1 570  
.  
retr 1  
+OK 570 octets  
Return-Path: <usr0301@redlinux03.com>  
X-Original-To: usuario@redlinux03.com  
Delivered-To: usuario@redlinux03.com  
Received: from servidor02.redlinux03.com (servidor02.redlinux03.com [172.16.63.2])  
        by ubuntuserver (Postfix) with SMTP id E75AF46820  
        for <usuario@redlinux03.com>; Wed,  3 Mar 2021 20:29:25 +0100 (CET)  
subject: Prueba de usr0301 a usuario.  
Message-Id: <20210303193005.E75AF46820@ubuntuserver>  
Date: Wed,  3 Mar 2021 20:29:25 +0100 (CET)  
From: usr0301@redlinux03.com  
Mensaje de prueba en el que el remitente es usr0301 y destinatario es usuario  
.  
dele 1  
+OK Marked to be deleted.  
quit  
+OK Logging out, messages deleted.  
Connection closed by foreign host.  
You have new mail in /var/mail/usuario  
usuario@ubuntuserver:~$
```

9. Capturar:

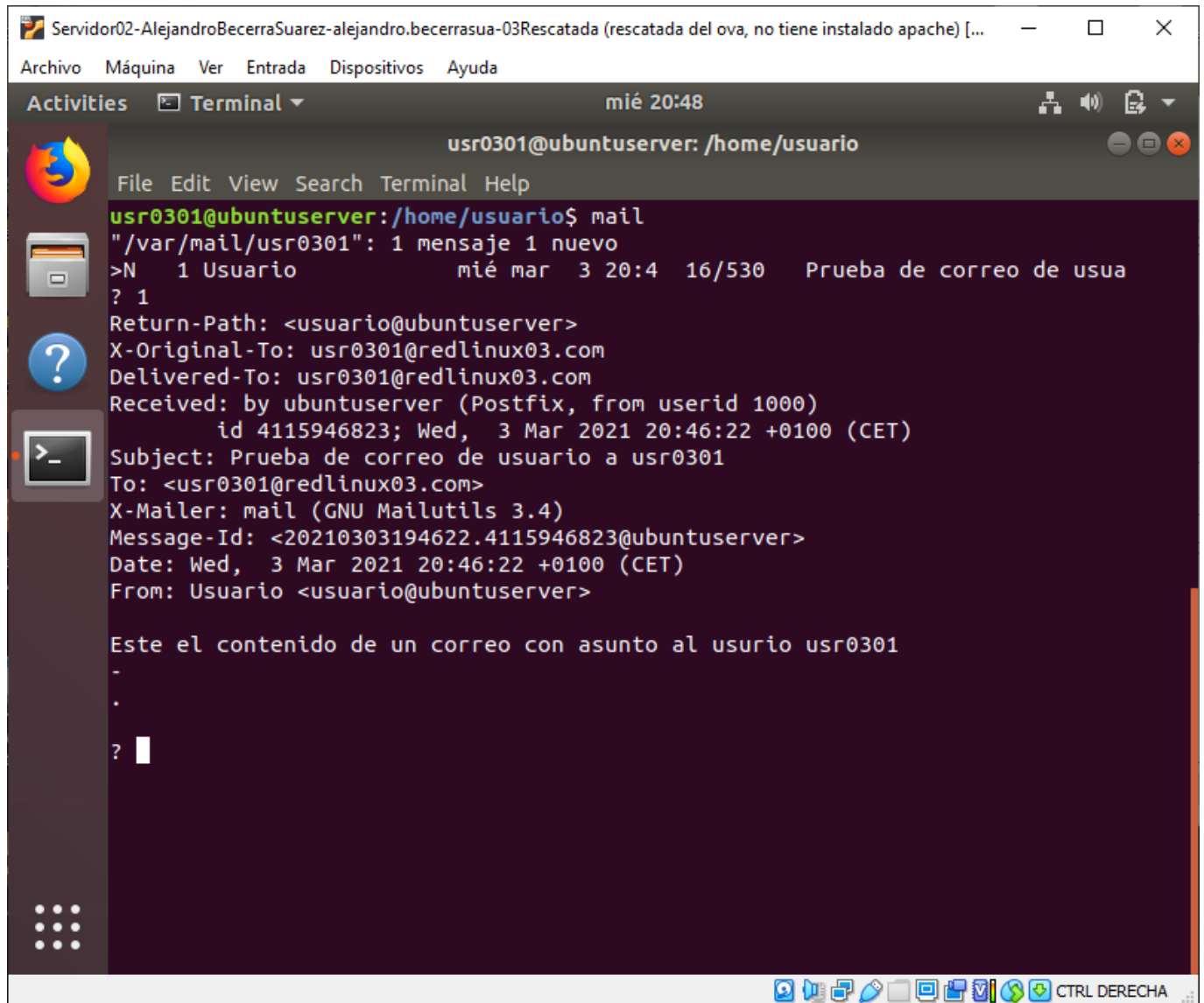
- a. Mediante el comando mail, **enviar** un correo del usuario *usuario* al usuario *usrXY01*. El correo deberá tener asunto.
- b. Contenido del directorio en el que se almacenan los buzones de correo.



