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TECNOLÓGICO NACIONAL DE MÉXICO
INSTITUTO TECNOLÓGICO DE
SAN LUIS POTOSÍ

Departamento Sistemas y Computación

INGENIERIA EN INFORMATICA

Práctica 3 - Configuración DNS y correo electrónico

ADMINISTRACIÓN DE LOS SERVIDORES DE TI

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STEPHANIE

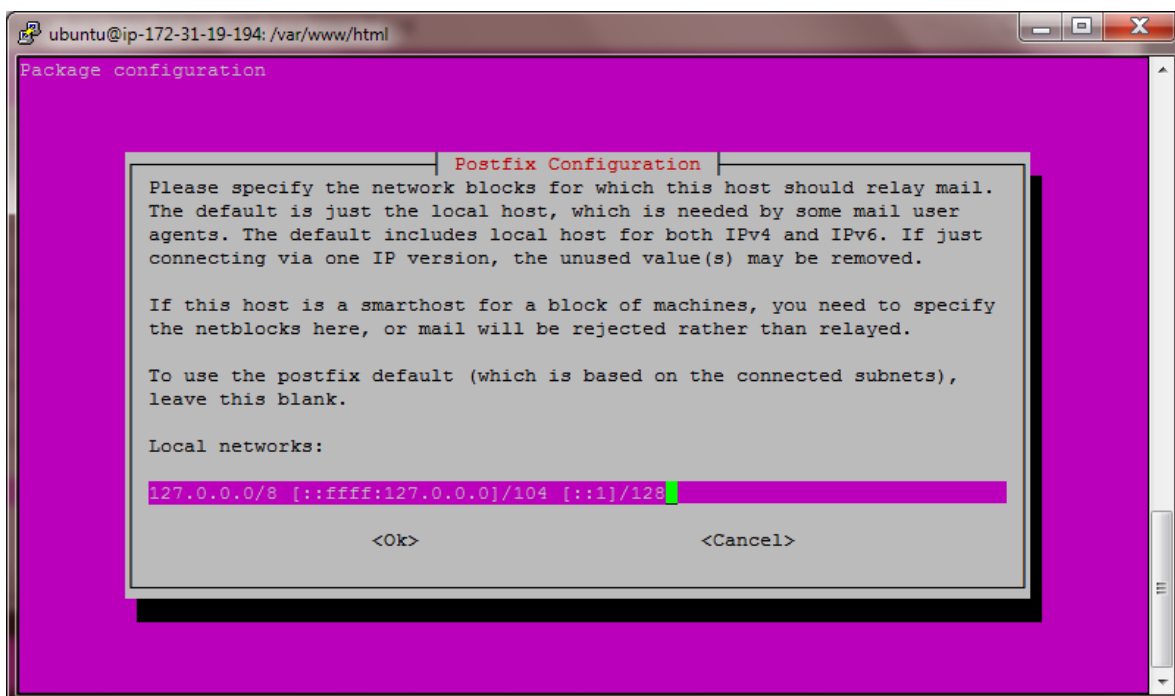
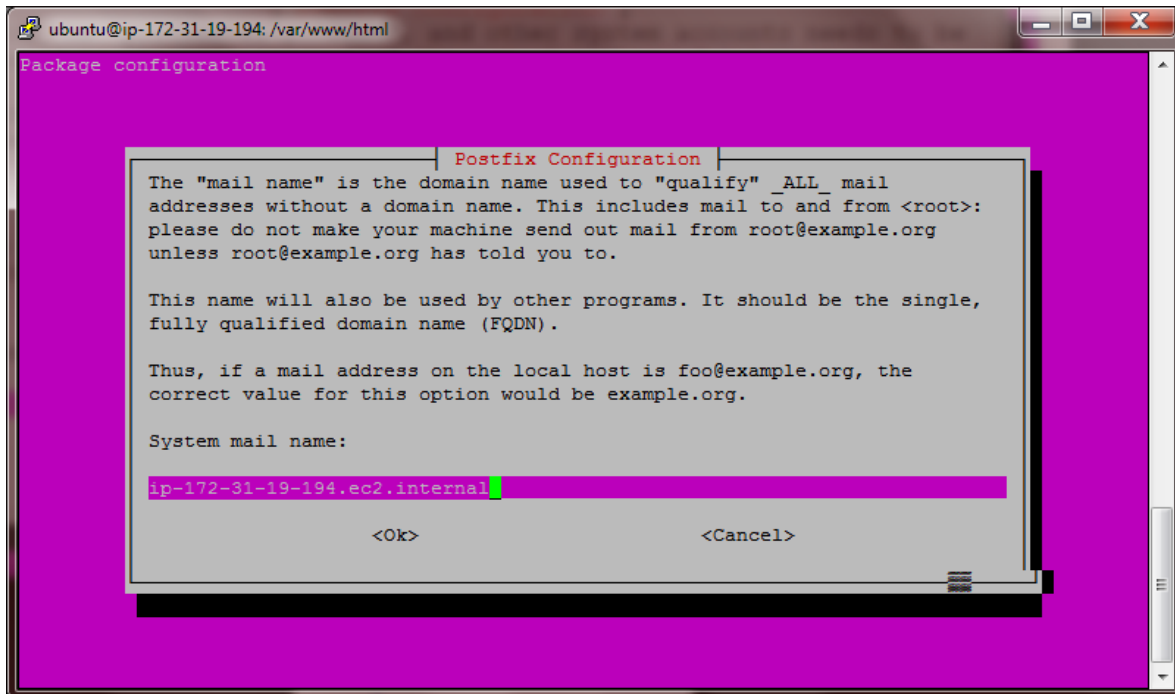
Soledad de Graciano Sánchez, S. L. P. 26 de Noviembre del 2020

