

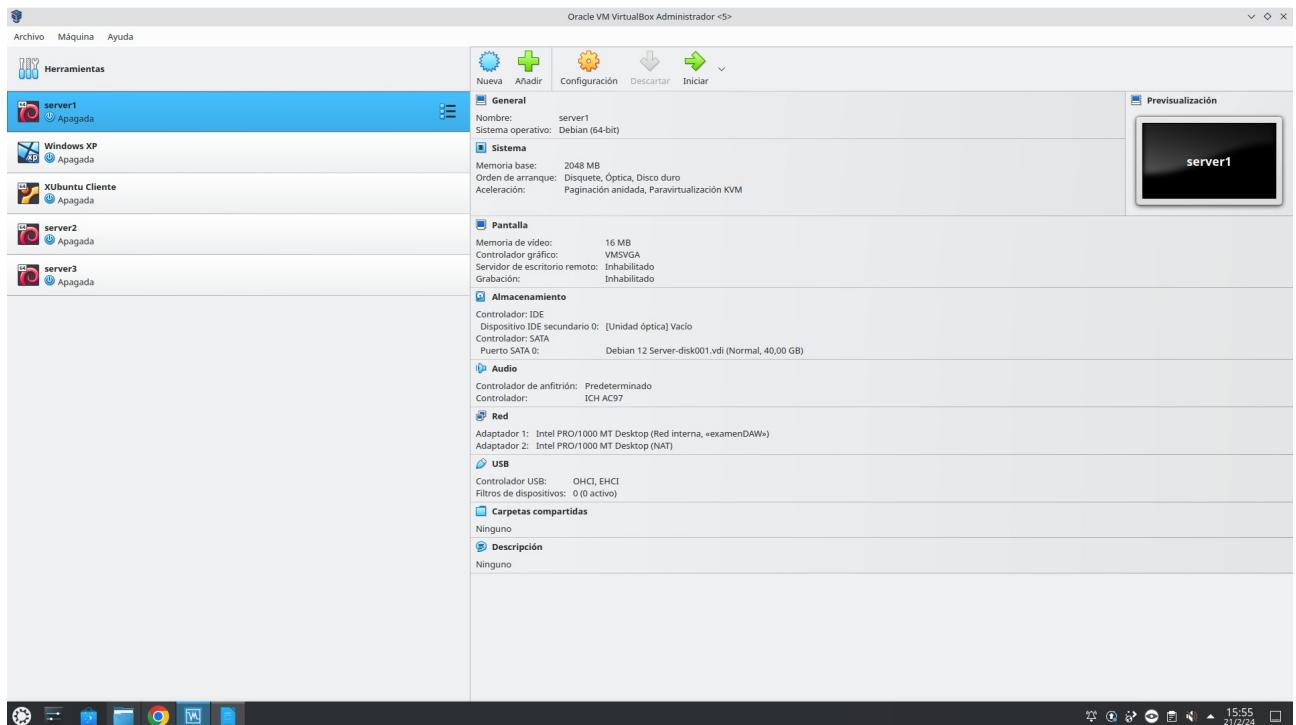
EXAMEN 2^a EVALUACIÓN

Ejercicio1:

Realizare la siguiente configuración para todos los servidores dando por hecho que se tiene que hacer en todos los servidores para instalar el software necesario:

1-se asigna a todos los servidores 2 adaptadores de red:

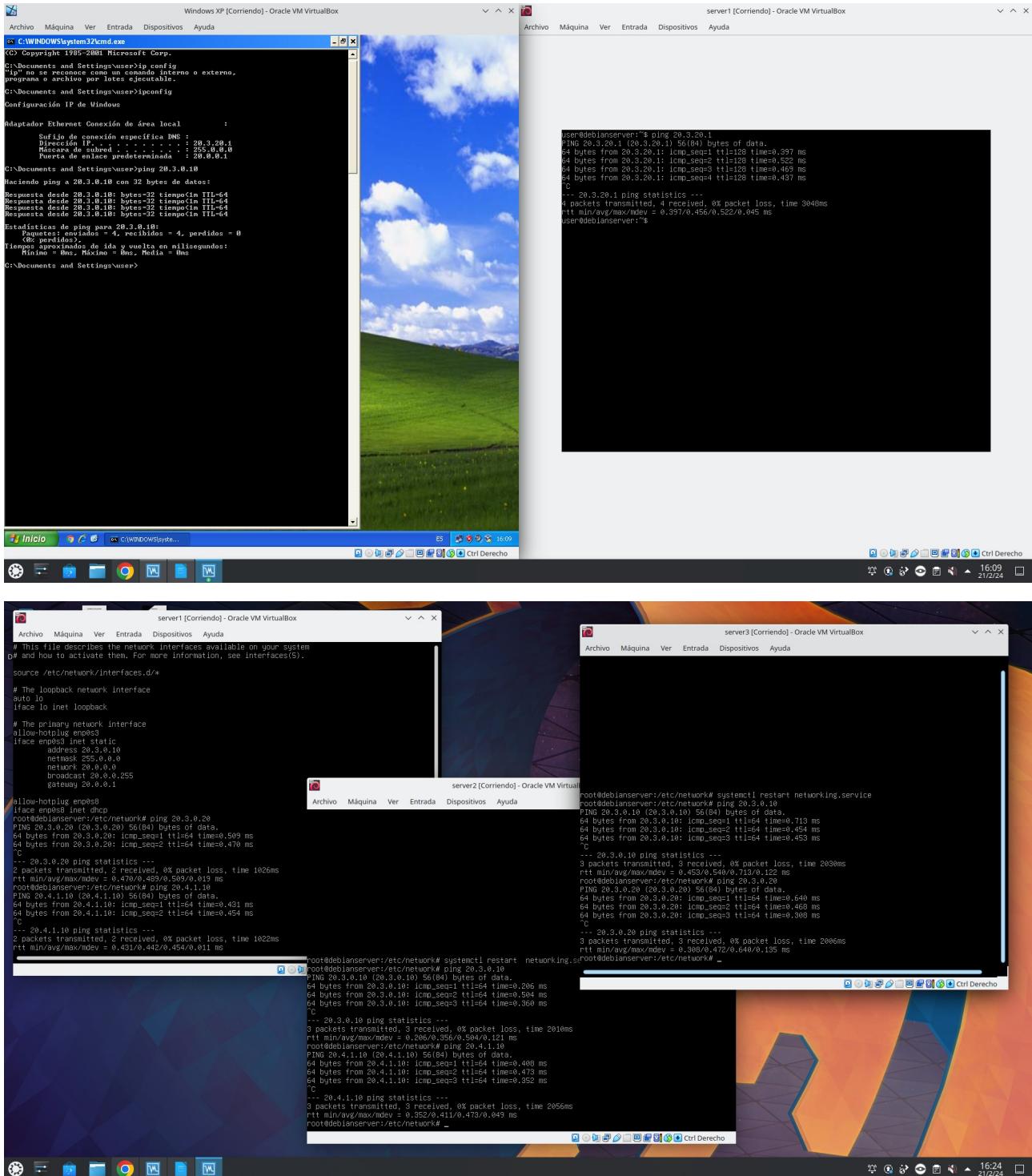
el primero para la red interna y segundo estará en NAT para instalar el software:



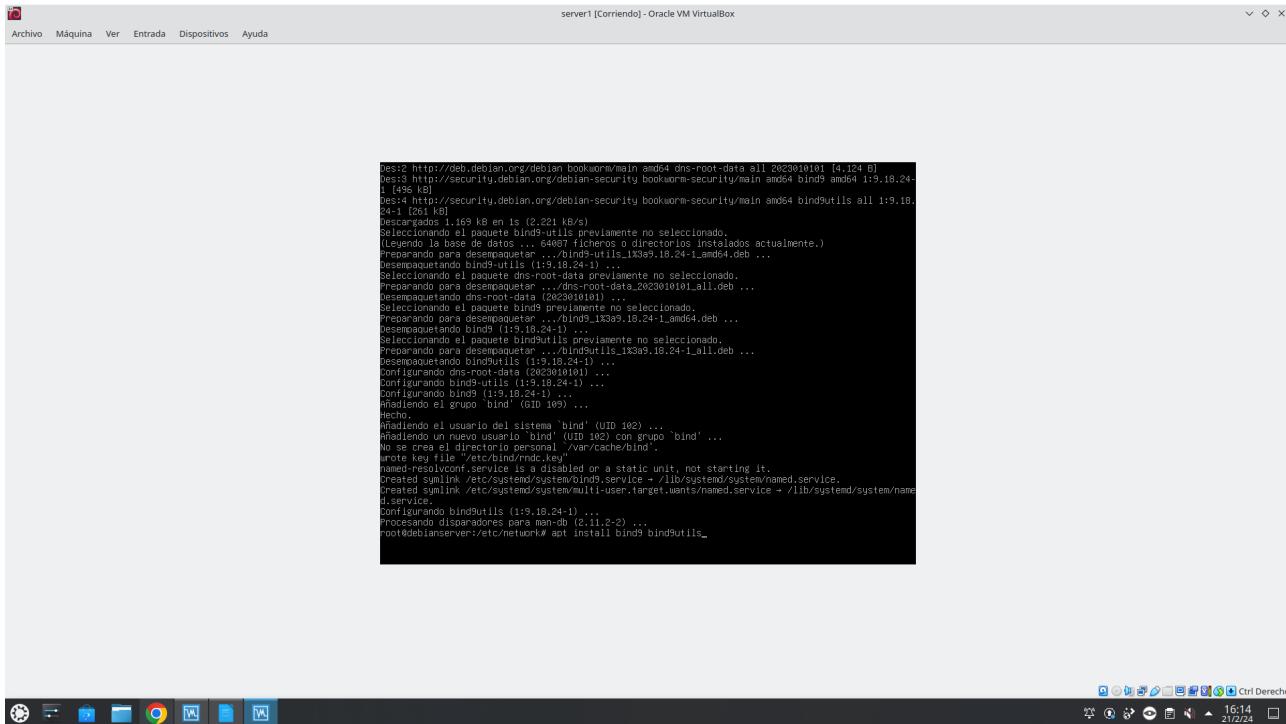
lo siguiente es configurar la red para que sea estática:(lo mismo para el resto de equipos)

```
GNU nano 7.2                               /etc/network/interfaces
# This file describes the network interfaces available on your system
# and how to activate them. For more information, see interfaces(5).
source /etc/network/interfaces.d/*
# The loopback network interface
auto lo
iface lo inet loopback
# The primary network interface
allow-hotplug em1
iface em1 inet static
    address 20.3.0.10
    netmask 255.255.255.0
    network 20.0.0.0
    broadcast 20.0.0.255
    gateway 20.0.0.1
allow-hotplug em2
iface em2 inet dhcp
```

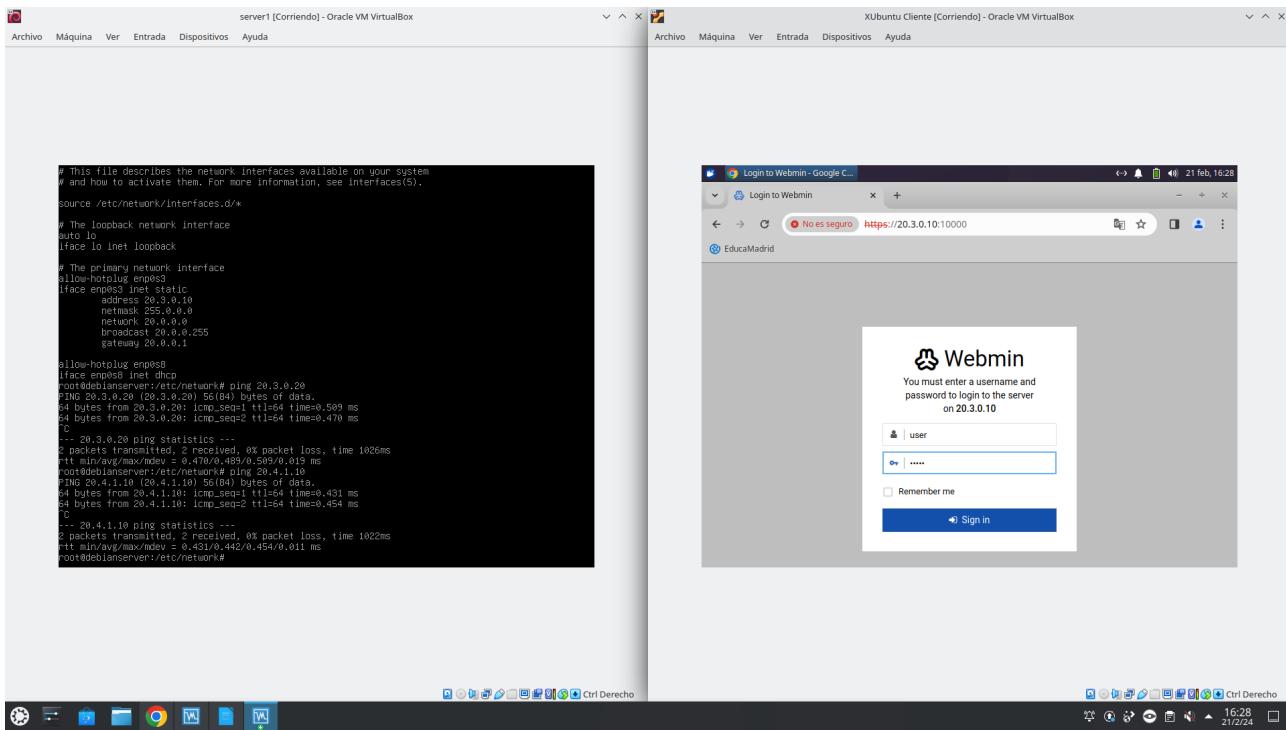
ahora comprobación de conexión entre ellas:



ahora procedo a instalar el software en las maquinas: (en principio bind9 y bind9utils y resolv)



ahora procedo a conectarme desde el cliente linux grafico a los webmin para empezar la configuración del dns:



DNS1-MASTER:

Primero creo la zona maestra en este caso seria tigre101.info:

The screenshot shows the 'Create Master Zone' configuration page. The 'Domain name / Network' field contains 'tigre101.info'. The 'Master server' field is set to 'server1.tigre101.info' with the option 'Add NS record for master server?' checked. The 'Email address' field is 'inventado@tigre101.info'. The 'Records file' dropdown is set to 'Automatic'. Under 'New master zone options', the 'Zone type' is 'Forward (Names to Addresses)'. Other settings include: 'Add reverses for template addresses?' (Yes), 'Refresh time' (3600 seconds), 'Transfer retry time' (600 seconds), 'Expiry time' (1209600 seconds), and 'Negative cache time' (3600 seconds). A large orange 'Create' button is at the bottom.