```
Servidor02-AlejandroBecerraSuarez-alejandro.becerrasua-03Rescatada (rescatada del ova, no tiene instalado apache) [...]  
Archivo  Máquina  Ver  Entrada  Dispositivos  Ayuda  
Activities  Terminal  mié 20:47  
usuario@ubuntuserver: ~  
File Edit View Search Terminal Help  
usuario@ubuntuserver:~$ mail -s "Prueba de correo de usuario a usr0301"  
To: usr0301@redlinux03.com  
Cc:  
Este el contenido de un correo con asunto al usurio usr0301  
.  
.  
You have mail in /var/mail/usuario  
usuario@ubuntuserver:~$ ls /var/mail/  
root  usr0301  usuario  
usuario@ubuntuserver:~$
```

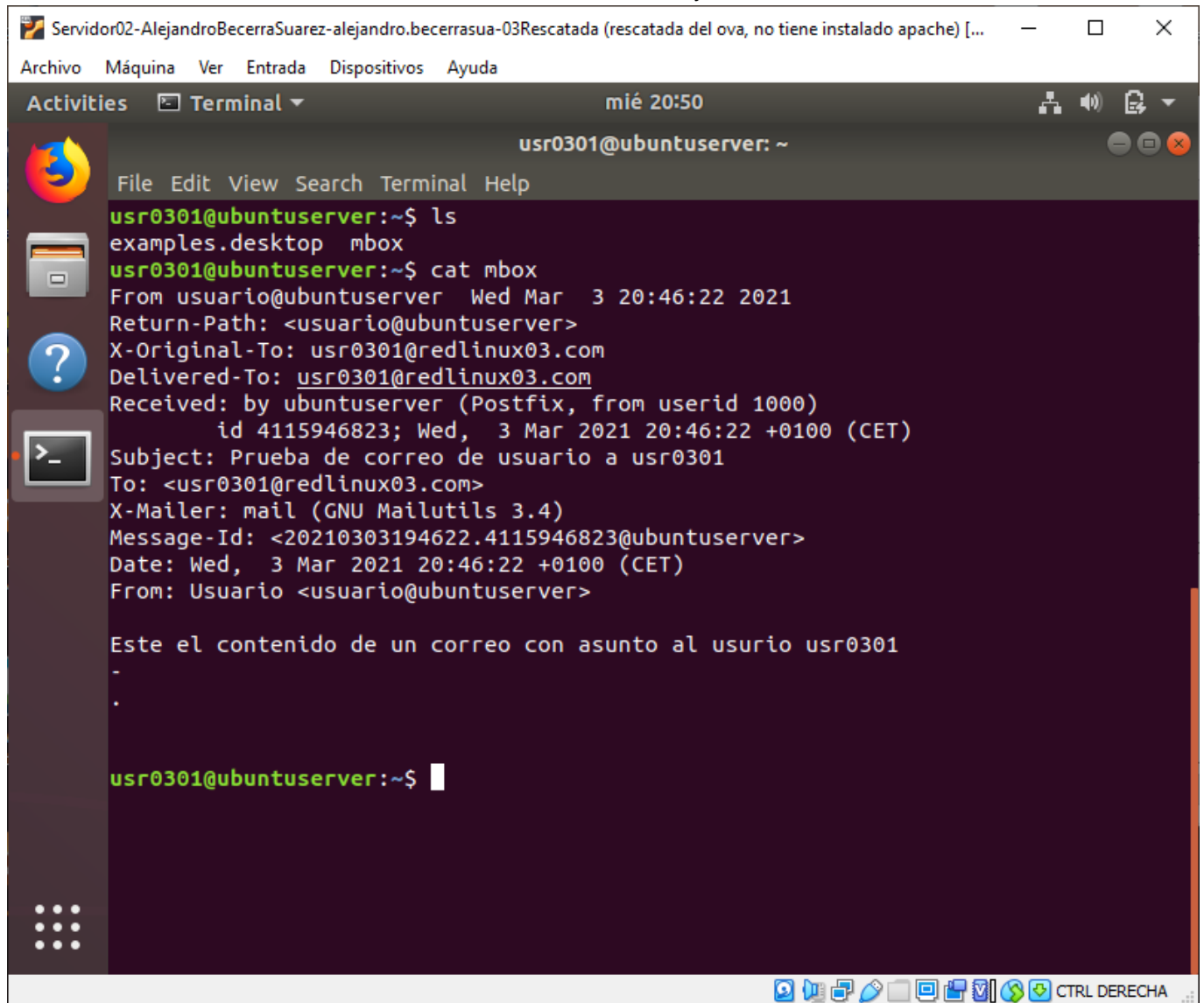
10. Capturar:

- Consola mostrando el comando mail que permita la **lectura** del único mensaje que debería tener *usrXY01*.