Correo

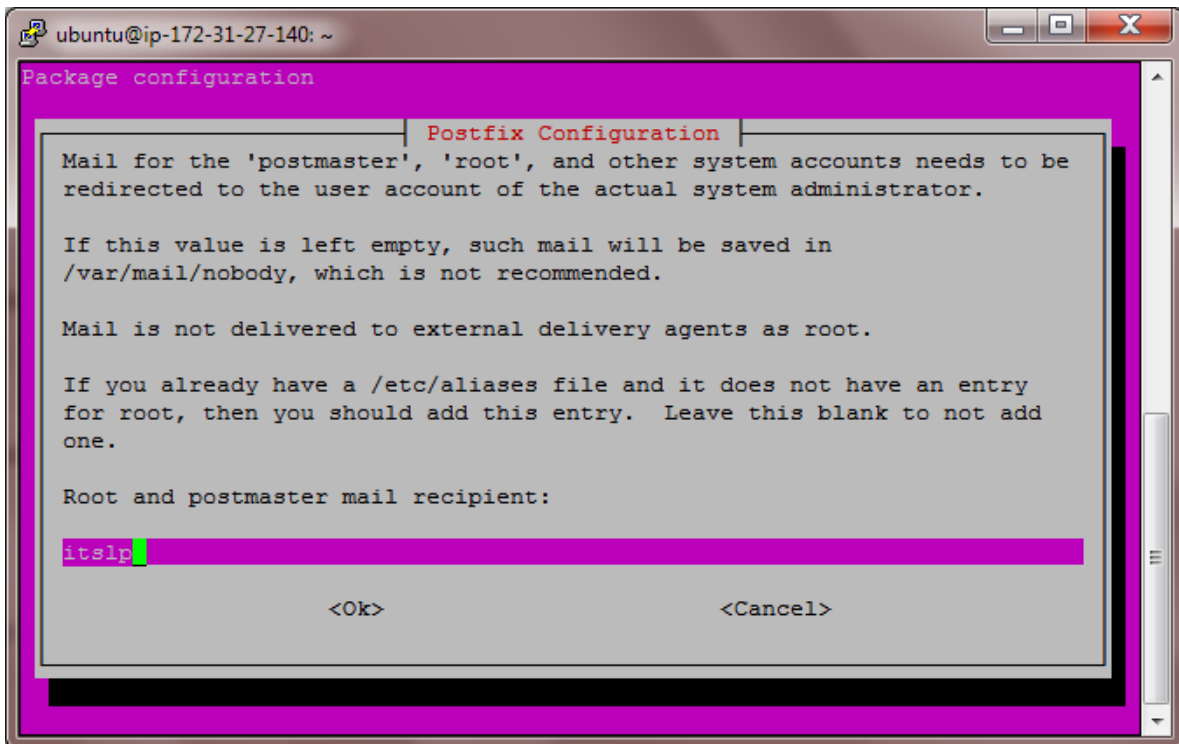
Instalamos Postfix

```
sudo apt install postfix
```

Una vez realizamos las configuraciones.



