

VirtualHost per IP

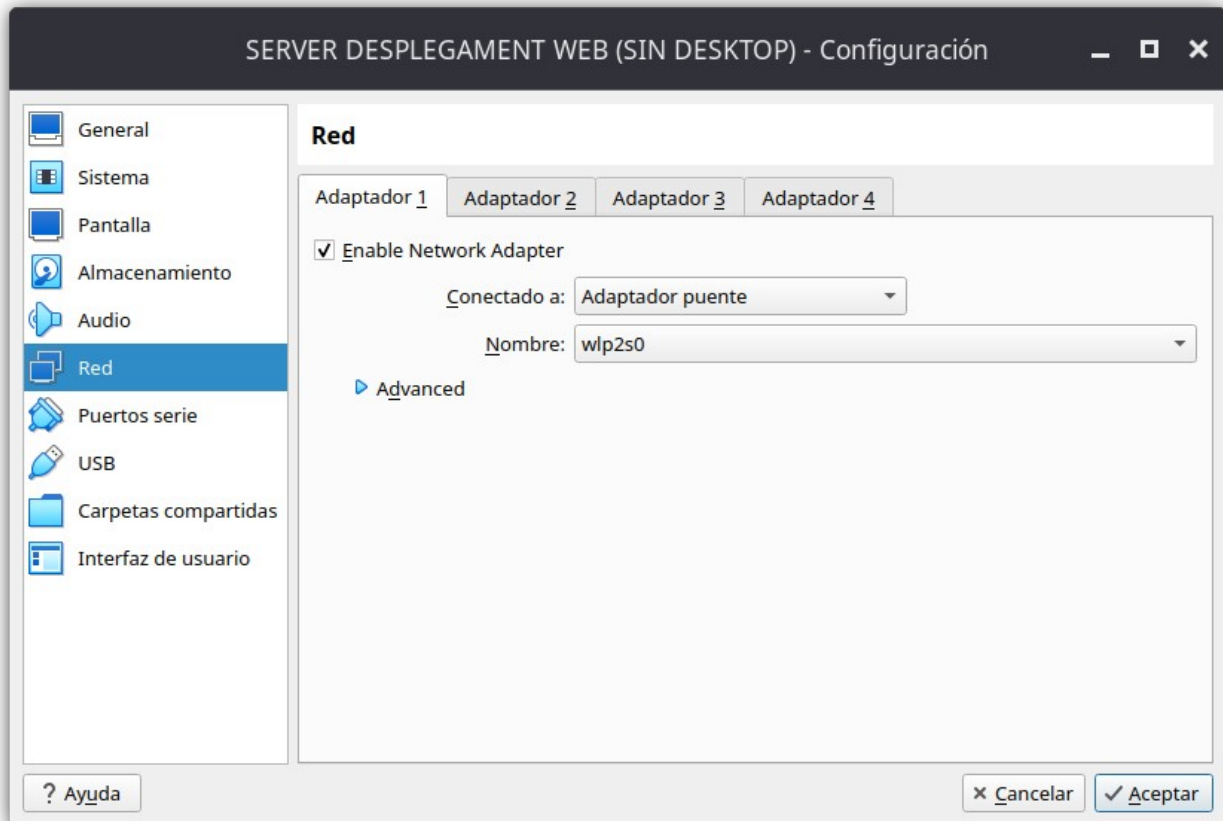
LUIS MUÑOZ NAVE

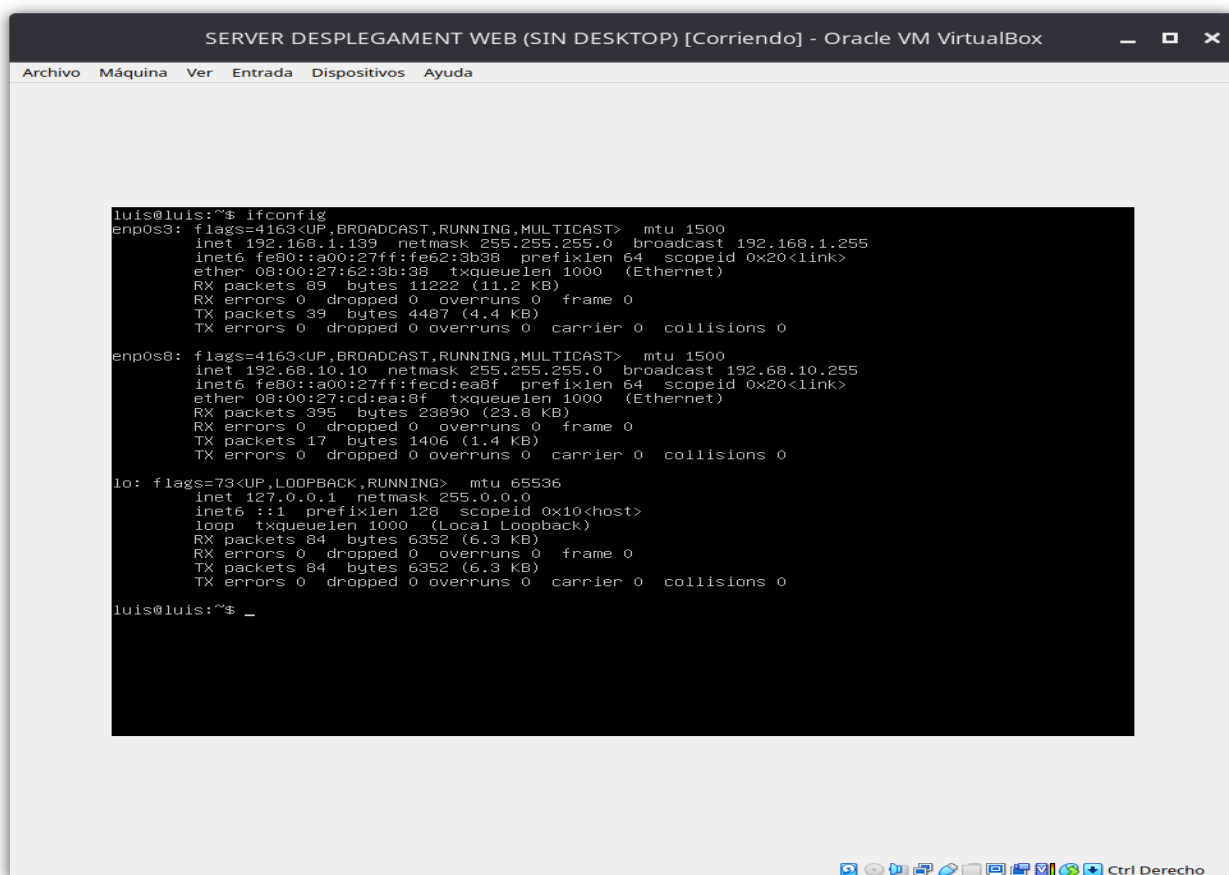