```
Servidor02-AlejandroBecerraSuarez-alejandro.becerrasua-03Rescatada (rescatada del ova, no tiene instalado apache) [...]  
Archivo  Máquina  Ver  Entrada  Dispositivos  Ayuda  
Activities  Terminal  mié 20:48  
usr0301@ubuntuserver: /home/usuario  
File Edit View Search Terminal Help  
usr0301@ubuntuserver:/home/usuario$ mail  
"/var/mail/usr0301": 1 mensaje 1 nuevo  
>N 1 Usuario mié mar 3 20:4 16/530 Prueba de correo de usua  
? 1  
Return-Path: <usuario@ubuntuserver>  
X-Original-To: usr0301@redlinux03.com  
Delivered-To: usr0301@redlinux03.com  
Received: by ubuntuserver (Postfix, from userid 1000)  
id 4115946823; Wed, 3 Mar 2021 20:46:22 +0100 (CET)  
Subject: Prueba de correo de usuario a usr0301  
To: <usr0301@redlinux03.com>  
X-Mailer: mail (GNU Mailutils 3.4)  
Message-Id: <20210303194622.4115946823@ubuntuserver>  
Date: Wed, 3 Mar 2021 20:46:22 +0100 (CET)  
From: Usuario <usuario@ubuntuserver>  
  
Este el contenido de un correo con asunto al usurio usr0301  
-  
.  
?  
CTRL DERECHA
```

b. Contenido del directorio del usuario *usrXY01* y contenido del archivo *mbox*.



The screenshot shows a terminal window titled "Servidor02-AlejandroBecerraSuarez-alejandro.becerrasua-03Rescatada (rescatada del ova, no tiene instalado apache) [...]". The terminal is running as user `usr0301@ubuntuserver: ~`. The user has executed the command `ls`, which lists the files `examples.desktop` and `mbox`. Then, the user executed `cat mbox`, displaying the content of the `mbox` file. The content is an email header and body. The header includes fields like `From`, `Return-Path`, `X-Original-To`, `Delivered-To`, `Received`, `Subject`, `To`, `X-Mailer`, `Message-Id`, `Date`, and `From`. The body of the email states: "Este el contenido de un correo con asunto al usurio usr0301". The terminal window has a sidebar with icons for Firefox, a file manager, a help icon, and a terminal icon. The bottom of the window shows a system tray with various icons and the text "CTRL DERECHA".

```
Servidor02-AlejandroBecerraSuarez-alejandro.becerrasua-03Rescatada (rescatada del ova, no tiene instalado apache) [...]
```

Archivo Máquina Ver Entrada Dispositivos Ayuda

Activities Terminal mié 20:50

usr0301@ubuntuserver: ~

File Edit View Search Terminal Help

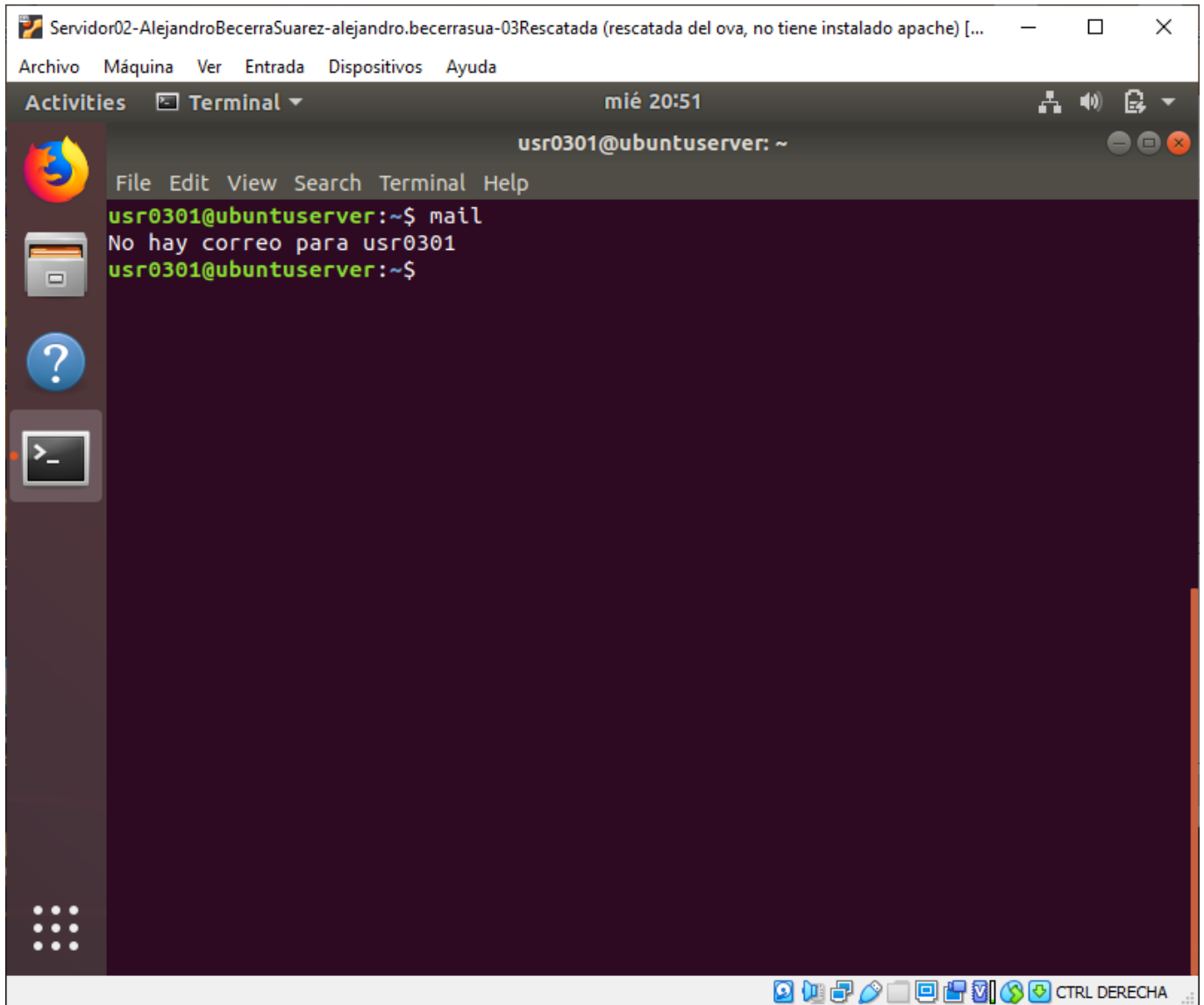
```
usr0301@ubuntuserver:~$ ls
examples.desktop  mbox
usr0301@ubuntuserver:~$ cat mbox
From usuario@ubuntuserver Wed Mar  3 20:46:22 2021
Return-Path: <usuario@ubuntuserver>
X-Original-To: usr0301@redlinux03.com
Delivered-To: usr0301@redlinux03.com
Received: by ubuntuserver (Postfix, from userid 1000)
        id 4115946823; Wed,  3 Mar 2021 20:46:22 +0100 (CET)
Subject: Prueba de correo de usuario a usr0301
To: <usr0301@redlinux03.com>
X-Mailer: mail (GNU Mailutils 3.4)
Message-Id: <20210303194622.4115946823@ubuntuserver>
Date: Wed,  3 Mar 2021 20:46:22 +0100 (CET)
From: Usuario <usuario@ubuntuserver>