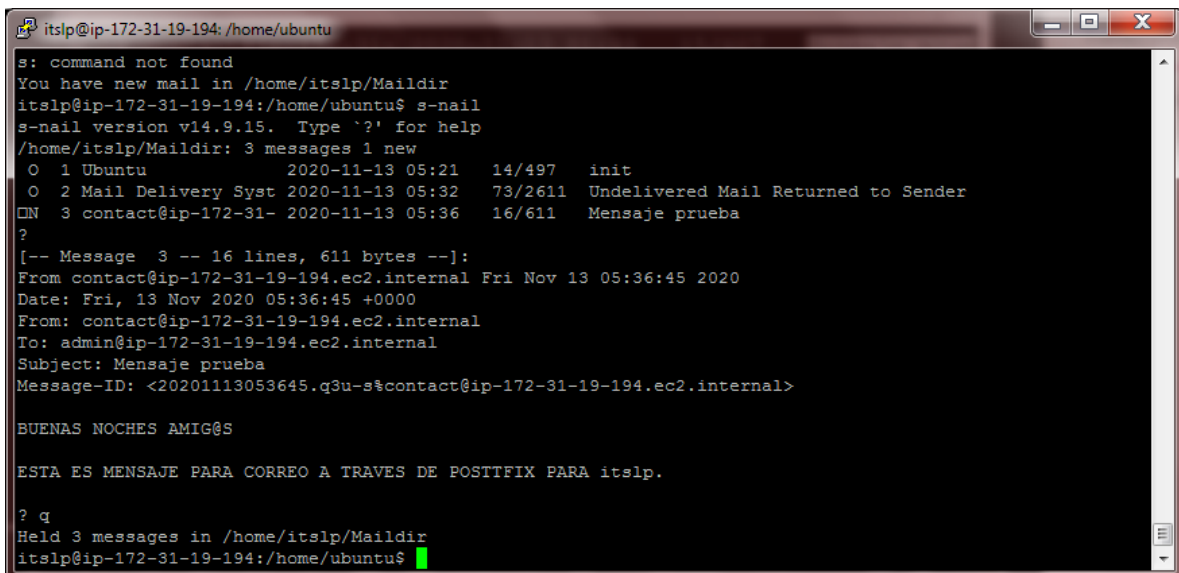
Usando el dominio itslp



Si nos equivocamos podemos usar el comando.

```
sudo dpkg-reconfigure postfix
```

Después de crear usuario y dar permisos hacemos la prueba localmente.



Configuration del cliente web usando Squirrelmail

Instalar Dovecot:

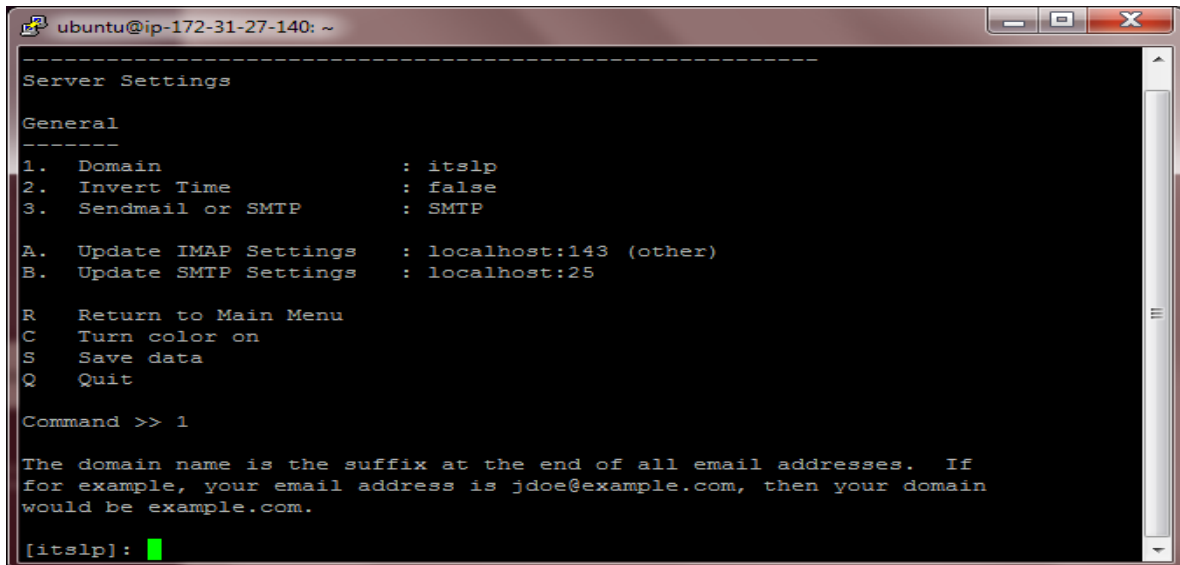
Dovecot es un servidor IMAP/POP3 que usaremos para enviar y recibir mails al servidor SMTP Postfix. `sudo apt install dovecot-imapd dovecot-pop3d`.