una vez creada la zona directa me dirijo a crear la inversa que en este caso seria la 20:

The screenshot shows the 'Create Master Zone' configuration page for a reverse zone. The 'Domain name / Network' field contains '20'. The 'Master server' field is set to 'server1.tigre101.info' with the option 'Add NS record for master server?' checked. The 'Email address' field is 'inventado@tigre101.info'. The 'Records file' dropdown is set to 'Automatic'. Under 'New master zone options', the 'Zone type' is 'Reverse (Addresses to Names)'. Other settings include: 'Add reverses for template addresses?' (No), 'Refresh time' (3600 seconds), 'Transfer retry time' (600 seconds), 'Expiry time' (1209600 seconds), and 'Negative cache time' (3600 seconds). A large orange 'Create' button is at the bottom.

quedaria asi:

The screenshot shows the XUbuntu Cliente [Corriendo] - Oracle VM VirtualBox window. The URL is https://20.3.0.10:10000/bind8/?xnavigation=1. The main content area displays the "Global Server Options" section for BIND DNS Server version 9.18. The interface includes a sidebar with "Webmin", "System", "Servers" (selected), "Tools", "Networking", "Hardware", "Cluster", "Un-used Modules", and "Refresh Modules". Below the sidebar is a "Search" bar. The main panel has several tabs at the top: "Other DNS Servers", "Logging and Errors", "Access Control Lists", "Files and Directories", "Forwarding and Transfers", "Addresses and Topology", "Miscellaneous Options", "Control Interface Options", "DNS Keys", "Zone Defaults", "Setup RNDC", "DNSSEC Verification", "DNSSEC Key Re-Signing", "Check BIND Config", and "Edit Config File". Under "Existing DNS Zones", there is a table listing zones and their types. At the bottom of the table are buttons for "Delete Selected", "Update Records in Selected", "Add Record to Selected", and "Delete Records in Selected". The status bar at the bottom shows various icons and the date/time 21 feb, 16:34.

dicho esto me dispongo a crear los addresses (enseño como se hace una vez) que quedarían de la siguiente manera:

The screenshot shows the XUbuntu Cliente [Corriendo] - Oracle VM VirtualBox window. The URL is https://20.3.0.10:10000/bind8/edit_record.cgi?zone=tigre101.info&id=server1%2Etigre101%2Einfo%2E%2F20%2E3%2E0%2E10&num=3&type=A&sort=&view=any&xnavigation=1. The main content area displays the "Edit Address" page for the zone tigre101.info. The sidebar and other interface elements are identical to the previous screenshot. The "Edit Address Record" form contains fields for "Name" (server1.tigre101.info.), "Address" (20.3.0.10), and "Time To Live" (Default (3600) seconds). There is also a "Update reverse?" checkbox with options "Yes" and "No". At the bottom of the form are "Save" and "Delete" buttons, along with links to "Return to zone list", "Return to record types", and "Return to records". The status bar at the bottom shows various icons and the date/time 21 feb, 16:36.

y el resto se quedaría así en la zona directa:

The screenshot shows the 'Address Records' section of the BIND DNS Server in Webmin. The URL is https://20.3.0.10:10000/bind8/edit_recs.cgi?zone=tigre101.info&view=any&type=A&sort=&xnavigation=1. The interface includes fields for 'Name', 'Address', 'Time-To-Live', and 'Update reverse?'. A table lists existing records with columns for Name, TTL, and Address. Buttons for 'Create', 'Delete Selected', and navigation links ('Return to zone list', 'Return to record types') are also present.

y para la zona inversa sería lo siguiente ya que al crear primero la zona inversa antes de generar los address se crean los registros automáticamente:

The screenshot shows the 'Reverse Address Records' section of the BIND DNS Server in Webmin. The URL is https://20.3.0.10:10000/bind8/edit_recs.cgi?zone=20.in-addr.arpa&view=any&type=PTR&sort=&xnavigation=1. The interface includes fields for 'Address', 'Hostname', 'Time-To-Live', and 'Update forward?'. A table lists existing records with columns for Address, TTL, and Hostname. Buttons for 'Create', 'Delete Selected', and navigation links ('Return to zone list', 'Return to record types') are also present.

para el alias sería de la siguiente forma:

The screenshot shows the XUbuntu Cliente [Corriendo] - Oracle VM VirtualBox interface. The browser window displays the URL https://20.3.0.10:10000/bind8/edit_recs.cgi?zone=tigre101.info&view=any&type=CNAME&xnavigation=1. The main content area is titled "Name Alias Records In tigre101.info". A form is shown for adding a new record:

Name	luna
Time-To-Live	Default seconds
<input type="button" value="Create"/>	

Below the form, there is a search bar labeled "Show records matching:" and a "Search" button. At the bottom of the page are two buttons: "Return to zone list" and "Return to record types".

y quedaría así:

The screenshot shows the same XUbuntu Cliente [Corriendo] - Oracle VM VirtualBox interface and browser URL. The main content area is titled "Name Alias Records In tigre101.info". The newly added record is listed in the table:

Name	TTL	Real Name
luna.tigre101.info.	3600	marte.tigre101.info.

At the bottom of the page are two buttons: "Return to zone list" and "Return to record types".

cabe destacar que se tiene que asignar unos reenviadores de la siguiente manera:

moviendonos a server → bind DNS server → forwarding and transfers y ahí indicamos los servidores de reenviador

The screenshot shows the XUbuntu Cliente [Corriendo] - Oracle VM VirtualBox desktop environment. The browser window displays the 'BIND DNS Server/Forwarding...' configuration page at https://20.3.0.10:10000/bind8/conf_forwarding.cgi?xnavigation=1. The left sidebar of the Webmin interface is visible, showing the 'Servers' section with 'BIND DNS Server' selected. The main content area is titled 'Forwarding and Transfers' and contains a table for 'Servers to forward queries to' with entries for IP addresses 8.8.8.8, 8.8.4.4, 1.1.1.1, and 1.1.1.1. It also includes sections for 'Lookup directly if forwarders cannot?', 'Maximum zone transfer time', 'Zone transfer format', and various concurrency settings like 'Maximum concurrent incoming transfers per server' and 'Maximum concurrent outgoing zone transfers'. A 'Save' button is at the bottom.

se me olvido agregar la zona como address:

The screenshot shows the same XUbuntu Cliente [Corriendo] - Oracle VM VirtualBox desktop environment. The browser window displays the 'BIND DNS Server/Address R...' configuration page at https://20.3.0.10:10000/bind8/edit_recs.cgi?zone=tigre101.info&view=any&type=A&sort=&xnavigation=1. The left sidebar of the Webmin interface is visible, showing the 'Servers' section with 'BIND DNS Server' selected. The main content area is titled 'Address Records' and shows a table of records for the zone 'tigre101.info'. The table columns are 'Name', 'TTL', and 'Address'. The records listed are: server1.tigre101.info (TTL 3600, Address 20.3.0.10), server2.tigre101.info (TTL 3600, Address 20.3.0.20), server3.tigre101.info (TTL 3600, Address 20.4.1.10), marte.tigre101.info (TTL 3600, Address 20.3.20.1), neptuno.tigre101.info (TTL 3600, Address 20.3.20.2), and tigre101.info (TTL 3600, Address 20.3.0.10). There are buttons for 'Create', 'Delete Selected', and 'Delete reverses too?'.