Este el contenido de un correo con asunto al usurio usr0301
-
.

usr0301@ubuntuserver:~$
```

CTRL DERECHA

c. Resultado de ejecutar de nuevo el comando `mail` para chequear el correo de *usrXY01*.

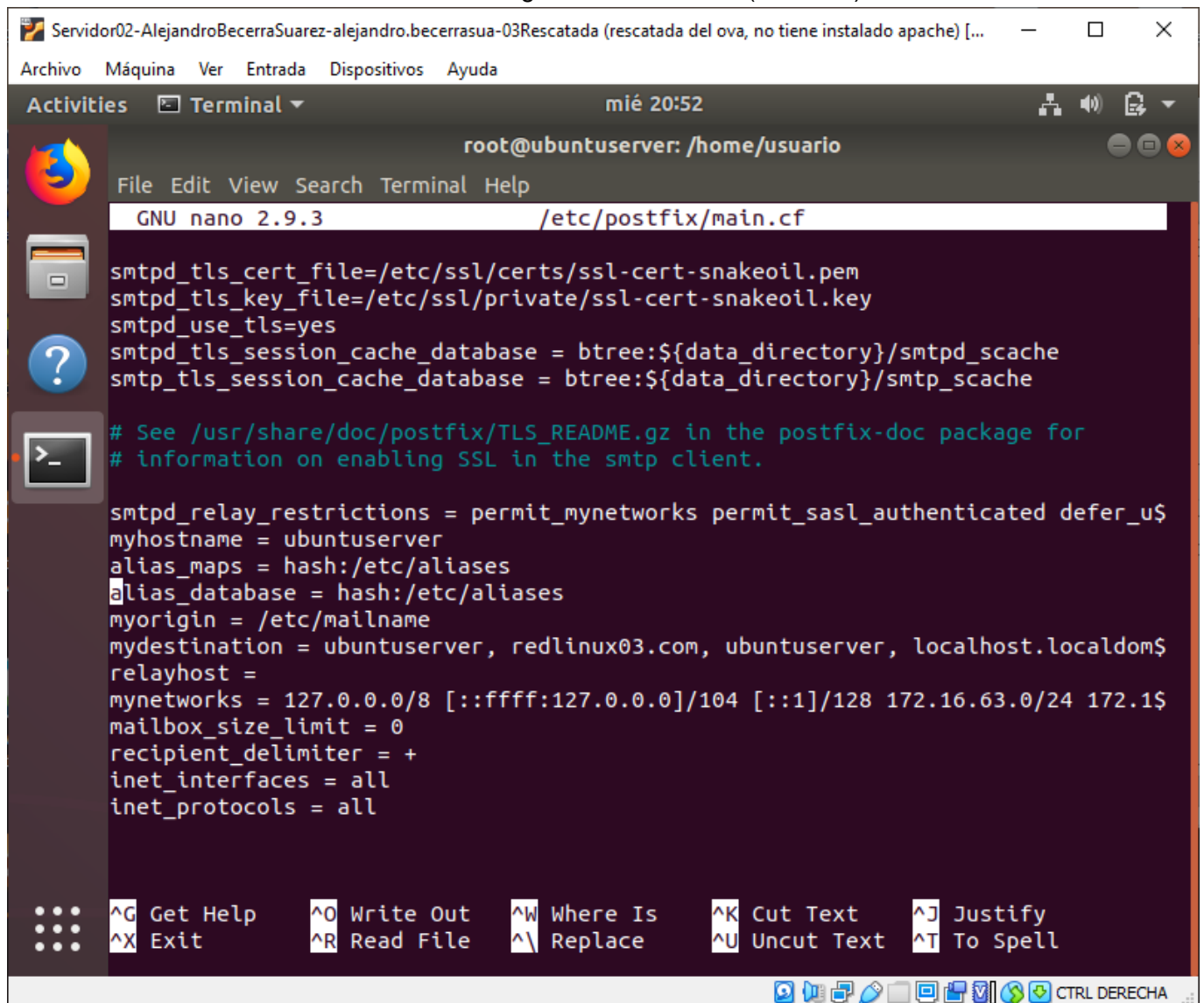


The screenshot shows a terminal window titled "Servidor02-AlejandroBecerraSuarez-alejandro.becerrasua-03Rescatada (rescatada del ova, no tiene instalado apache) [...]". The terminal is running as the user `usr0301@ubuntuserver: ~`. The command `mail` has been executed, resulting in the output "No hay correo para usr0301". The terminal window has a menu bar with "File", "Edit", "View", "Search", "Terminal", and "Help". The system clock shows "mié 20:51". The desktop environment includes a sidebar with icons for Firefox, a file manager, a help icon, and a terminal icon. The bottom of the screen features a taskbar with various application icons and a "CTRL DERECHA" button.