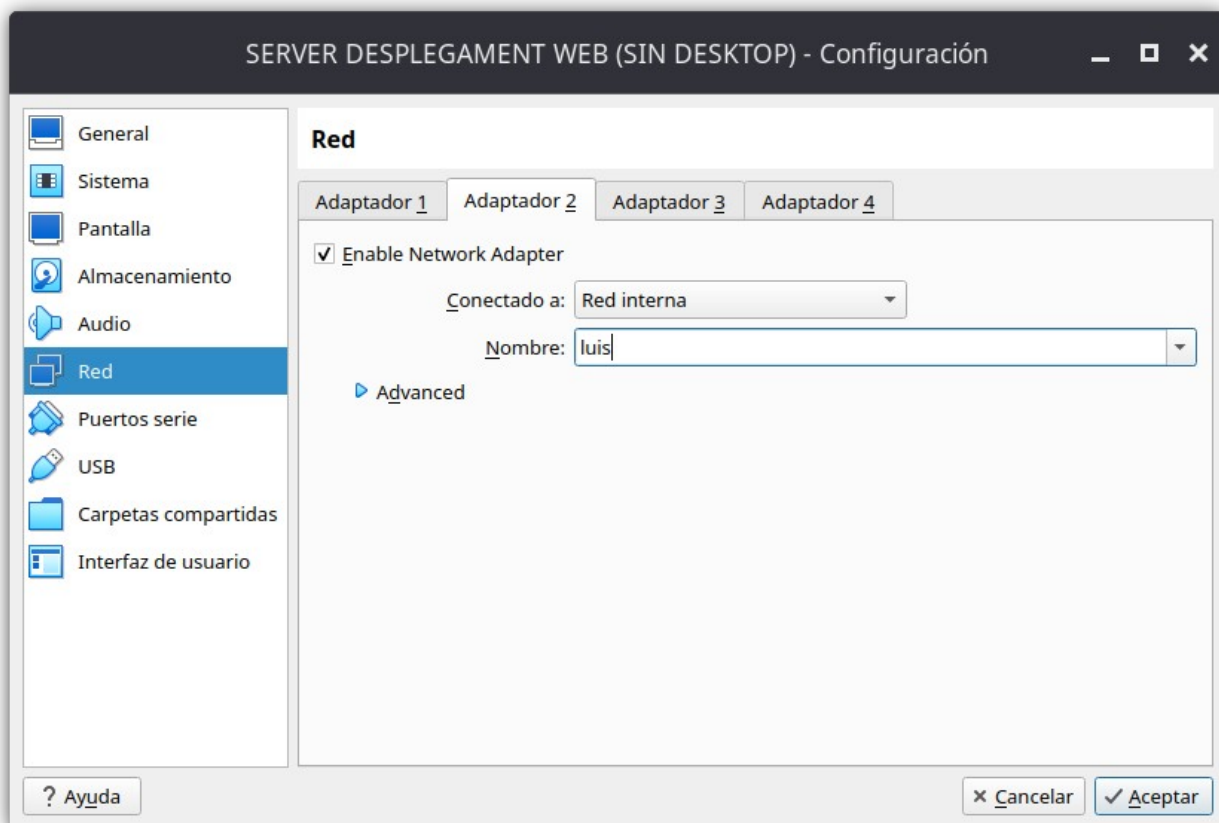
Exercici 3: configurar VirtualHost per IP en Apache