DNS2-SLAVE:

Para esta sección primero tengo que agregar el slave como name server dentro de la zona master:

The screenshot shows the Webmin interface for a BIND DNS Server. The left sidebar is titled 'Webmin' and includes sections for System, Servers, Tools, Networking, Hardware, Cluster, and Refresh Modules. Under 'Servers', 'BIND DNS Server' is selected. The main content area is titled 'Name Server Records' for the zone 'tigre101.info'. It displays a table with one row: 'Name Server' set to 'server2.tigre101.info.' and 'TTL' set to '3600'. Below the table are search and selection filters. At the bottom are buttons for 'Delete Selected', 'Return to zone list', and 'Return to record types'.

luego creo la zona slave:

The screenshot shows the Webmin interface for a BIND DNS Server. The left sidebar is identical to the previous screenshot. The main content area is titled 'Create Slave Zone' for the zone 'tigre101.info'. It has sections for 'Zone type' (Forward), 'Domain name / Network' (tigre101.info), 'Master servers' (28.3.8.16), and 'Server port' (Default). The 'Records file' section is set to 'Automatic'. At the bottom are buttons for 'Create' and 'Return to zone list'.

ahora tengo que configurar en el principal que se notifiquen los cambios realizados en los servidores esclavos(es dentro de zone defaults abajo del todo, se puede hacer en zonas dedicadas pero no se especifico en el examen):

The screenshot shows the 'BIND DNS Server/Zone Defaults' configuration page in Webmin. The left sidebar shows the navigation tree under 'Servers'. The main content area has several sections:

- Create DNSSEC key and sign new zones?**: Options: Yes (radio button selected), No.
- Initial key algorithm**: RSASHA1 (selected).
- Default zone settings**:
 - Allow transfers from...**: Default (radio button selected).
 - Also notify slaves...**: Default (radio button selected).
- Check names in master zones?**: Options: Ignore, Warn, Fail, Default (Default is selected).
- Check names in slave zones?**: Options: Ignore, Warn, Fail, Default (Default is selected).
- Check names in responses?**: Options: Ignore, Warn, Fail, Default (Default is selected).
- Notify slaves of changes?**: Options: Yes (radio button selected), No, explicit, Default.

A 'Save' button is at the bottom right.

entonces para aplicar cambios y que se realice la transferencia se necesita crear un registro nuevo o forzar la transferencia de registros en mi caso creare un alias inventado sobre el cliente de ubuntu llamado “neptuno” ya que como se aprecia en la siguiente captura no se realizó ninguna transferencia de registros:

The screenshot shows the 'Edit Slave Zone' configuration page for the 'tigre101.info' zone in Webmin. The left sidebar shows the navigation tree under 'Servers'. The main content area displays a table of records:

Type	Records	Type	Records
Address	0	Reverse Address	0
Name Server	0	Location	0
Name Alias	0	Service Address	0
Mail Server	0	Public Key	0
Host Information	0	SSL Certificate	0
Text	0	SSH Public Key	0
Sender Permitted From	0	Certificate Authority	0
DMARC	0	Name Authority	0
Well Known Service	0	DNSSEC Parameters	0
Responsible Person	0	IPv6 Address	0

Below the table are three buttons: 'View Records', 'Edit Zone Options', and 'Test Zone Transfer'. At the bottom left is a red 'Delete Zone' button with the text 'Click this button to delete this zone from your DNS server. The source master zone will be untouched.' A 'Return to zone list' button is at the bottom right.

The screenshot shows the XUbuntu Client [Corriendo] - Oracle VM VirtualBox window. The main content is the Webmin interface under the Servers section, specifically the BIND DNS Server module. A sub-menu 'Name Alias Records' is open, showing a table with one entry: 'luna.tigre101.info'. A new record is being created for 'ubuntu', with 'Real Name' set to 'neptuno.tigre101.info'. The interface includes a search bar, a toolbar, and a bottom navigation bar.

al probar la transferencia de datos test falla por el siguiente motivo:

The screenshot shows the XUbuntu Client [Corriendo] - Oracle VM VirtualBox window. The main content is the Webmin interface under the Servers section, specifically the BIND DNS Server module. A sub-menu 'Test Zone Transfer' is open, displaying an error message: 'Testing transfer of slave zone from 20.3.0.10... Failed; DIG 9.18.24-1-Debian IN AXFR tigre101.info @20.3.0.10 ; global options: +cmd ; Transfer failed.' The interface includes a search bar, a toolbar, and a bottom navigation bar.

por lo cual no puedo perder tiempo en este punto supongo que es por faltar el comando dig y ahora no me acuerdo el comando para instalarlo.

DNS2-delegado:

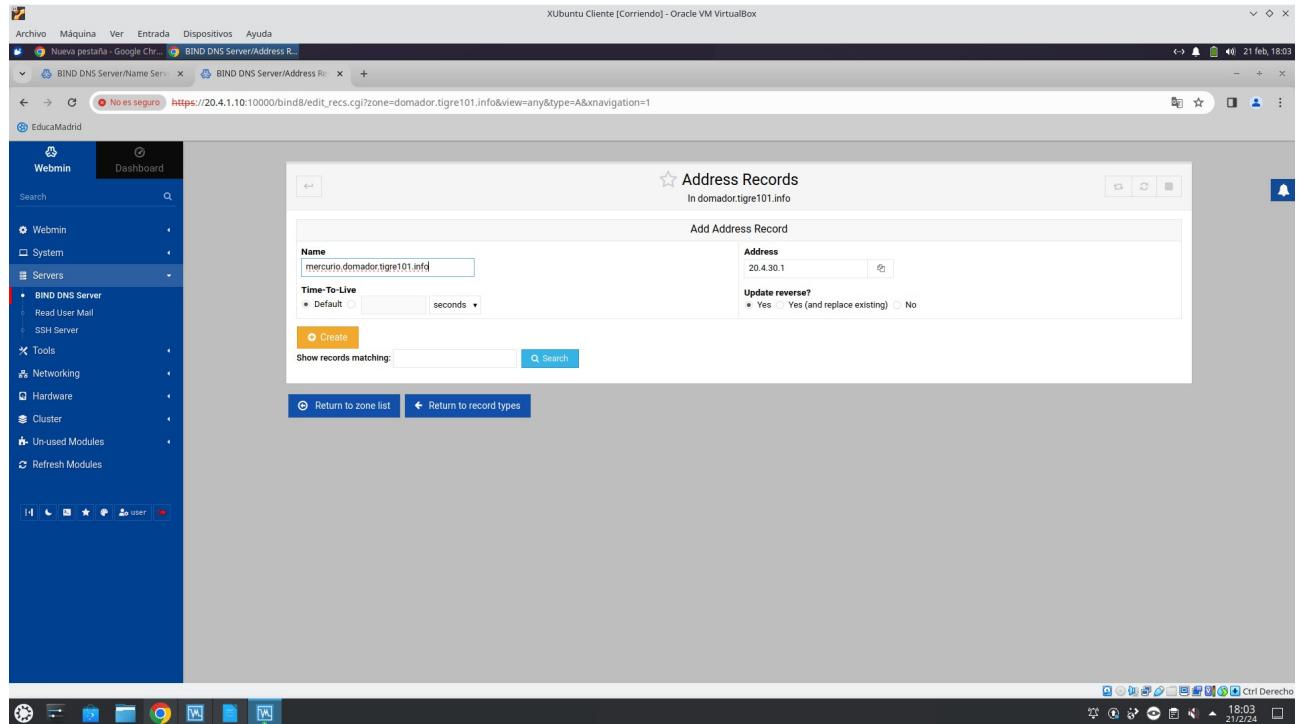
Se tiene que crear en el dominio principal un nameserver que apunte al tercer servidor:

The screenshot shows the XUbuntu Client [Corriendo] - Oracle VM VirtualBox interface. The main window displays the 'Name Server Records' section for the zone 'tigre101.info'. A new 'Name Server Record' is being created, pointing to 'server3.tigre101.info'. The interface includes a search bar, a table for existing records, and buttons for creating, deleting, and returning to the zone list.

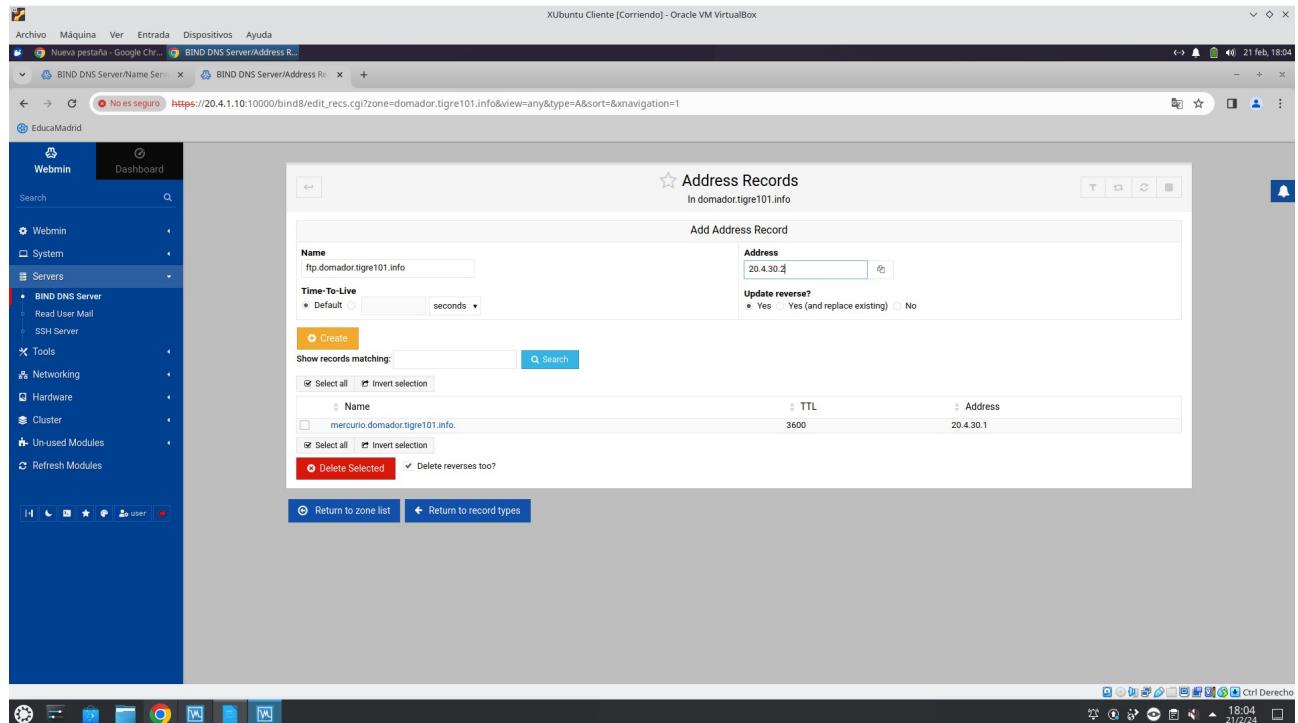
como ya teníamos el servidor identificado en address solo falta ir al tercer servidor y configurar la zona delegada:

The screenshot shows the XUbuntu Client [Corriendo] - Oracle VM VirtualBox interface. The main window displays the 'Create Master Zone' interface. A new master zone is being created for the domain 'tigre101.info'. The configuration includes setting the zone type to 'Forward (Names to Addresses)', specifying the domain name as 'domador.tigre101.info', and defining the master server as 'server3.tigre101.info'. Other options like refresh time, transfer retry time, and expiry time are also set.

ahora toca crear los registros y listo:



The screenshot shows the 'Address Records' page in Webmin for the zone 'domador.tigre101.info'. A new A record is being created for the host 'mercurio'. The 'Name' field contains 'mercurio.domador.tigre101.info', the 'Address' field contains '20.4.30.1', and the 'Time-To-Live' is set to 'Default'. The 'Update reverse?' option is checked. The 'Create' button is highlighted in orange.