Y lo reiniciamos cuando esté instalado: `sudo service dovecot restart`

Descargamos Squirrelmail, se descomprime y la guardamos en `/var/www/html/squirrelmail` también se le cambia el propietario del directorio a `www-data` para que Squirrelmail pueda escribir los mails allí. Y se configuro con el comando:

```
sudo perl /var/www/html/squirrelmail/config/conf.pl
```

Accedemos anteriormente al **2. Server Settings**.y nos dará la captura siguiente: donde usaremos el dominio `itslp`.

A terminal window titled 'ubuntu@ip-172-31-27-140: ~' showing the 'Server Settings' menu. The 'General' section is expanded, showing options 1 through 5. Option 1 is 'Domain' with value 'itslp'. Option 2 is 'Invert Time' with value 'false'. Option 3 is 'Sendmail or SMTP' with value 'SMTP'. Option 4 is 'Update IMAP Settings' with value 'localhost:143 (other)'. Option 5 is 'Update SMTP Settings' with value 'localhost:25'. Below these are options R (Return to Main Menu), C (Turn color on), S (Save data), and Q (Quit). The prompt 'Command >> 1' is shown. A message explains that the domain name is the suffix at the end of all email addresses. The prompt '[itslp]:' is at the bottom with a green cursor.

```
-----
Server Settings
General
-----
1. Domain           : itslp
2. Invert Time      : false
3. Sendmail or SMTP : SMTP
4. Update IMAP Settings : localhost:143 (other)
5. Update SMTP Settings : localhost:25

R  Return to Main Menu
C  Turn color on
S  Save data
Q  Quit

Command >> 1

The domain name is the suffix at the end of all email addresses.  If
for example, your email address is jdoe@example.com, then your domain
would be example.com.

[itslp]:
```