2 adaptadors de xarxa.

* Xarxa interna.

* Adaptador pont.



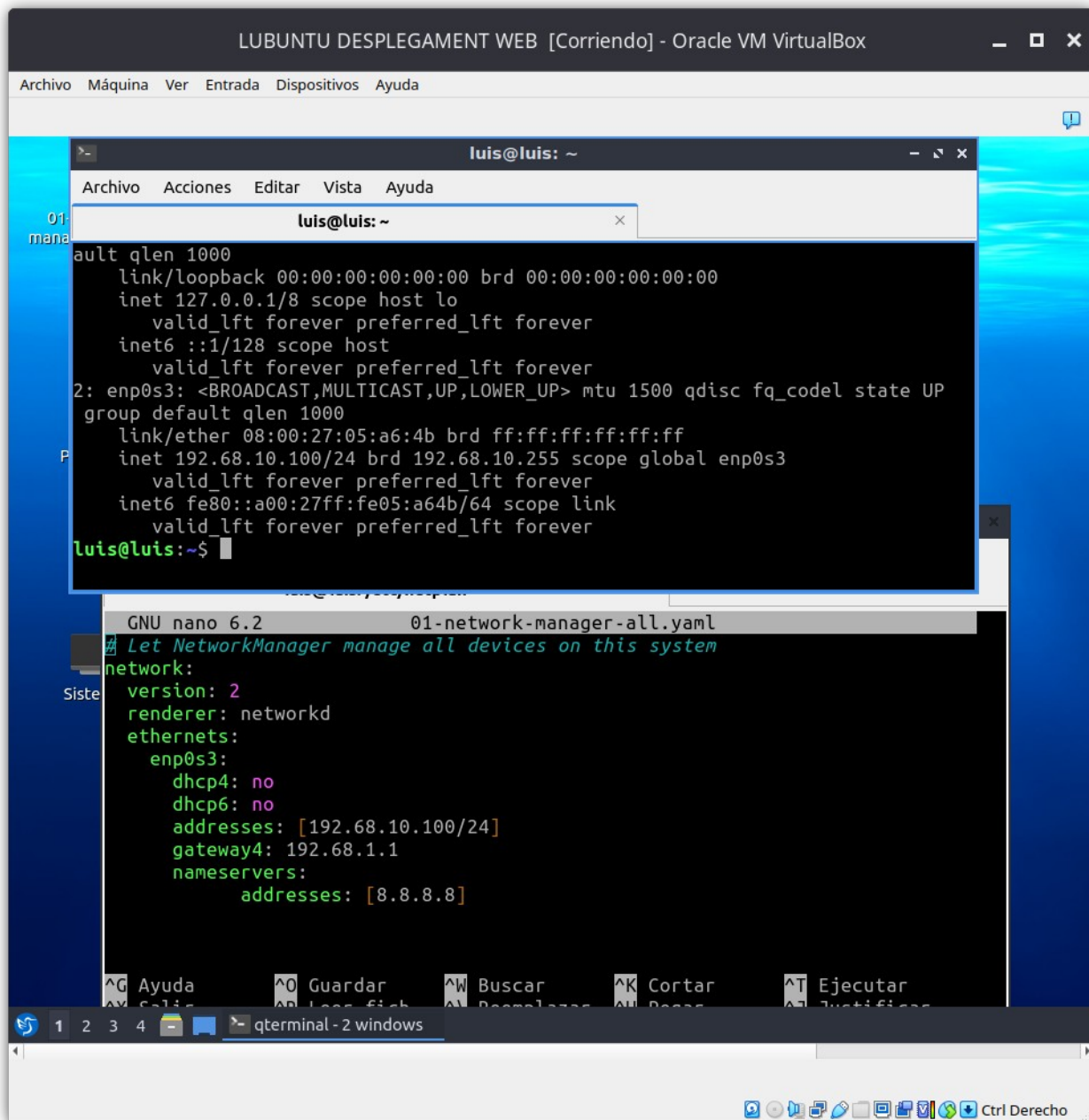


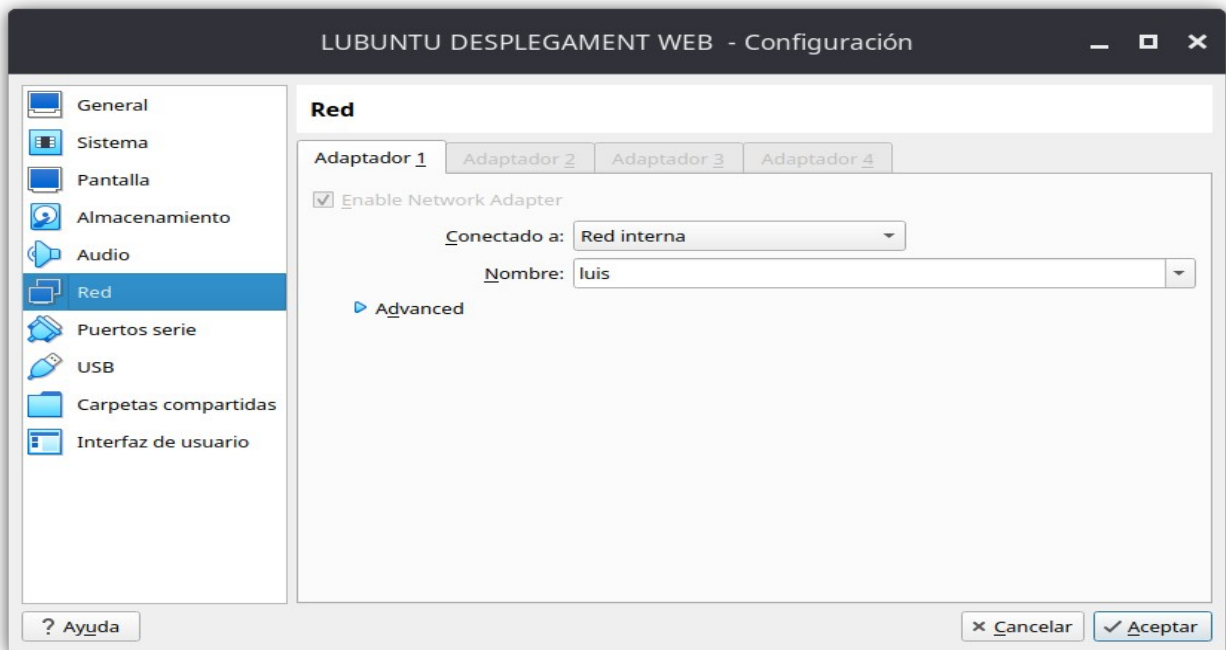
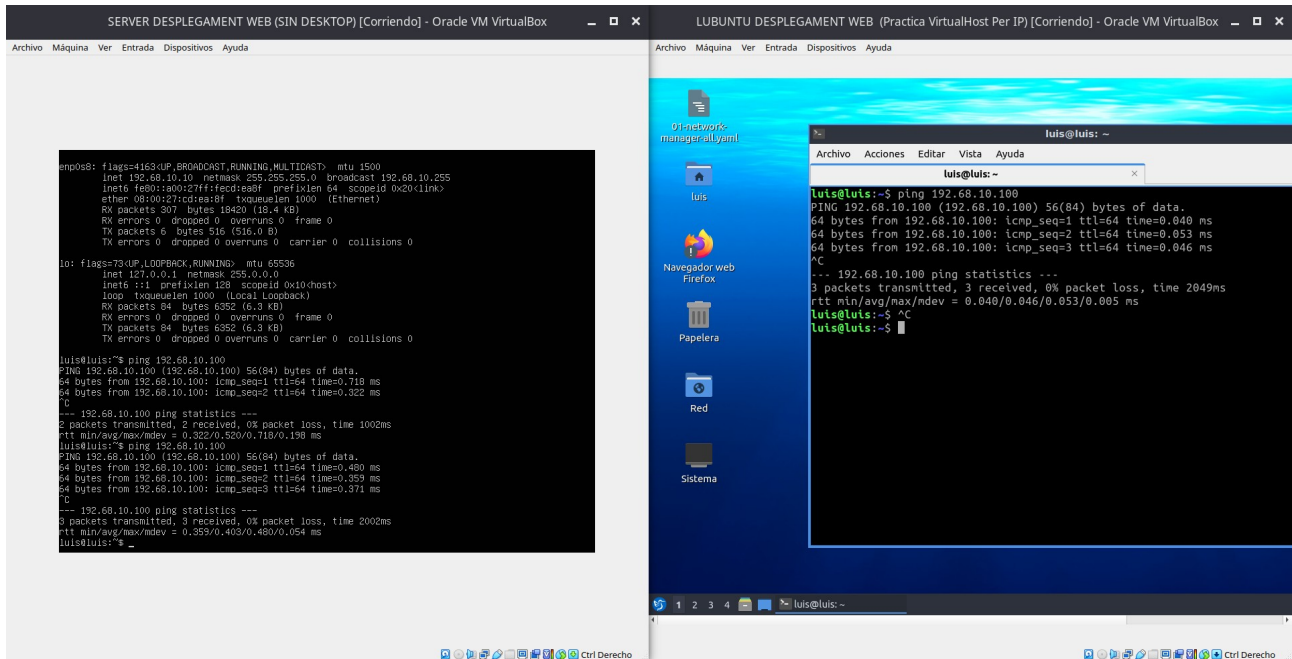
Màquina virtual amb Lubuntu. -

1 adaptador de xarxa.

* Xarxa interna

- Màquina real amb accés al servidor.