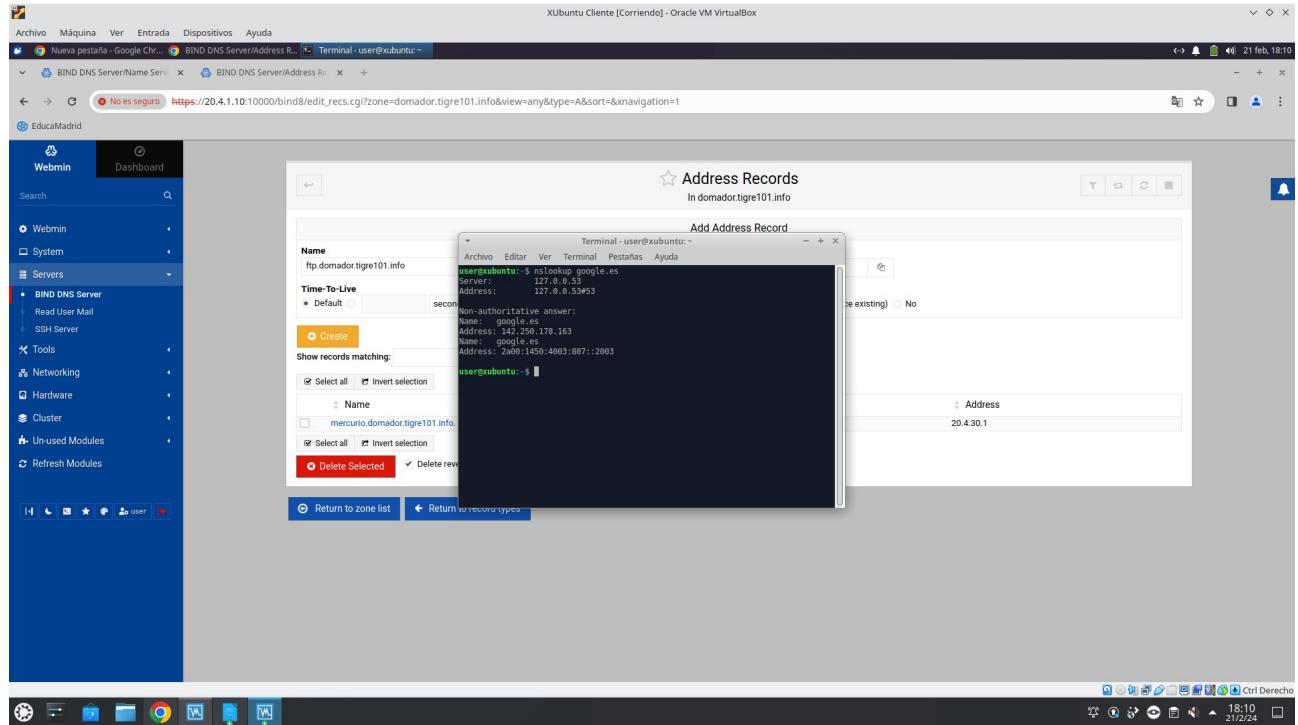


The screenshot shows the 'Address Records' page again, but this time for the host 'ftp'. The 'Name' field contains 'ftp.domador.tigre101.info', the 'Address' field contains '20.4.30.1', and the 'Time-To-Live' is set to 'Default'. The 'Update reverse?' option is checked. The 'Create' button is highlighted in orange. Below the form, a table lists existing records for both 'mercurio' and 'ftp' hosts, showing their TTL values (3600) and corresponding IP addresses (20.4.30.1).

y no olvidar su zona inversa pero por no hacerlo repetitivo ya estaria creado.

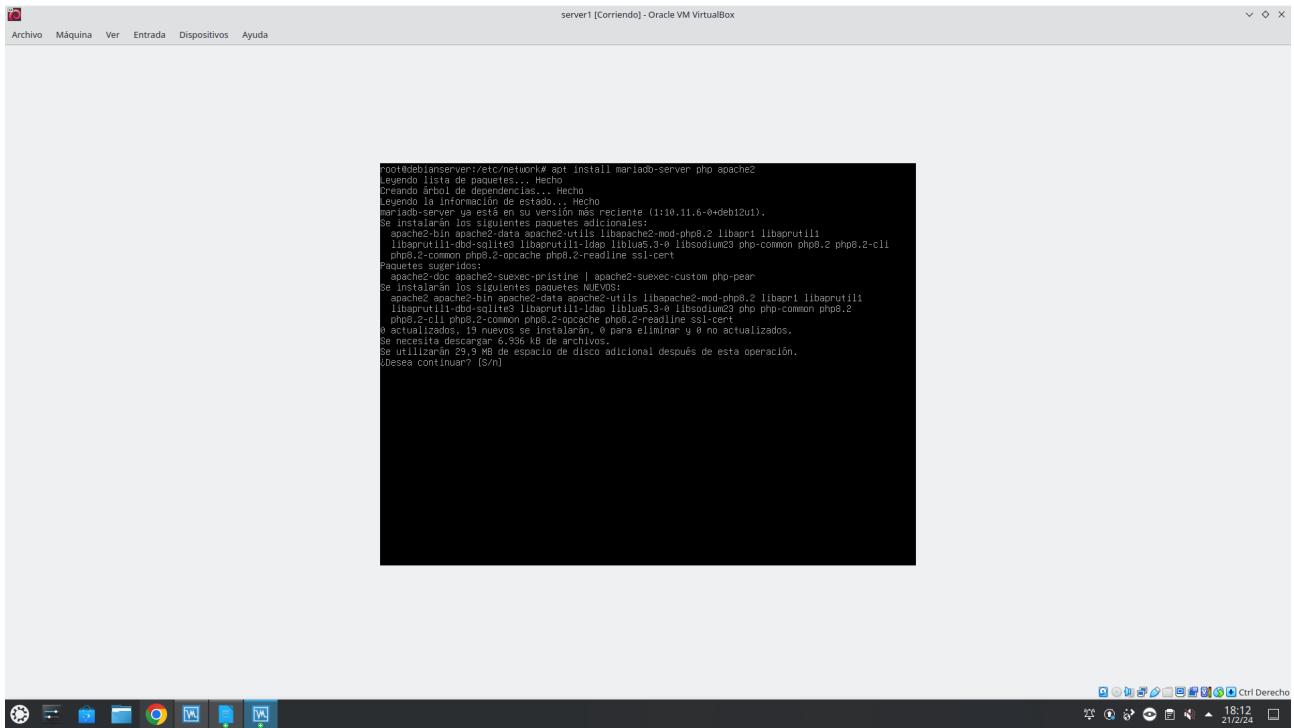
COMPROBACIÓN:

Google.es:

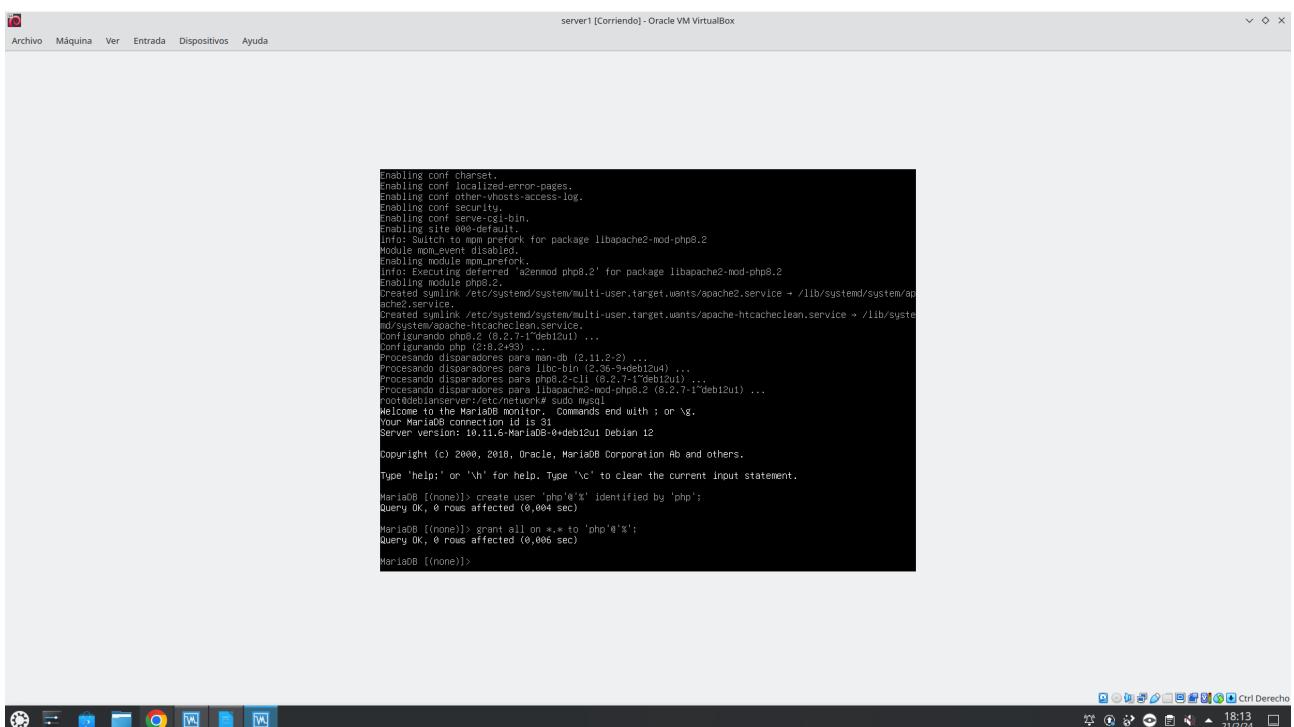


EJERCICIO2-WORDPRESS:

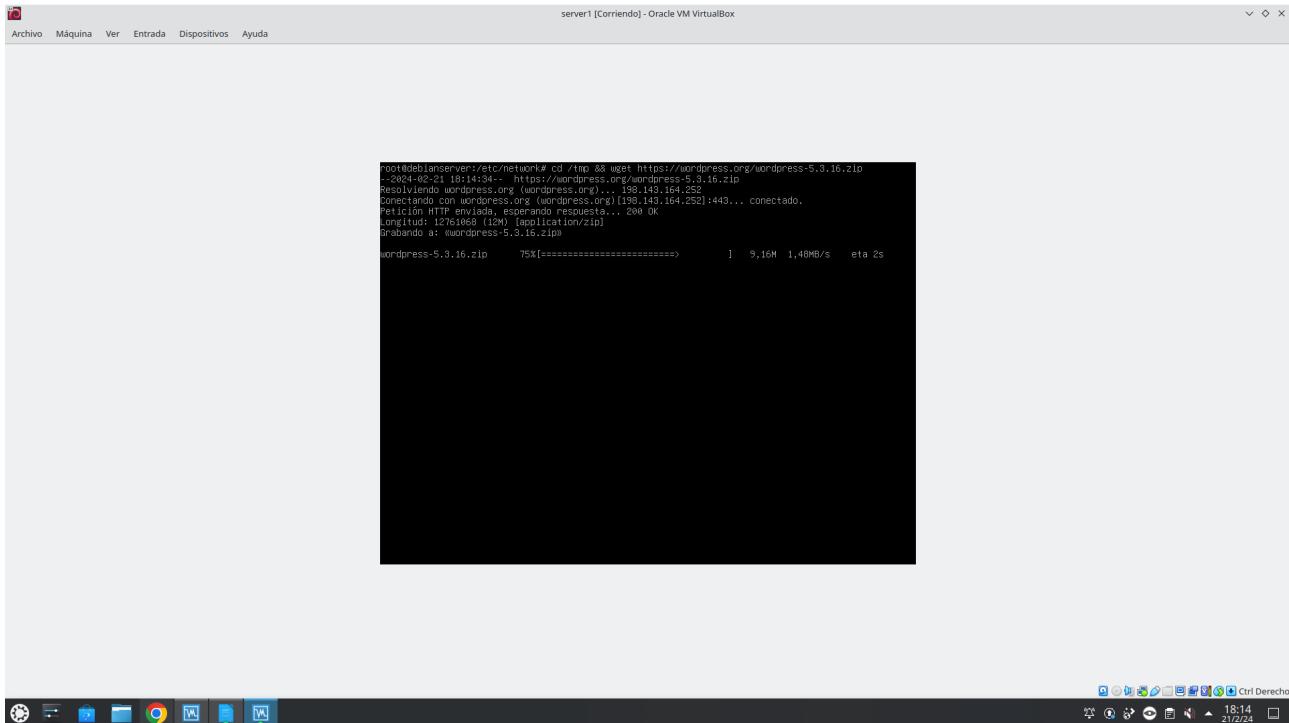
primero de todo preparare el entorno con los requisitos de una lamp, tales como: apache2,mariaDB,php.



tras esto creare el usuario para la practica en la base de datos y su respectiva base de datos:



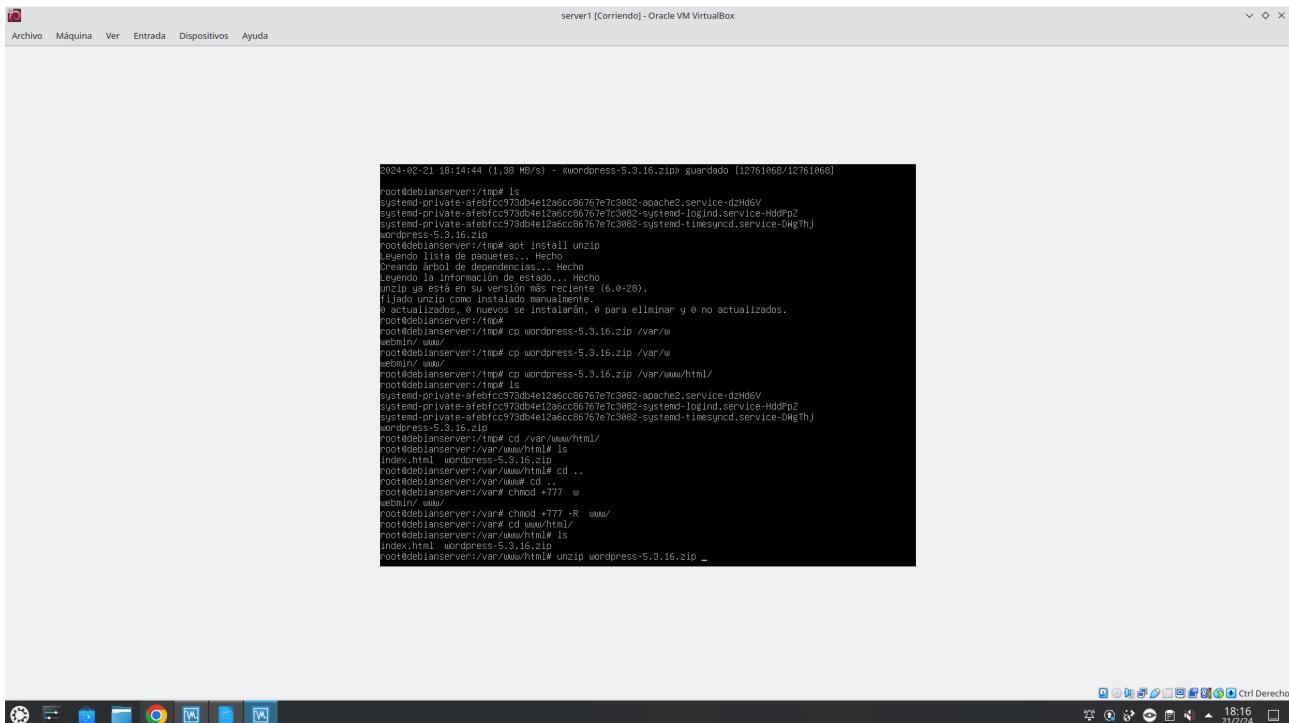
ahora procedo a descargar el comprimido de wordpress con el comando :
cd /tmp && wget <https://wordpress.org/wordpress-5.3.16.zip>
y luego el comando unzip



```
root@debianserver:/etc/network# cd /tmp && wget http://wordpress.org/wordpress-5.3.16.zip
--2024-02-21 18:14:34-- https://wordpress.org/wordpress-5.3.16.zip
Resolviendo wordpress.org (wordpress.org)... 198.143.164.252
Conectando con wordpress.org (wordpress.org)[198.143.164.252]:443... conectado.
HTTP request sent, awaiting response... 200 OK
Longitud: 12761068 [application/xzip]
Grabando a: «wordpress-5.3.16.zip»

wordpress-5.3.16.zip 75%[=====] 9,16M 1,40MB/s eta 2s
```

ahora lo movere a la carpeta /var/www/html una copia del original por si acaso se complica.
Tambien dare permisos sobre la carpeta al usuario www-data y cambiare los permisos acl.tambien
creare un directorio de subidas al servidor llamado uploads