```
Servidor02-AlejandroBecerraSuarez-alejandro.becerrasua-03Rescatada (rescatada del ova, no tiene instalado apache) [...]  
Archivo  Máquina  Ver  Entrada  Dispositivos  Ayuda  
Activities  Terminal  mié 20:51  
usr0301@ubuntuserver: ~  
File Edit View Search Terminal Help  
usr0301@ubuntuserver:~$ mail  
No hay correo para usr0301  
usr0301@ubuntuserver:~$
```

11. Realizar las siguientes capturas:

a. Contenido del archivo de configuración de Postfix (main.cf).



The screenshot shows a terminal window titled "Servidor02-AlejandroBecerraSuarez-alejandro.becerrasua-03Rescatada (rescatada del ova, no tiene instalado apache) [...]". The terminal is running the nano text editor, editing the file `/etc/postfix/main.cf`. The user is `root@ubuntuserver: /home/usuario`. The terminal shows the following configuration for Postfix:

```
smtpd_tls_cert_file=/etc/ssl/certs/ssl-cert-snakeoil.pem
smtpd_tls_key_file=/etc/ssl/private/ssl-cert-snakeoil.key
smtpd_use_tls=yes
smtpd_tls_session_cache_database = btree:${data_directory}/smtpd_scache
smtp_tls_session_cache_database = btree:${data_directory}/smtp_scache

# See /usr/share/doc/postfix/TLS_README.gz in the postfix-doc package for
# information on enabling SSL in the smtp client.