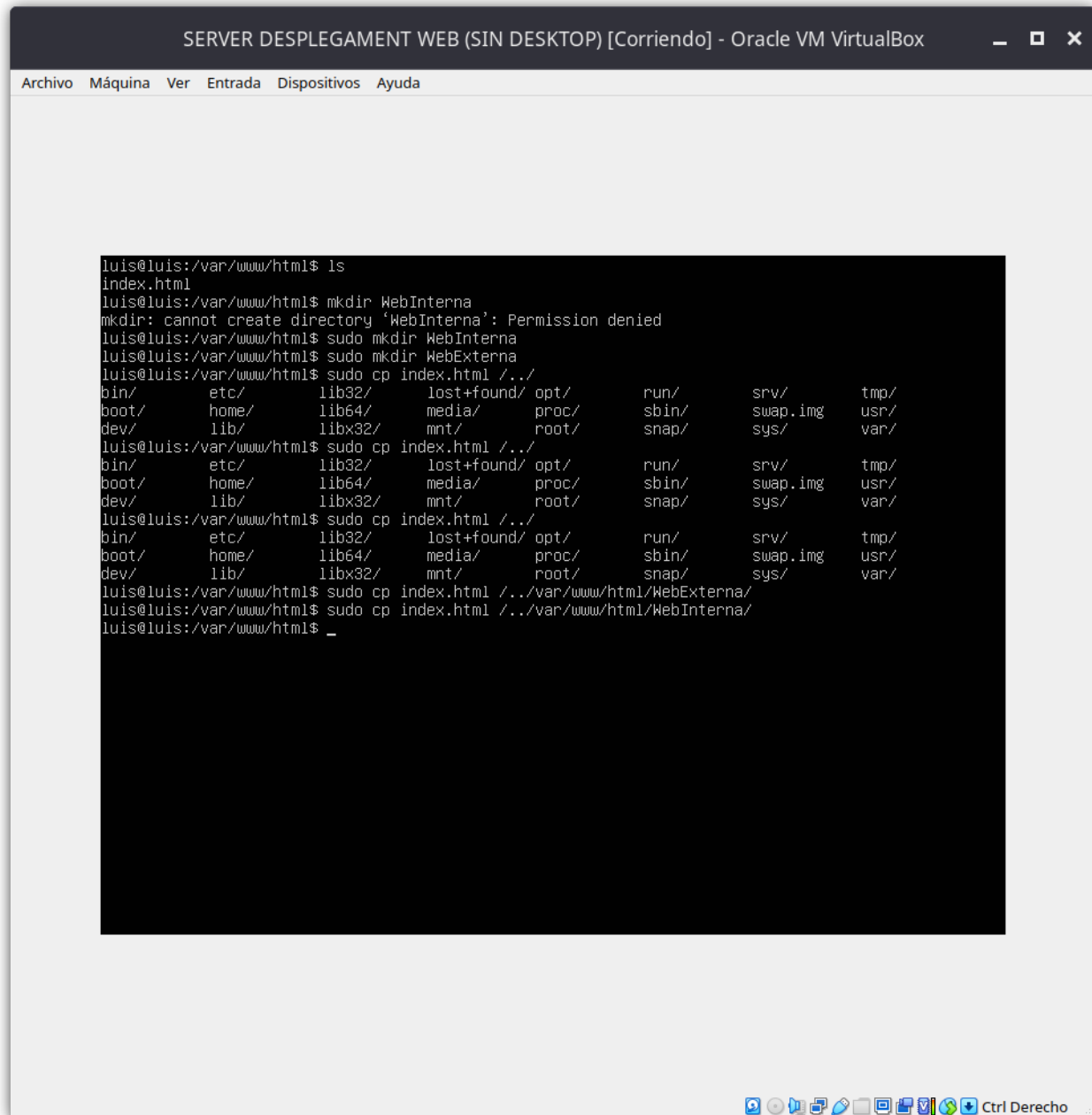




```
luis@luis:~$ sudo apt install apache2 apache2-utils
Leyendo lista de paquetes... Hecho
Creando árbol de dependencias... Hecho
Leyendo la información de estado... Hecho
apache2 ya está en su versión más reciente (2.4.52-1ubuntu4.6).
apache2-utils ya está en su versión más reciente (2.4.52-1ubuntu4.6).
0 actualizados, 0 nuevos se instalarán, 0 para eliminar y 0 no actualizados.
luis@luis:~$ _
```

1. Crear els directoris amb els documents html corresponents a cada IP del servidor.

- IP real: lloc web que mostre «Estem a la xarxa real».
- IP interna: lloc web que mostre «Estem a la xarxa interna».



```
SERVER DESPLEGAMENT WEB (SIN DESKTOP) [Corriendo] - Oracle VM VirtualBox
Archivo  Máquina  Ver  Entrada  Dispositivos  Ayuda

luis@luis:/var/www/html$ ls
index.html
luis@luis:/var/www/html$ mkdir WebInterna
mkdir: cannot create directory 'WebInterna': Permission denied
luis@luis:/var/www/html$ sudo mkdir WebInterna
luis@luis:/var/www/html$ sudo mkdir WebExterna
luis@luis:/var/www/html$ sudo cp index.html ../
luis@luis:/var/www/html$ sudo cp index.html ../
bin/      etc/      lib32/    lost+found/ opt/      run/      srv/      tmp/
boot/     home/     lib64/    media/      proc/     sbin/     swap.img  usr/
dev/      lib/      libx32/   mnt/        root/     snap/     sys/      var/
luis@luis:/var/www/html$ sudo cp index.html ../
bin/      etc/      lib32/    lost+found/ opt/      run/      srv/      tmp/
boot/     home/     lib64/    media/      proc/     sbin/     swap.img  usr/
dev/      lib/      libx32/   mnt/        root/     snap/     sys/      var/
luis@luis:/var/www/html$ sudo cp index.html ../
bin/      etc/      lib32/    lost+found/ opt/      run/      srv/      tmp/
boot/     home/     lib64/    media/      proc/     sbin/     swap.img  usr/
dev/      lib/      libx32/   mnt/        root/     snap/     sys/      var/
luis@luis:/var/www/html$ sudo cp index.html ../var/www/html/WebExterna/
luis@luis:/var/www/html$ sudo cp index.html ../var/www/html/WebInterna/
luis@luis:/var/www/html$ _
```

SERVER DESPLEGAMENT WEB (SIN DESKTOP) [Corriendo] - Oracle VM VirtualBox

Archivo Máquina Ver Entrada Dispositivos Ayuda

```
GNU nano 6.2 index.html
div.content_section_text a:visited,
div.content_section_text a:active {
    background-color: #DCDFE6;
    color: #000000;
}

div.content_section_text a:hover {
    background-color: #000000;
    color: #DCDFE6;
}

div.validator {
}
</style>
</head>
<body>
<div class="main_page">
<div class="page_header floating_element">

<div>
<span style="margin-top: 1.5em;" class="floating_element">
Apache2 Web Externa (Luis)
</span>
</div>
<div class="banner">
<div id="about"></div>
It works!
</div>
</div>

luis@luis:/var/www/html/WebExterna$
```