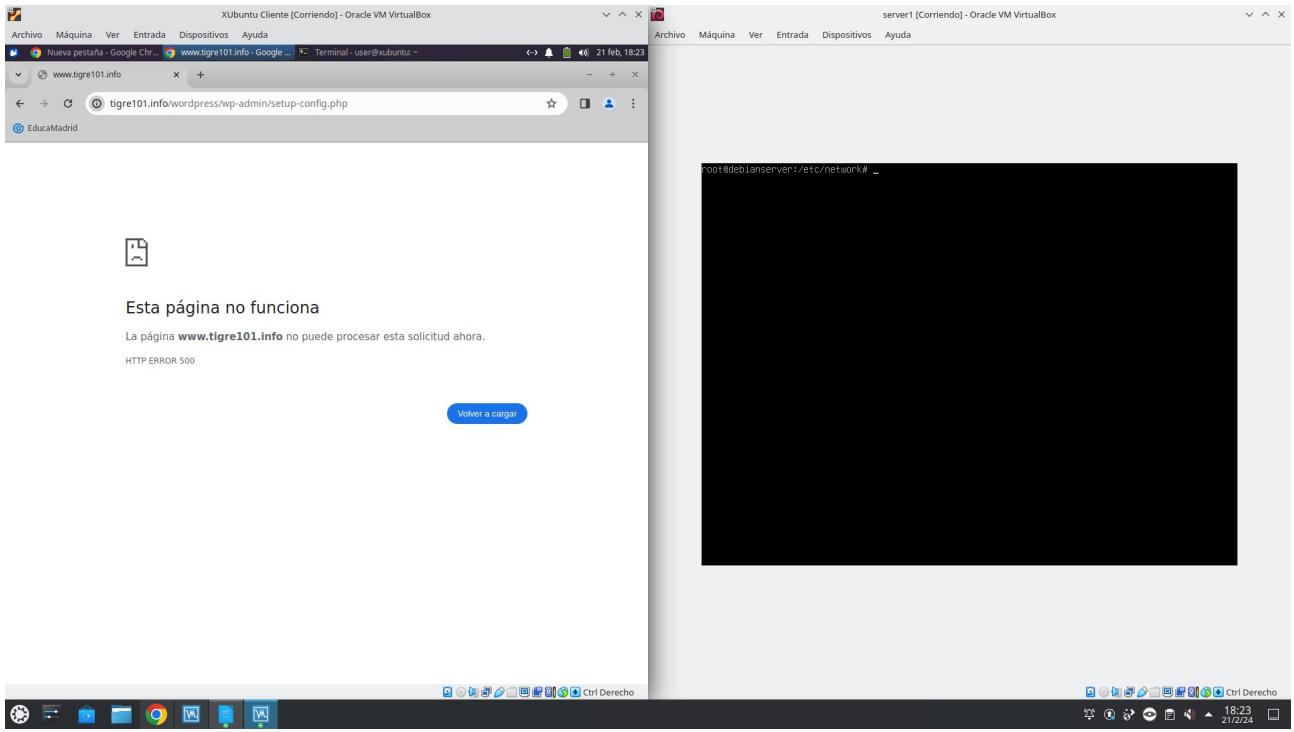


```
root@debianserver:/tmp# apt install unzip
root@debianserver:/tmp# cp wordpress-5.3.16.zip /var/www/
root@debianserver:/tmp# cp wordpress-5.3.16.zip /var/www/
root@debianserver:/tmp# cp /var/www/wordpress-5.3.16.zip /var/www/html/
root@debianserver:/tmp# ls /var/www/html/
index.html wordpress-5.3.16.zip
root@debianserver:/var/www/html# cd ..
root@debianserver:/var/www# cd ..
root@debianserver:/var# chmod +777 www
root@debianserver:/var# chmod +777 -R www
root@debianserver:/var# cd www/html/
root@debianserver:/var/www/html# ls
index.html wordpress-5.3.16.zip
root@debianserver:/var/www/html# unzip wordpress-5.3.16.zip
```

```

infating: wordpress/wp-admin/js/color-picker.js
infating: wordpress/wp-admin/js/password-strength-meter.js
infating: wordpress/wp-admin/js/autosave.js
infating: wordpress/wp-admin/js/editor-expand.js
infating: wordpress/wp-admin/js/code-editor.min.js
infating: wordpress/wp-admin/js/set-post-thumbnail.js
infating: wordpress/wp-admin/js/autosave-link.php
infating: wordpress/wp-admin/widgets.php
infating: wordpress/wp-admin/setup-config.php
infating: wordpress/wp-admin/install.php
infating: wordpress/wp-admin/themes-new.php
infating: wordpress/wp-admin/post-new.php
infating: wordpress/wp-admin/themes.php
infating: wordpress/wp-admin/options-reading.php
infating: wordpress/wp-trackback.php
infating: wordpress/wp-trackback-post.php
root@debianserver:/var/www/html# ls
index.html  wordpress-5.3.16.zip
root@debianserver:/var/www/html# ls
index.html  wordpress-5.3.16.zip
root@debianserver:/var/www/html# cd wordpress
root@debianserver:/var/www/html/wordpress# ls
index.php  wp-admin    wp-content    wp-load.php  wp-signup.php
index.html  wp-admin-ajax.php  wp-content/themes  wp-mail.php  wp-trackback.php
readme.html  wp-comments-post.php  wp-includes  wp-links-opml.php  wp-settings.php
wp-activate.php  wp-config-sample.php  wp-links-search.php  wp-typography.php
wp-deactivate.php  wp-content/themes  wp-content/themes  wp-mail.php
wp-embed.php  wp-content/themes  wp-content/themes  wp-mail.php
wp-links-search.php  wp-content/themes  wp-content/themes  wp-mail.php
wp-mail.php  wp-content/themes  wp-content/themes  wp-mail.php
wp-signup.php  wp-content/themes  wp-content/themes  wp-mail.php
wp-trackback.php  wp-content/themes  wp-content/themes  wp-mail.php
wp-typography.php  wp-content/themes  wp-content/themes  wp-mail.php
root@debianserver:/var/www/html/wordpress# wp-content# ls -l
total 16
drwxr-xr-x  2 root root 28 feb  8 2012 index.php
drwxr-xr-x  3 root root 4096 oct 12 21:01 plugins
drwxr-xr-x  5 root root 4096 oct 12 21:31 themes
drwxr-xr-x  2 root root 4096 feb 21 18:18 uploads
root@debianserver:/var/www/html/wordpress# wp-content# _
```

tras esto podemos acceder al wordpress poniendo la ruta en un navegador tal que asi:
www.tigre101.info/wordpress y el automaticamente nos redirigira a la pagina conveniente de bienvenida para configurar.



tras esto son solo dos tonterias pero como la version de php no es compatible y no hay tiempo si hubiera sido la ultima version.

tras esto podemos acceder al wordpress poniendo la ruta en un navegador tal que asi:
<http://localhost/wordpress> y el automaticamente nos redirigira a la pagina conveniente de bienvenida para configurar.