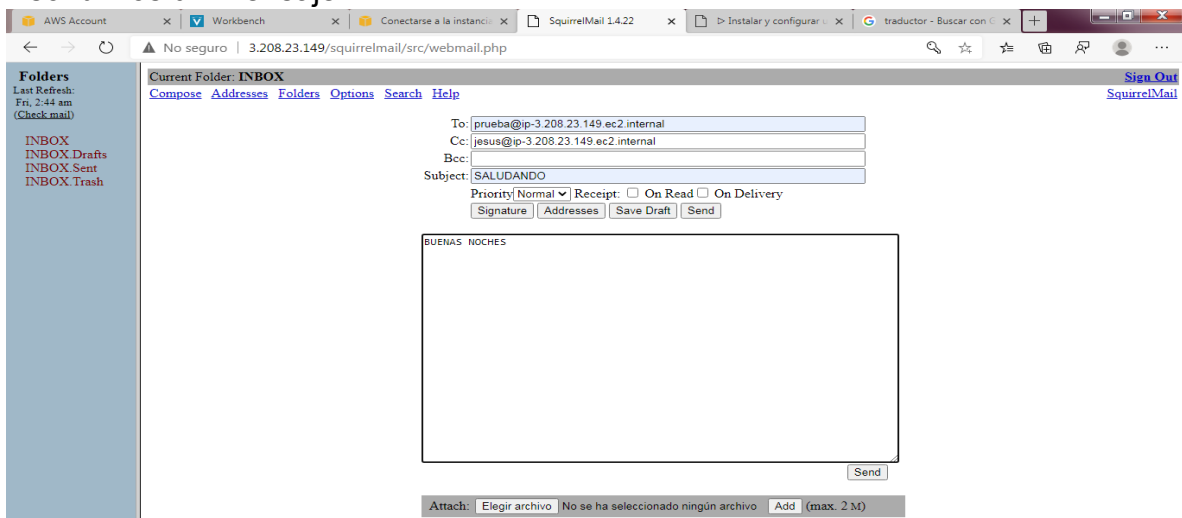
Seleccionamos R y cambiamos los puntos 1,2 y 11. Guardamos cambios.

```
ubuntu@ip-172-31-27-140: ~
SquirrelMail Configuration : Read: config.php (1.4.0)
-----
General Options
1. Data Directory           : /var/www/html/squirrelmail/data/
2. Attachment Directory    : /var/www/html/squirrelmail/attach/
3. Directory Hash Level    : 0
4. Default Left Size       : 150
5. Usernames in Lowercase  : false
6. Allow use of priority    : true
7. Hide SM attributions    : false
8. Allow use of receipts   : true
9. Allow editing of identity : true
   Allow editing of name   : true
   Remove username from header : false
10. Allow server thread sort : false
11. Allow server-side sorting : true
12. Allow server charset search : true
13. Enable UID support      : true
14. PHP session name       : SQMSESSID
15. Location base          :
16. Only secure cookies if poss. : true
17. Disable secure forms   : false
18. Page referral requirement :
```

En el navegador escribimos la ip publica/squirrelmail para acceder al login con el usuario que creamos.



Escribimos un mensaje.



Current Folder: **INBOX**

[Compose](#) [Addresses](#) [Folders](#) [Options](#) [Search](#) [Help](#) [Sign Out](#)

To: prueba@ip-3.208.23.149.ec2.internal

Cc: jesus@ip-3.208.23.149.ec2.internal

Bcc:

Subject: SALUDANDO

Priority: Normal | Receipt: ☐ On Read ☐ On Delivery

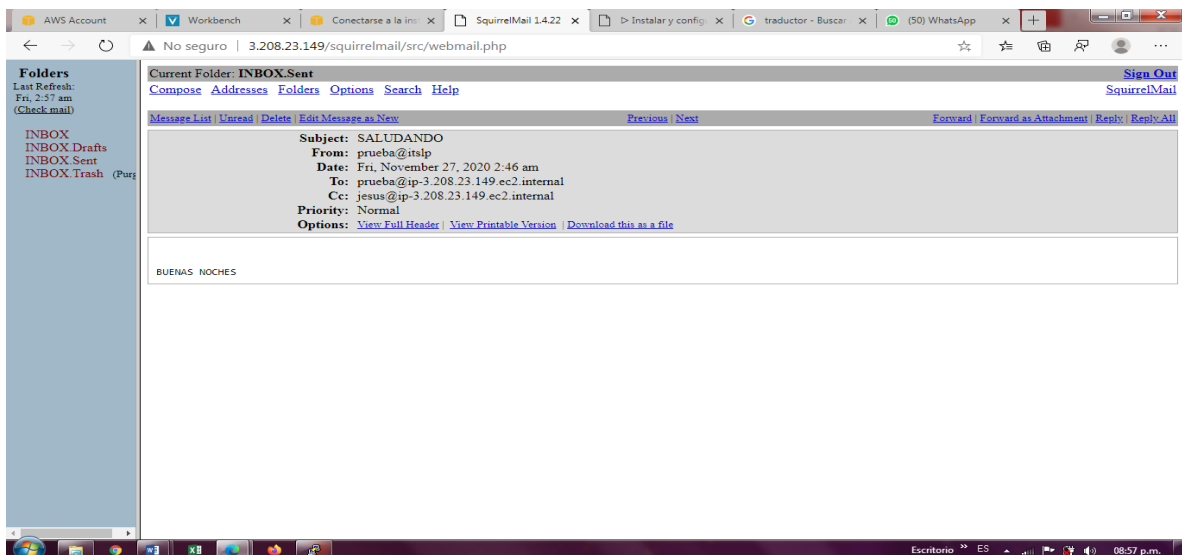
[Signature](#) [Addresses](#) [Save Draft](#) [Send](#)

BUENAS NOCHES

[Send](#)

Attach: [Elegir archivo](#) No se ha seleccionado ningún archivo [Add](#) (max. 2 M)

Verificamos el envío.