Ctrl Derecho

SERVER DESPLEGAMENT WEB (SIN DESKTOP) [Corriendo] - Oracle VM VirtualBox

Archivo Máquina Ver Entrada Dispositivos Ayuda

```
GNU nano 6.2 index.html

div.content_section_text a:link,
div.content_section_text a:visited,
div.content_section_text a:active {
    background-color: #DCDFE6;
    color: #000000;
}

div.content_section_text a:hover {
    background-color: #000000;
    color: #DCDFE6;
}

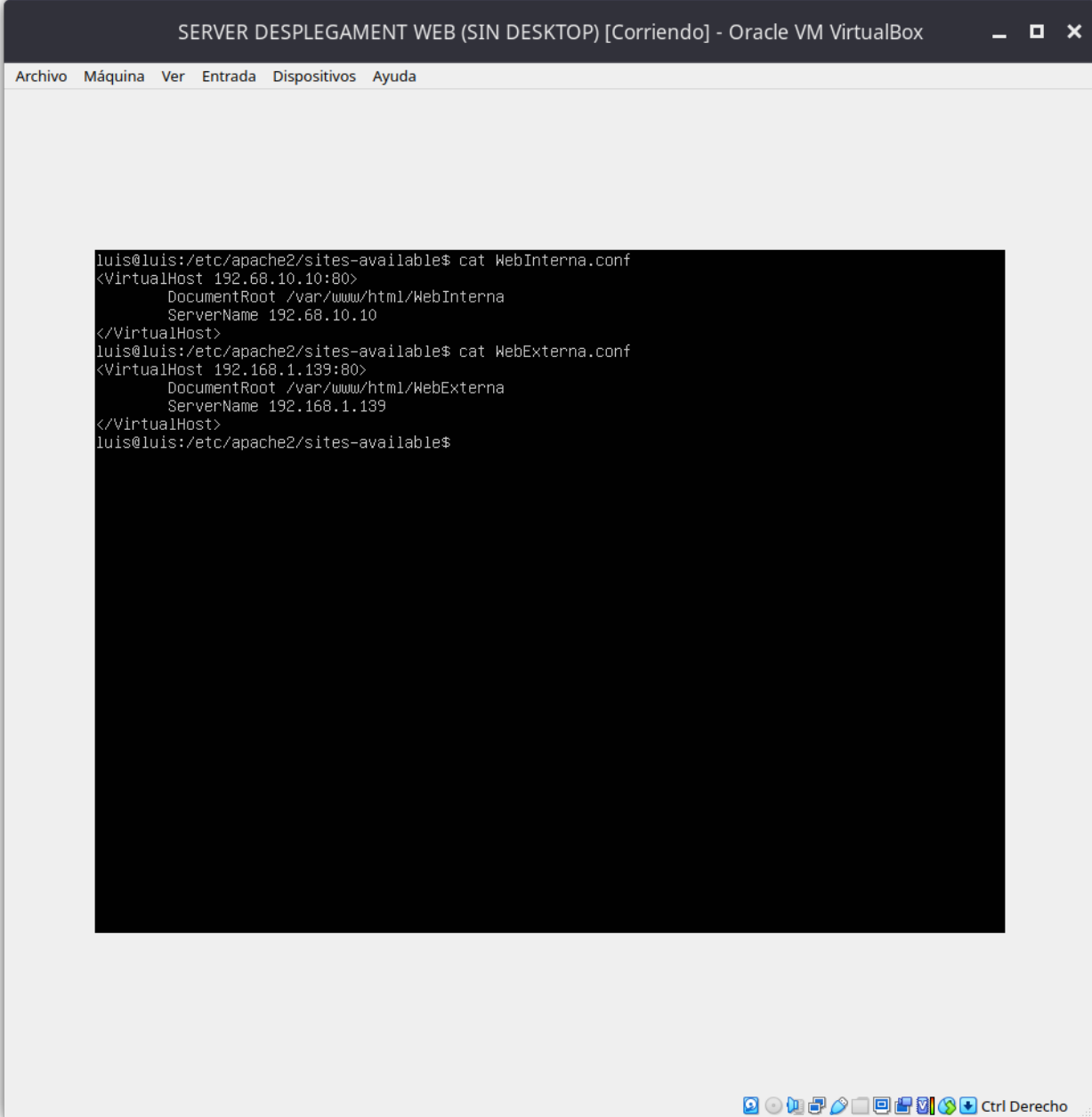
div.validator {
}
</style>
</head>
<body>
<div class="main_page">
<div class="page_header floating_element">

<div>
<span style="margin-top: 1.5em;" class="floating_element">
Apache2 Web Interna (Luis)
</span>
</div>
<div class="banner">
<div id="about"></div>
It works!
</div>
</div>

luis@luis:/var/www/html/WebInterna$
```

Ctrl Derecho

2. Crear els arxius de configuració dels nous llocs web en el directori adient



The screenshot shows a terminal window titled "SERVER DESPLEGAMENT WEB (SIN DESKTOP) [Corriendo] - Oracle VM VirtualBox". The terminal output shows the user 'luis' at the prompt 'luis@luis:/etc/apache2/sites-available\$' running the command 'cat WebInterna.conf'. The output of this command is:

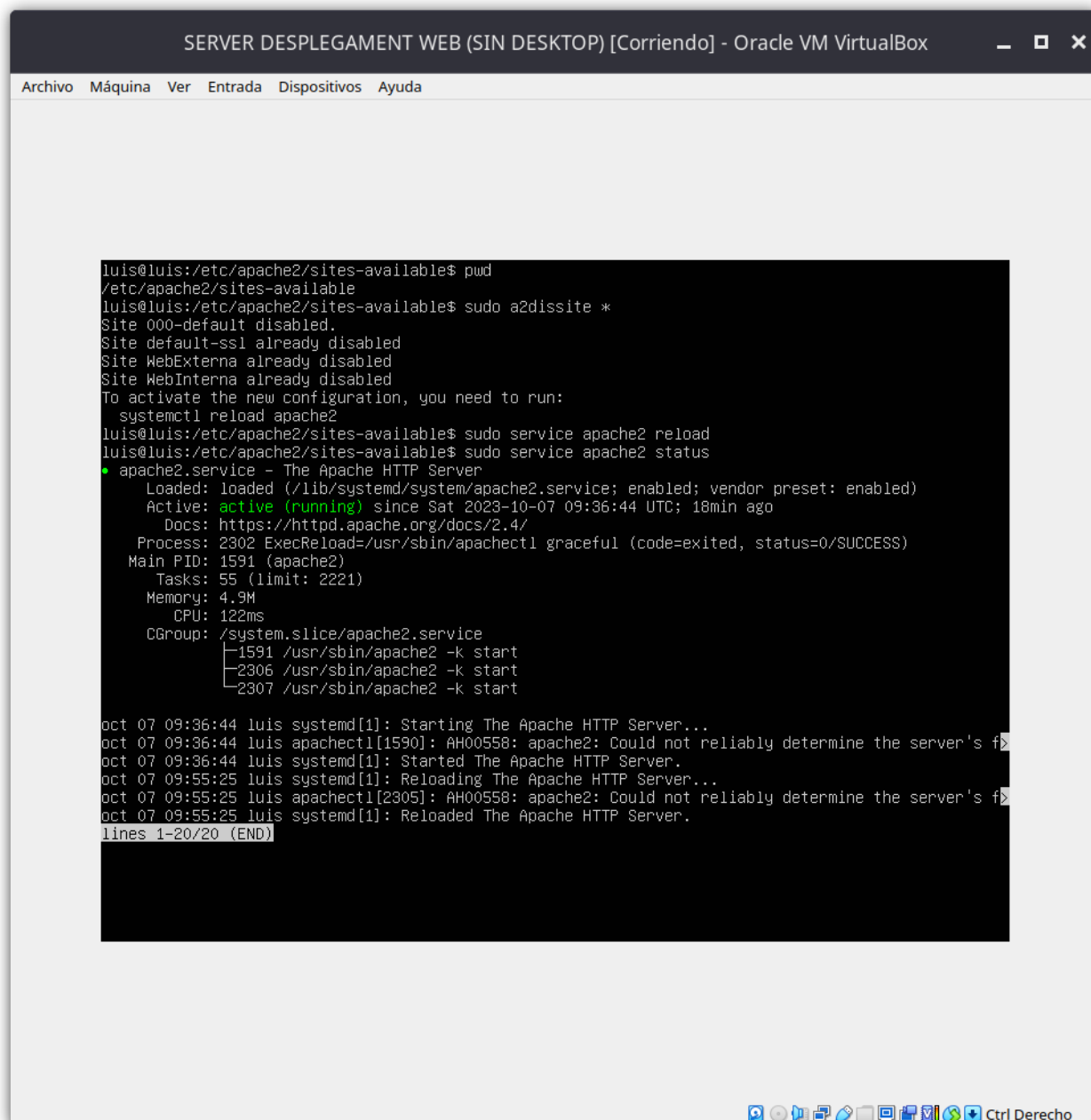
```
<VirtualHost 192.68.10.10:80>
    DocumentRoot /var/www/html/WebInterna
    ServerName 192.68.10.10
</VirtualHost>
```