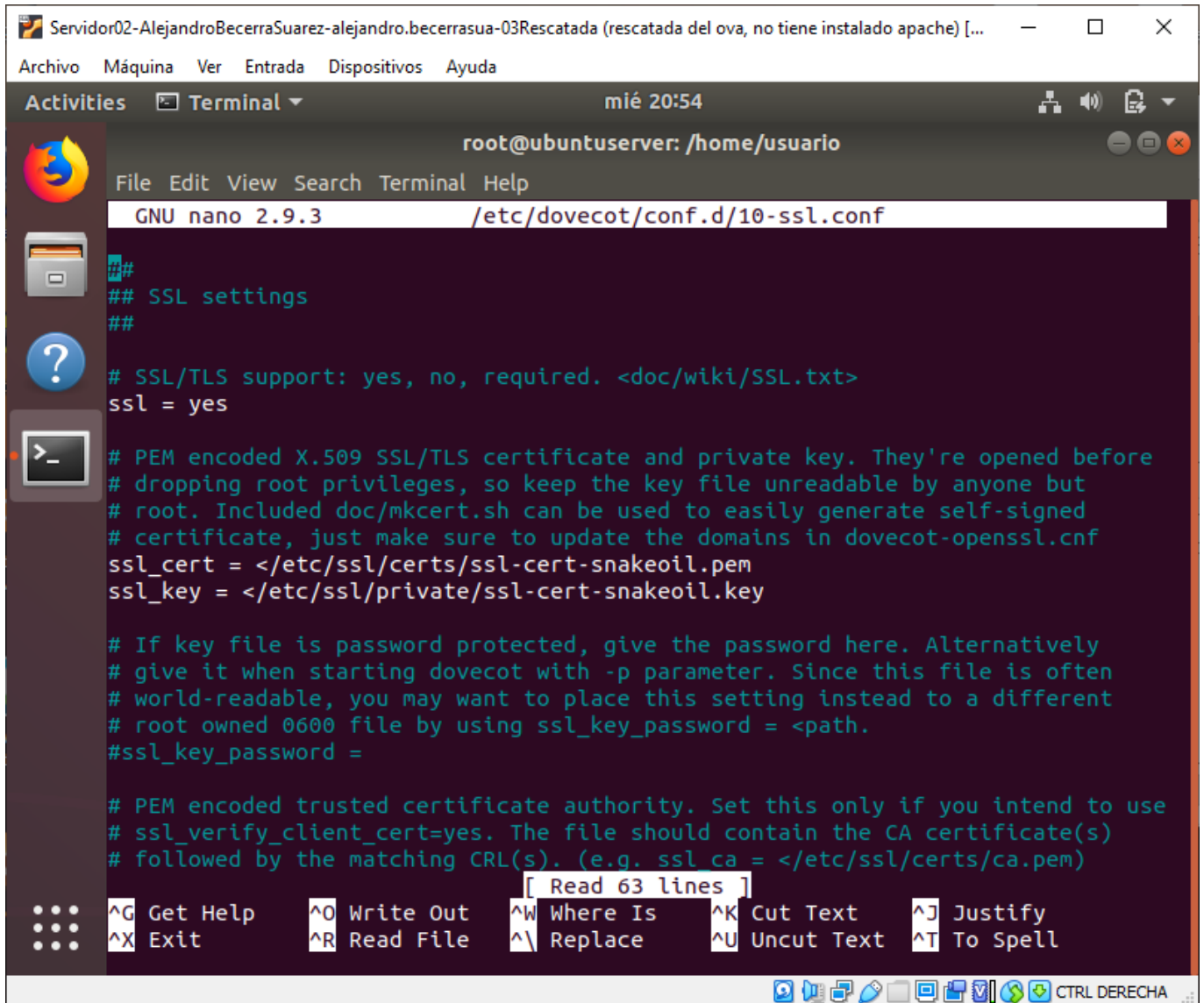
smtpd_relay_restrictions = permit_mynetworks permit_sasl_authenticated defer_u$
myhostname = ubuntuserver
alias_maps = hash:/etc/aliases
alias_database = hash:/etc/aliases
myorigin = /etc/mailname
mydestination = ubuntuserver, redlinux03.com, ubuntuserver, localhost.localdom$
relayhost =
mynetworks = 127.0.0.0/8 [::ffff:127.0.0.0]/104 [::1]/128 172.16.63.0/24 172.1$
mailbox_size_limit = 0
recipient_delimiter = +
inet_interfaces = all
inet_protocols = all
```

At the bottom of the terminal, there is a list of keyboard shortcuts for the nano editor:

^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

The terminal window also shows a sidebar with icons for Activities, Terminal, and a search icon. The bottom status bar includes system icons and the text "CTRL DERECHA".

b. Contenido del archivo en el que se ha configurado SSL (10-ssl.conf).



The screenshot shows a terminal window titled "Servidor02-AlejandroBecerraSuarez-alejandro.becerrasua-03Rescatada (rescatada del ova, no tiene instalado apache) [...]". The terminal is running the nano text editor, editing the file `/etc/dovecot/conf.d/10-ssl.conf`. The user is `root@ubuntuserver: /home/usuario`. The editor shows the following configuration:

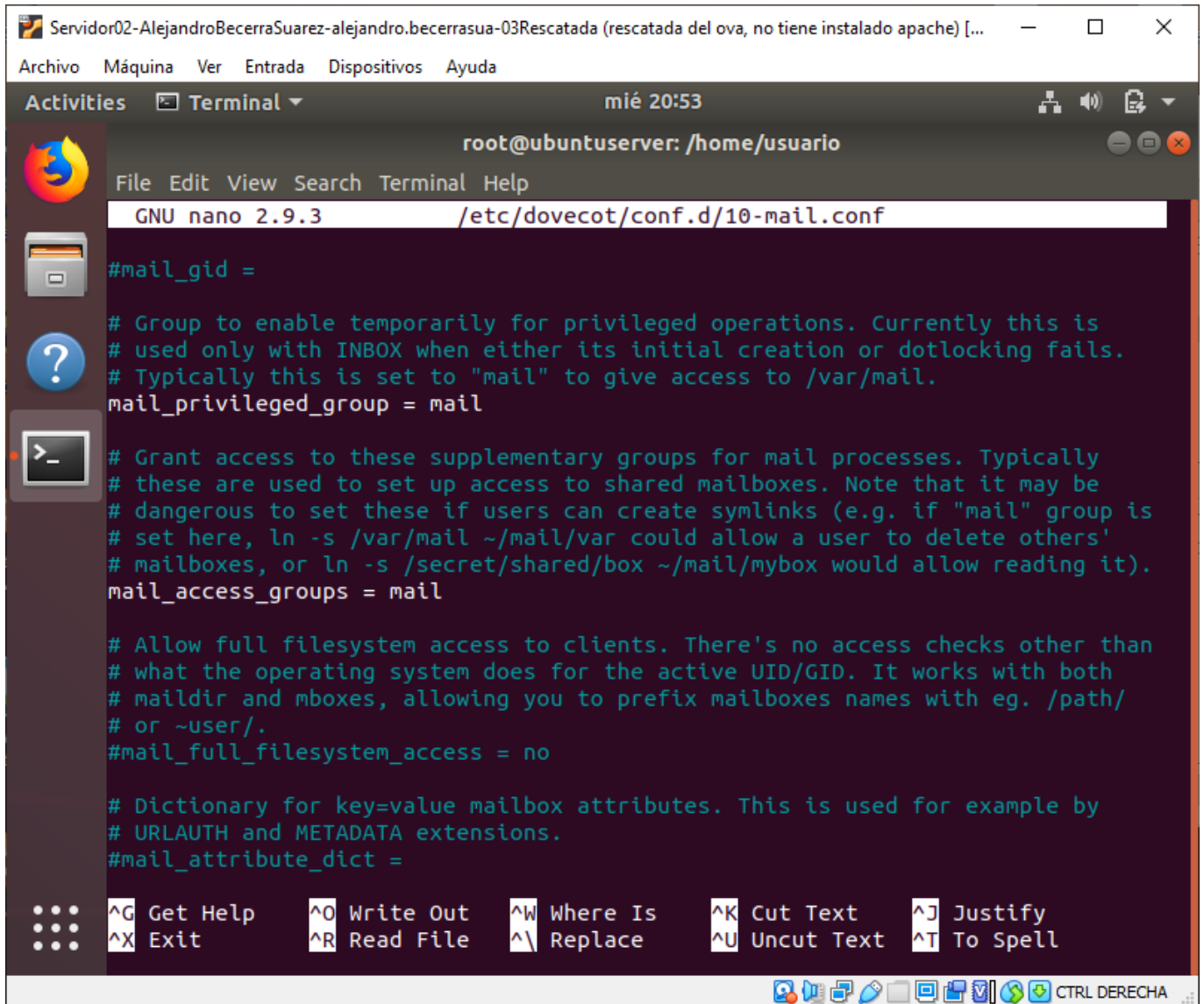
```
##  
## SSL settings  
##  
# SSL/TLS support: yes, no, required. <doc/wiki/SSL.txt>  
ssl = yes  
  