Current Folder: **INBOX.Sent**

[Compose](#) [Addresses](#) [Folders](#) [Options](#) [Search](#) [Help](#) [Sign Out](#)

[Message List](#) [Unread](#) [Delete](#) [Edit Message as New](#) [Previous](#) [Next](#) [Forward](#) [Forward as Attachment](#) [Reply](#) [Reply All](#)

Subject: SALUDANDO

From: prueba@itslp

Date: Fri, November 27, 2020 2:46 am

To: prueba@ip-3.208.23.149.ec2.internal

Cc: jesus@ip-3.208.23.149.ec2.internal

Priority: Normal

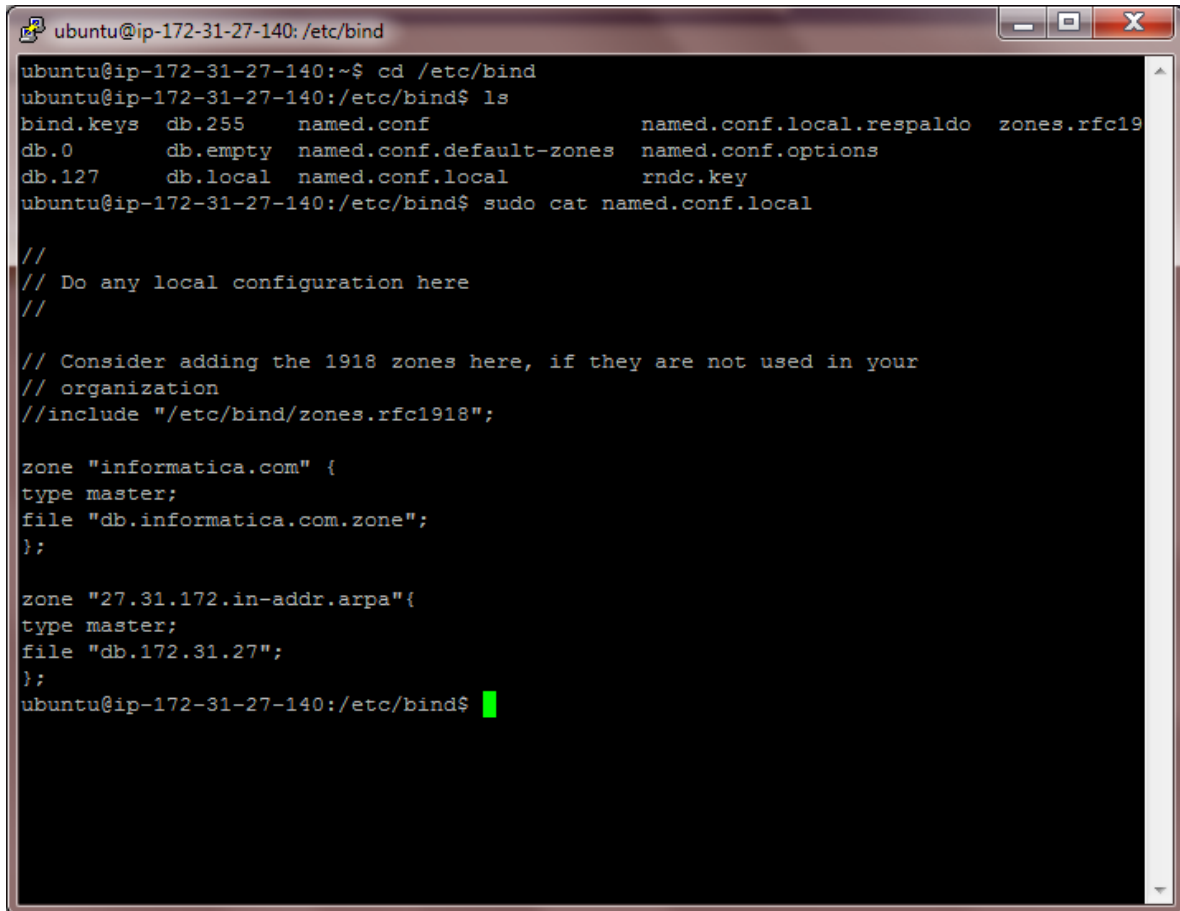
Options: [View Full Header](#) [View Printable Version](#) [Download this as a file](#)