Next, the user runs the command 'cat WebExterna.conf', and the output is:

```
<VirtualHost 192.168.1.139:80>
    DocumentRoot /var/www/html/WebExterna
    ServerName 192.168.1.139
</VirtualHost>
```

The terminal prompt returns to 'luis@luis:/etc/apache2/sites-available\$'. The terminal window has a menu bar with 'Archivo', 'Máquina', 'Ver', 'Entrada', 'Dispositivos', and 'Ayuda'. At the bottom right, there is a system tray with various icons and the text 'Ctrl Derecho'.

3. Desactivar tots els llocs web del servidor i deixar sòls actius el que estem configurant.
- a2dissite

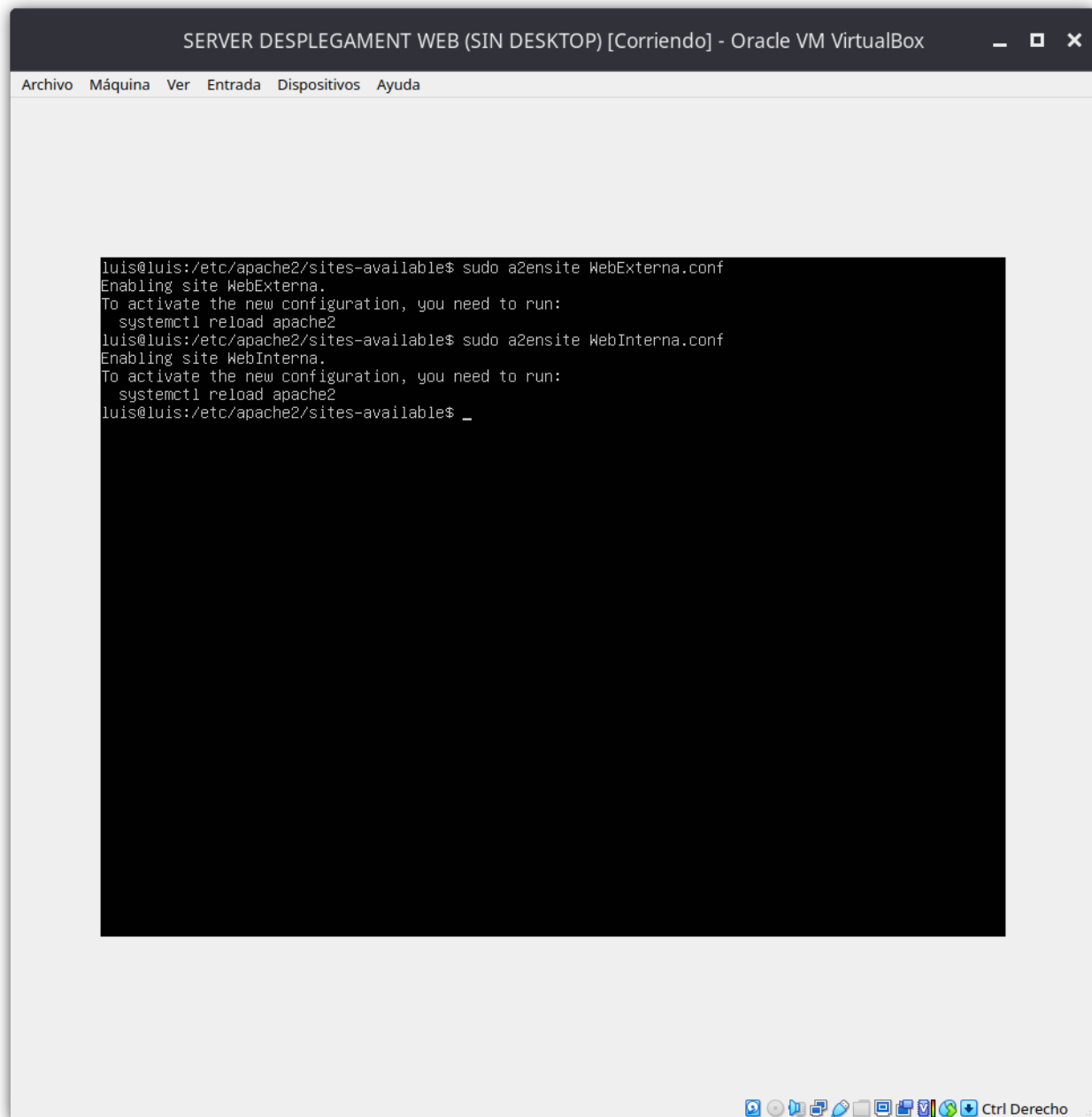


The screenshot shows a terminal window titled "SERVER DESPLEGAMENT WEB (SIN DESKTOP) [Corriendo] - Oracle VM VirtualBox". The terminal output shows the user running several commands to manage the Apache2 service. First, they run 'pwd' and 'ls' in the directory '/etc/apache2/sites-available'. Then, they run 'sudo a2dissite *' to disable all sites. The output shows that '000-default', 'default-ssl', 'WebExterna', and 'WebInterna' are all disabled. Next, they run 'systemctl reload apache2' and 'sudo service apache2 reload'. Finally, they run 'sudo service apache2 status' to check the service status. The status output shows that the service is 'active (running)' and provides details about its configuration, including the loaded path, active state, documentation, process ID, main PID, tasks, memory, CPU, and cgroup. The terminal also shows system logs indicating the successful start and reload of the Apache HTTP Server.

```
luis@luis:/etc/apache2/sites-available$ pwd
/etc/apache2/sites-available
luis@luis:/etc/apache2/sites-available$ sudo a2dissite *
Site 000-default disabled.
Site default-ssl already disabled
Site WebExterna already disabled
Site WebInterna already disabled
To activate the new configuration, you need to run:
  systemctl reload apache2
luis@luis:/etc/apache2/sites-available$ sudo service apache2 reload