# PEM encoded X.509 SSL/TLS certificate and private key. They're opened before  
# dropping root privileges, so keep the key file unreadable by anyone but  
# root. Included doc/mkcert.sh can be used to easily generate self-signed  
# certificate, just make sure to update the domains in dovecot-openssl.cnf  
ssl_cert = </etc/ssl/certs/ssl-cert-snakeoil.pem  
ssl_key = </etc/ssl/private/ssl-cert-snakeoil.key  
  
# If key file is password protected, give the password here. Alternatively  
# give it when starting dovecot with -p parameter. Since this file is often  
# world-readable, you may want to place this setting instead to a different  
# root owned 0600 file by using ssl_key_password = <path>.  
#ssl_key_password =  
  
# PEM encoded trusted certificate authority. Set this only if you intend to use  
# ssl_verify_client_cert=yes. The file should contain the CA certificate(s)  
# followed by the matching CRL(s). (e.g. ssl ca = </etc/ssl/certs/ca.pem>)
```

At the bottom of the terminal, there is a status bar with the text "Read 63 lines" and a list of 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

The terminal window also shows a sidebar with icons for file manager, help, and terminal, and a top bar with menu options like "Archivo", "Máquina", "Ver", "Entrada", "Dispositivos", and "Ayuda".

- c. Contenido del archivo en el que se ha configurado el grupo de usuarios que tendrán acceso al correo (10-mail.conf).



The screenshot shows a terminal window titled "Servidor02-AlejandroBecerraSuarez-alejandro.becerrasua-03Rescatada (rescatada del ova, no tiene instalado apache) [...]" with a menu bar (Archivo, Máquina, Ver, Entrada, Dispositivos, Ayuda) and a status bar (mié 20:53). The terminal displays the nano editor editing the file "/etc/dovecot/conf.d/10-mail.conf". The editor's title bar shows "root@ubuntuserver: /home/usuario". The nano editor's menu bar includes File, Edit, View, Search, Terminal, and Help. The status bar at the bottom of the editor shows "GNU nano 2.9.3" and the file path. The content of the file is as follows:

```
#mail_gid =

# Group to enable temporarily for privileged operations. Currently this is
# used only with INBOX when either its initial creation or dotlocking fails.
# Typically this is set to "mail" to give access to /var/mail.
mail_privileged_group = mail

# Grant access to these supplementary groups for mail processes. Typically
# these are used to set up access to shared mailboxes. Note that it may be
# dangerous to set these if users can create symlinks (e.g. if "mail" group is
# set here, ln -s /var/mail ~/mail/var could allow a user to delete others'
# mailboxes, or ln -s /secret/shared/box ~/mail/mybox would allow reading it).
mail_access_groups = mail

# Allow full filesystem access to clients. There's no access checks other than
# what the operating system does for the active UID/GID. It works with both
# maildir and mboxes, allowing you to prefix mailbox names with eg. /path/
# or ~user/.
#mail_full_filesystem_access = no