BUENAS NOCHES

DNS

Instalamos Bind9

Creamos un named.conf.local editándolo con los datos siguientes:

A terminal window titled 'ubuntu@ip-172-31-27-140: /etc/bind' with standard window controls. The terminal shows the following commands and output:

```
ubuntu@ip-172-31-27-140:~$ cd /etc/bind
ubuntu@ip-172-31-27-140:/etc/bind$ ls
bind.keys  db.255    named.conf      named.conf.local.respaldo  zones.rfc19
db.0       db.empty  named.conf.default-zones  named.conf.options
db.127     db.local  named.conf.local  rndc.key
ubuntu@ip-172-31-27-140:/etc/bind$ sudo cat 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 "informatica.com" {
type master;
file "db.informatica.com.zone";
};

zone "27.31.172.in-addr.arpa"{
type master;
file "db.172.31.27";
};
ubuntu@ip-172-31-27-140:/etc/bind$
```

Creamos dos archivos (db.172.31.27 y db.informatica.com.zone), en /var/cache/bind. Editándolos con los siguientes datos:

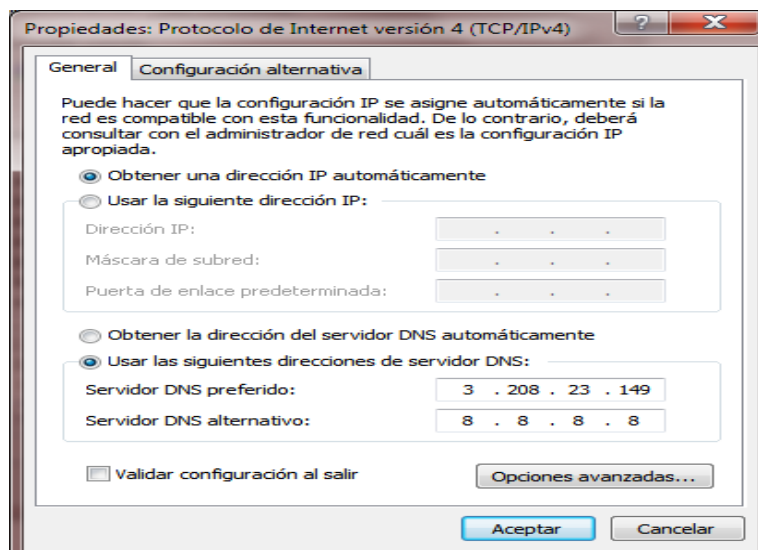
```
ubuntu@ip-172-31-27-140: /var/cache/bind
ubuntu@ip-172-31-27-140:/var/cache/bind$ sudo cat db.172.31.27
$ORIGIN informatica.com.
$TTL 86400 ; 1 dia
@ IN SOA ns.informatica.com. info.informatica.com. (
2020070801 ; serie
6H ; refresco (6 horas)
1H ; reintentos (1 hora)
2W ; expira (2 semanas)
3H ; mínimo (3 horas)
)

@ IN NS ns
@ IN MX 10 mail
@ IN A 172.31.27.140
ns IN A 172.31.27.140
mail IN A 172.31.27.140
www IN A 172.31.27.140
mail IN TXT "v=spf1 a mx a:informatica.com ip4:172.31.27.140 -all"
ubuntu@ip-172-31-27-140:/var/cache/bind$
```

```
ubuntu@ip-172-31-27-140: /var/cache/bind
ubuntu@ip-172-31-27-140:/var/cache/bind$ sudo cat db.informatica.com.zone
$ORIGIN 27.31.172.in-addr.arpa.
$TTL 86400 ; 1 dia
@ IN SOA ns.informatica.com. info.informatica.com. (
2020042501 ; serie
6H ; refresco (6 horas)
1H ; reintentos (1 hora)
2W ; expira (2 semanas)
3H ; mínimo (3 horas)
)

@ IN NS ns.informatica.com.
140 IN PTR ns.informatica.com.
140 IN PTR mail.informatica.com.
140 IN PTR www.informatica.com.
ubuntu@ip-172-31-27-140:/var/cache/bind$
```

Agregamos la IP Privada del DNS.