luis@luis:/etc/apache2/sites-available$ sudo service apache2 status
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor preset: enabled)
   Active: active (running) since Sat 2023-10-07 09:36:44 UTC; 18min ago
     Docs: https://httpd.apache.org/docs/2.4/
   Process: 2302 ExecReload=/usr/sbin/apachectl graceful (code=exited, status=0/SUCCESS)
    Main PID: 1591 (apache2)
      Tasks: 55 (limit: 2221)
     Memory: 4.9M
        CPU: 122ms
    CGroup: /system.slice/apache2.service
            └─1591 /usr/sbin/apache2 -k start
              2306 /usr/sbin/apache2 -k start
              2307 /usr/sbin/apache2 -k start

oct 07 09:36:44 luis systemd[1]: Starting The Apache HTTP Server...
oct 07 09:36:44 luis apachectl[1590]: AH00558: apache2: Could not reliably determine the server's f
oct 07 09:36:44 luis systemd[1]: Started The Apache HTTP Server.
oct 07 09:55:25 luis systemd[1]: Reloading The Apache HTTP Server...
oct 07 09:55:25 luis apachectl[2305]: AH00558: apache2: Could not reliably determine the server's f
oct 07 09:55:25 luis systemd[1]: Reloaded The Apache HTTP Server.
lines 1-20/20 (END)
```

4. Activar els dos llocs que estem configurant.
- a2ensite

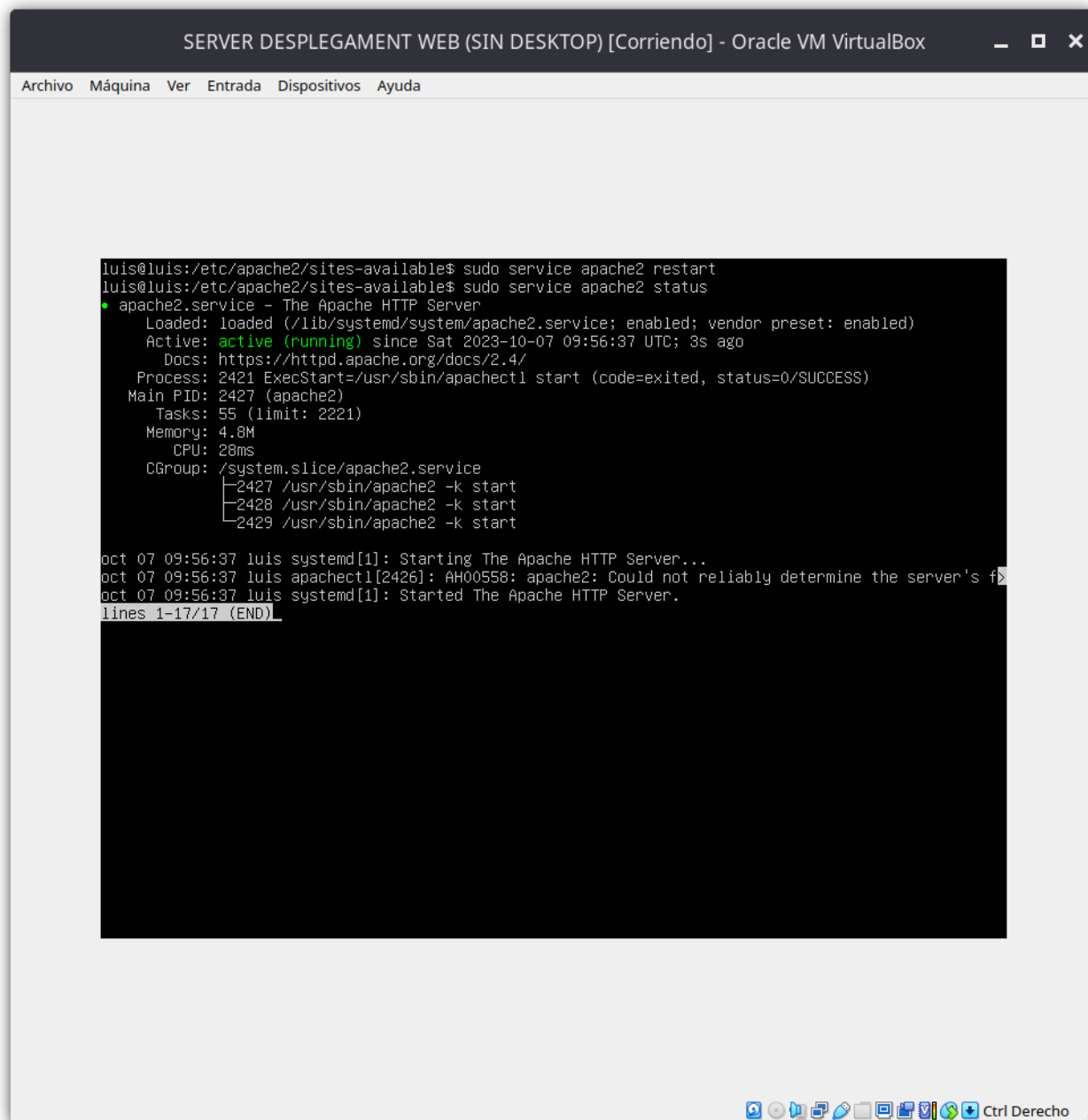


The screenshot shows a terminal window titled "SERVER DESPLEGAMENT WEB (SIN DESKTOP) [Corriendo] - Oracle VM VirtualBox". The terminal output is as follows:

```
luis@luis:/etc/apache2/sites-available$ sudo a2ensite WebExterna.conf
Enabling site WebExterna.
To activate the new configuration, you need to run:
    systemctl reload apache2
luis@luis:/etc/apache2/sites-available$ sudo a2ensite WebInterna.conf
Enabling site WebInterna.
To activate the new configuration, you need to run:
    systemctl reload apache2
luis@luis:/etc/apache2/sites-available$ _
```

The terminal window has a menu bar with "Archivo", "Máquina", "Ver", "Entrada", "Dispositivos", and "Ayuda". At the bottom right, there is a taskbar with various icons and the text "Ctrl Derecho".