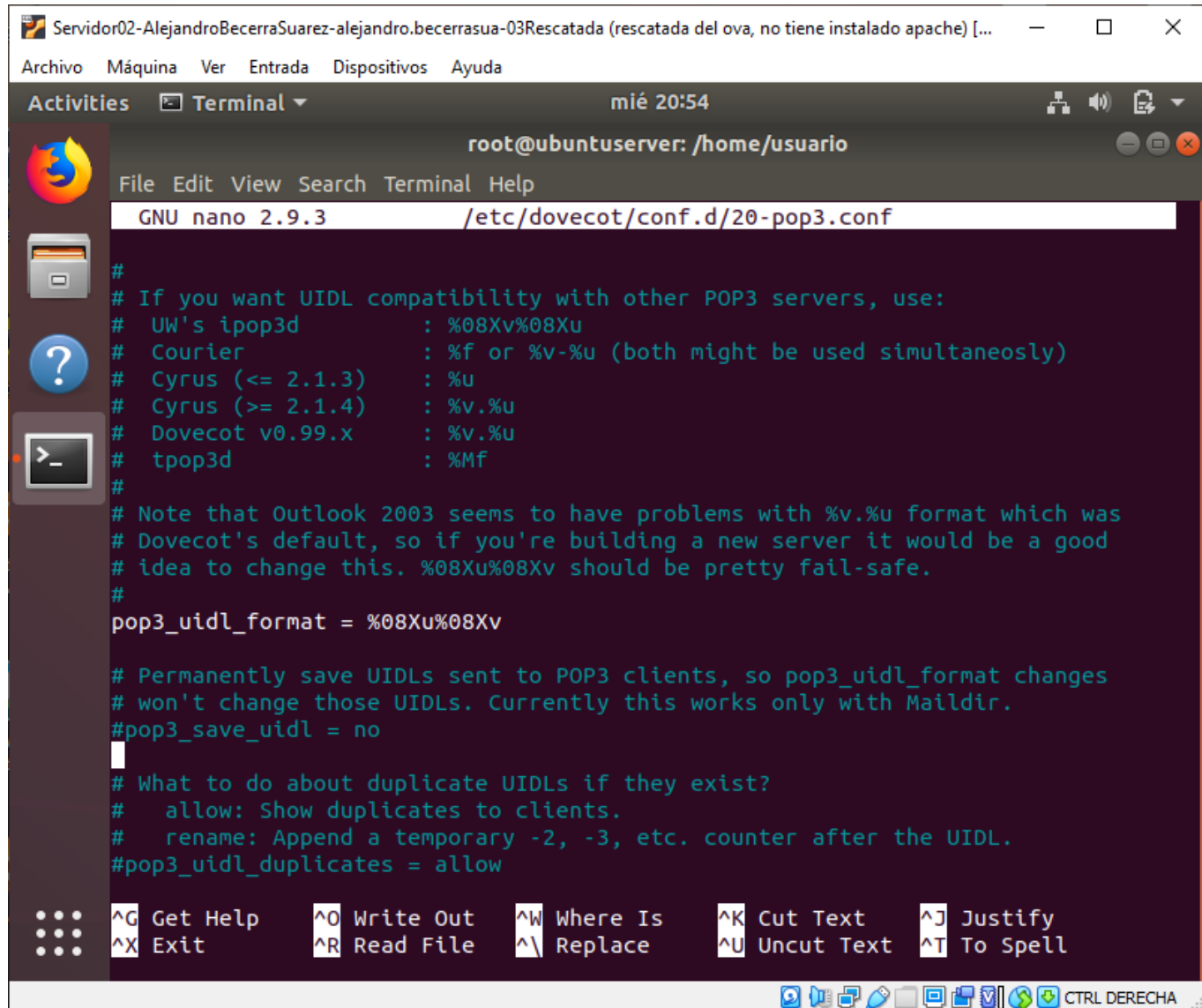
# Dictionary for key=value mailbox attributes. This is used for example by
# URLAUTH and METADATA extensions.
#mail_attribute_dict =
```

At the bottom of the terminal, there is a table of 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

The bottom of the terminal window shows a standard Linux desktop environment with various icons and a status bar on the right that includes "CTRL DERECHA".

- d. Establecer un formato de UIDL que mejore la compatibilidad con los diferentes clientes de correo (20-pop3.conf).



The screenshot shows a terminal window titled "Servidor02-AlejandroBecerraSuarez-alejandro.becerrasua-03Rescatada (rescatada del ova, no tiene instalado apache) [...]". The terminal is running the nano text editor, editing the file `/etc/dovecot/conf.d/20-pop3.conf`. The user is `root@ubuntuser: /home/usuario`. The terminal shows the following content:

```
GNU nano 2.9.3 /etc/dovecot/conf.d/20-pop3.conf

#
# If you want UIDL compatibility with other POP3 servers, use:
#   UW's ipop3d      : %08Xv%08Xu
#   Courier          : %f or %v-%u (both might be used simultaneously)
#   Cyrus (<= 2.1.3) : %u
#   Cyrus (>= 2.1.4) : %v.%u
#   Dovecot v0.99.x  : %v.%u
#   tpop3d           : %Mf
#
# Note that Outlook 2003 seems to have problems with %v.%u format which was
# Dovecot's default, so if you're building a new server it would be a good
# idea to change this. %08Xu%08Xv should be pretty fail-safe.
#
pop3_uidl_format = %08Xu%08Xv

# Permanently save UIDLs sent to POP3 clients, so pop3_uidl_format changes
# won't change those UIDLs. Currently this works only with Maildir.
#pop3_save_uidl = no

# What to do about duplicate UIDLs if they exist?
#   allow: Show duplicates to clients.
#   rename: Append a temporary -2, -3, etc. counter after the UIDL.
#pop3_uidl_duplicates = allow
```

At the bottom of the terminal, there is a table of 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

The terminal window also shows a sidebar with icons for Activities, Terminal, and a search icon. The bottom status bar includes system icons and the text "CTRL DERECHA".