Reiniciamos y verificamos el estatus que no tenga error alguno.

```
ubuntu@ip-172-31-27-140: /var/cache/bind
managed-keys.bind managed-keys.bind.jnl
ubuntu@ip-172-31-27-140: /var/cache/bind$ sudo nano /etc/bind/named.conf.local
ubuntu@ip-172-31-27-140: /var/cache/bind$ sudo nano db.172.31.27
ubuntu@ip-172-31-27-140: /var/cache/bind$ sudo nano db.informatica.com.zone
ubuntu@ip-172-31-27-140: /var/cache/bind$ sudo systemctl restart bind9
ubuntu@ip-172-31-27-140: /var/cache/bind$ sudo systemctl status bind9
● named.service - BIND Domain Name Server
   Loaded: loaded (/lib/systemd/system/named.service; enabled; vendor preset: enabled)
   Active: active (running) since Thu 2020-11-26 01:36:36 UTC; 9s ago
     Docs: man:named(8)
    Main PID: 59776 (named)
      Tasks: 5 (limit: 1164)
    Memory: 12.2M
    CGroup: /system.slice/named.service
            └─59776 /usr/sbin/named -f -u bind

Nov 26 01:36:36 ip-172-31-27-140 named[59776]: network unreachable resolving './DNSKEY/IN': 2001:500:0:
Nov 26 01:36:36 ip-172-31-27-140 named[59776]: network unreachable resolving './NS/IN': 2001:500:200:
Nov 26 01:36:36 ip-172-31-27-140 named[59776]: network unreachable resolving './DNSKEY/IN': 2001:dc3:
Nov 26 01:36:36 ip-172-31-27-140 named[59776]: network unreachable resolving './NS/IN': 2001:dc3:354:
Nov 26 01:36:36 ip-172-31-27-140 named[59776]: network unreachable resolving './DNSKEY/IN': 2001:7fd4:
Nov 26 01:36:36 ip-172-31-27-140 named[59776]: network unreachable resolving './NS/IN': 2001:7fd4:1#53
Nov 26 01:36:36 ip-172-31-27-140 named[59776]: network unreachable resolving './DNSKEY/IN': 2001:500:
Nov 26 01:36:36 ip-172-31-27-140 named[59776]: network unreachable resolving './NS/IN': 2001:500:a8:
Nov 26 01:36:36 ip-172-31-27-140 named[59776]: managed-keys-zone: Key 20326 for zone . is now trusted
Nov 26 01:36:36 ip-172-31-27-140 named[59776]: resolver priming query complete
lines 1-20/20 (END)...skipping...
● named.service - BIND Domain Name Server
   Loaded: loaded (/lib/systemd/system/named.service; enabled; vendor preset: enabled)
   Active: active (running) since Thu 2020-11-26 01:36:36 UTC; 9s ago
     Docs: man:named(8)
```

Usamos nslookup www.informatica.com, nos dara la información.

```
C:\Windows\system32\cmd.exe

DNS request timed out.
    timeout was 2 seconds.
DNS request timed out.
    timeout was 2 seconds.
DNS request timed out.
    timeout was 2 seconds.
DNS request timed out.
    timeout was 2 seconds.
*** Se agotó el tiempo de espera de la solicitud a UnKnown

C:\Users\Jean Francois>nslookup www.informatica.com
DNS request timed out.
    timeout was 2 seconds.
Servidor: UnKnown
Address: fe80::1

Respuesta no autoritativa:
Nombre: e2762.a.akamaiedge.net
Address: 184.50.157.197
Aliases: www.informatica.com
         san-www.informatica.com.chinacdn.edgekey.net
         san-www.informatica.com.chinacdn.edgekey.net.globalredir.akadns.net

C:\Users\Jean Francois>
```