5. Reiniciar el servei d'Apache.



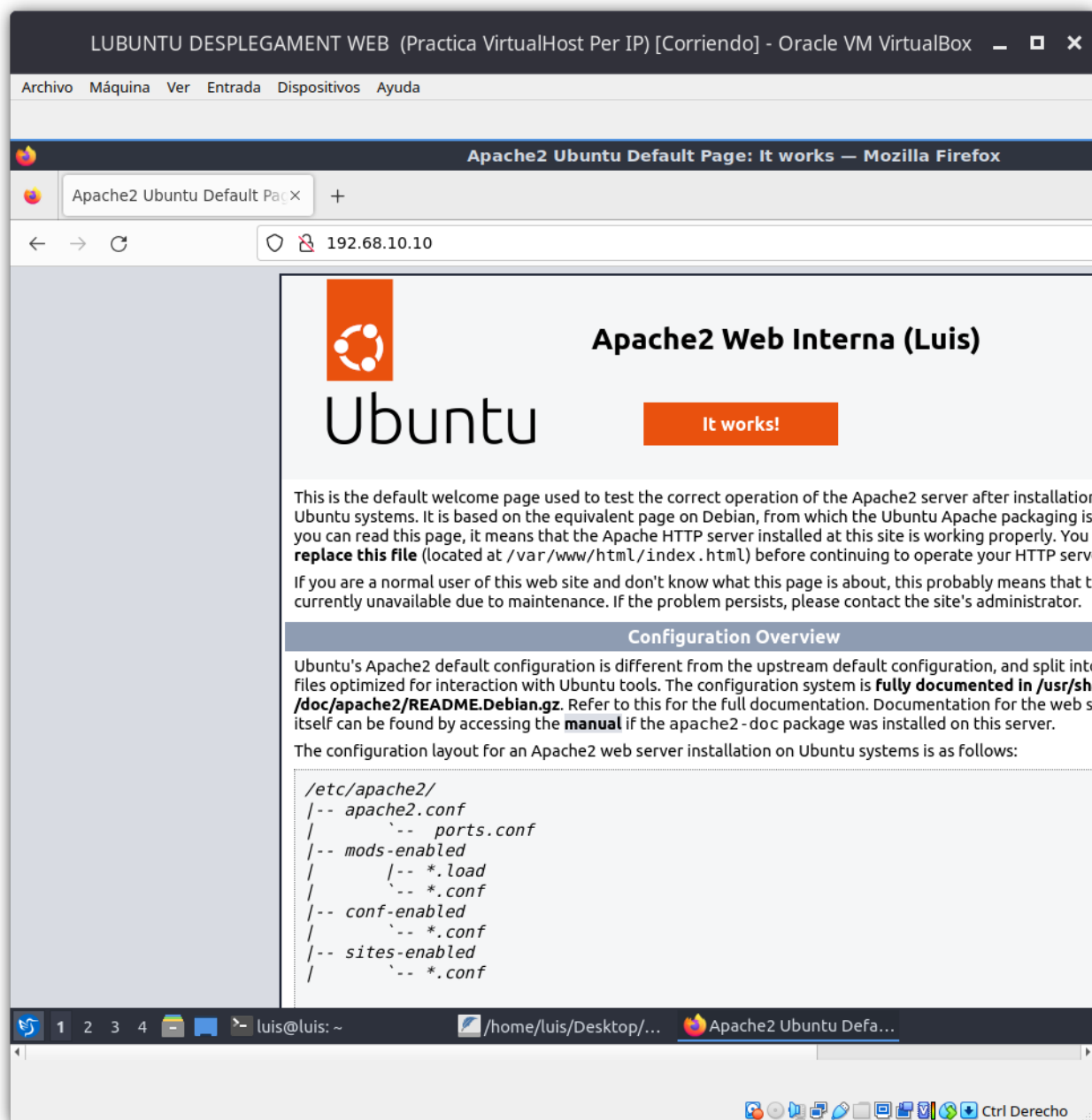
The screenshot shows a terminal window titled "SERVER DESPLEGAMENT WEB (SIN DESKTOP) [Corriendo] - Oracle VM VirtualBox". The terminal output shows the following commands and their results:

```
luis@luis:/etc/apache2/sites-available$ sudo service apache2 restart
luis@luis:/etc/apache2/sites-available$ sudo service apache2 status
• apache2.service - The Apache HTTP Server
   Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor preset: enabled)
   Active: active (running) since Sat 2023-10-07 09:56:37 UTC; 3s ago
     Docs: https://httpd.apache.org/docs/2.4/
   Process: 2421 ExecStart=/usr/sbin/apachectl start (code=exited, status=0/SUCCESS)
   Main PID: 2427 (apache2)
    Tasks: 55 (limit: 2221)
   Memory: 4.8M
     CPU: 28ms
   CGroup: /system.slice/apache2.service
           └─2427 /usr/sbin/apache2 -k start
             └─2428 /usr/sbin/apache2 -k start
               └─2429 /usr/sbin/apache2 -k start

oct 07 09:56:37 luis systemd[1]: Starting The Apache HTTP Server...
oct 07 09:56:37 luis apachectl[2426]: AH00558: apache2: Could not reliably determine the server's f
oct 07 09:56:37 luis systemd[1]: Started The Apache HTTP Server.
lines 1-17/17 (END)
```

The terminal window has a menu bar with "Archivo", "Máquina", "Ver", "Entrada", "Dispositivos", and "Ayuda". At the bottom right, there is a system tray with various icons and the text "Ctrl Derecho".

6. Accedir des del navegador, del client, als diferents llocs web segons el port.



La meua p gina inicialDocumentApache2 Ubuntu Default Pa s

←→No es seguro | 192.168.1.139



Ubuntu

Apache2 Web Externa (Luis)

It works!

This is the default welcome page used to test the correct operation of the Apache2 server after installation on Ubuntu systems. It is based on the equivalent page on Debian, from which the Ubuntu Apache packaging is derived. If you can read this page, it means that the Apache HTTP server installed at this site is working properly. You should **replace this file** (located at `/var/www/html/index.html`) before continuing to operate your HTTP server.

If you are a normal user of this web site and don't know what this page is about, this probably means that the site is currently unavailable due to maintenance. If the problem persists, please contact the site's administrator.

Configuration Overview

Ubuntu's Apache2 default configuration is different from the upstream default configuration, and split into several files optimized for interaction with Ubuntu tools. The configuration system is **fully documented in [/usr/share/doc/apache2/README.Debian.gz](#)**. Refer to this for the full documentation. Documentation for the web server itself can be found by accessing the **manual** if the `apache2-doc` package was installed on this server.

The configuration layout for an Apache2 web server installation on Ubuntu systems is as follows:

```
/etc/apache2/
|-- apache2.conf
/
-- ports.conf
|-- mods-enabled
/
|   |-- *.load
|   |-- *.conf
|-- conf-enabled
/
|   |-- *.conf
|-- sites-enabled
|   |-- *.conf
```

- `apache2.conf` is the main configuration file. It puts the pieces together by including all remaining configuration files when starting up the web server.
- `ports.conf` is always included from the main configuration file. It is used to determine the listening ports for incoming connections, and this file can be customized anytime.
- Configuration files in the `mods-enabled/`, `conf-enabled/` and `sites-enabled/` directories contain particular configuration snippets which manage modules, global configuration fragments, or virtual host configurations, respectively.
- They are activated by symlinking available configuration files from their respective `*-available/` counterparts. These should be managed by using our helpers `a2enmod`, `a2dismod`, `a2ensite`, `a2dissite`, and `a2enconf`, `a2disconf`. See their respective man pages for detailed information.