



P06- SERVIDOR LDAP

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ASO

Contenido

Contenido	2
Introducción.	3
1. Montar las máquinas virtuales. ¿Qué has tenido que modificar?.....	3
2. Instalar y configurar un servidor DNS que nos resuelva nuestras direcciones del dominio.....	5
3. Realizar consultas dig/nslookup para comprobar el funcionamiento del servidor DNS.....	9
4. Instalar el Servidor LDAP, detallando los pasos seguidos.....	10
4. Crear el dominio estaesmiclaseana.local cuyo usuario administrador se llamará administrador.	16
6. Crear las unidades organizativas misgrupos y misusuarios, para grupos y usuarios, respectivamente.....	18
7. Crear los grupos jefes y subordinados en la unidad organizativa misgrupos.	20
8. Crear los usuarios Juan García y Rosa López y hacerlos pertenecer al grupo Jefes. Estos usuarios contarán con perfiles móviles y sus directorios personales se crearán en /home/users.....	22
9. Crear también los usuarios Luis Gutiérrez, Ana García, Antonio Martínez y Patricia Torres pertenecientes al grupo subordinados. Estos usuarios tendrán perfiles locales y su directorio personal coincidirá con el login de usuario, directamente en el directorio /home.....	23
10. ¿En qué se diferencia la instalación de perfiles móviles de los perfiles locales? ¿Qué paquetes hay que instalar en el servidor? ¿Y en el cliente?.....	26
11. Comprobar el acceso de los dos tipos de usuarios (perfiles móviles y locales) al dominio.....	29
12. Comprobar que el perfil móvil funciona correctamente.	36
13. Configurar el cliente de Windows 10 e incorporarlo al dominio y comprobar su correcto funcionamiento.	38
Incidencias	43
Valoración	44

Introducción.

En esta práctica vamos a instalar servidor LDAP en una máquina Ubuntu Server y gestionarlo desde Webmin.

*NOTA: Al estar en mi casa tuve que usar la 192.168.1.0/24

1. Montar las máquinas virtuales. ¿Qué has tenido que modificar?

Primero que todo puse IP al servidor en /etc/netplan/*tabulación*

```
network:
  ethernets:
    enp0s3:
      dhcp4: no
      addresses:
        - 192.168.1.96/24
      nameservers:
        addresses:
          - 8.8.8.8
          - 8.8.4.4
      routes:
        - to: default
          via: 192.168.1.1
  version: 2
```

Y comprobo archivos /etc/hosts y /etc/hostname.

```
root@servidorana:/home/servidorana# cat /etc/hosts
127.0.0.1 localhost
127.0.1.1 servidorana

# The following lines are desirable for IPv6 capable hosts
::1      ip6-localhost ip6-loopback
fe00::0 ip6-localnet
ff00::0 ip6-mcastprefix
ff02::1 ip6-allnodes
ff02::2 ip6-allrouters
root@servidorana:/home/servidorana# cat /etc/hostname
servidorana
root@servidorana:/home/servidorana#
```

Miré la IP del cliente1:

```
ana@clienteana1:~$ ifconfig
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
        inet 192.168.1.97 netmask 255.255.255.0 broadcast 192.168.1.255
              inet6 fe80::de7a:4e9d:b3a9:5eff prefixlen 64 scopeid 0x20<link>
                ether 08:00:27:4c:87:50 txqueuelen 1000 (Ethernet)
                  RX packets 6995 bytes 3653428 (3.6 MB)
                  RX errors 0 dropped 30 overruns 0 frame 0
                  TX packets 5235 bytes 840728 (840.7 KB)
                  TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
        inet 127.0.0.1 netmask 255.0.0.0
        inet6 ::1 prefixlen 128 scopeid 0x10<host>
          loop txqueuelen 1000 (Bucle local)
            RX packets 1515 bytes 185722 (185.7 KB)
            RX errors 0 dropped 0 overruns 0 frame 0
            TX packets 1515 bytes 185722 (185.7 KB)
            TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

ana@clienteana1:~$ cat /etc/hostname
clienteana1
```

Y la IP cliente2:

2. Instalar y configurar un servidor DNS que nos resuelva nuestras direcciones del dominio.

Instalaremos el servidor DNS, y antes actualizaremos

```
sudo apt-get update
```

```
apt-get install bind9 bind9utils
```

Iniciaré y lo activaré para que se inicie cada vez que se enciende:

```
root@servidorana:/home/servidorana# sudo systemctl start systemd-resolved
root@servidorana:/home/servidorana# sudo systemctl enable systemd-resolved
root@servidorana:/home/servidorana# sudo systemctl status systemd-resolved
● systemd-resolved.service - Network Name Resolution
    Loaded: loaded (/usr/lib/systemd/system/systemd-resolved.service; enabled; preset: enabled)
      Active: active (running) since Thu 2024-12-12 18:45:08 UTC; 6min ago
        Docs: man:systemd-resolved.service(8)
```

Configuraremos los archivos necesarios:

“/etc/bind/named.conf.local”

```
GNU nano 7.2                                     /etc/bind/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 "estaesmiclaseana.local" {
    type master;
    file "/var/cache/bind/estaesmiclaseana.local.db";
};

zone "1.168.192.in-addr.arpa" {
    type master;
    file "/var/cache/bind/192.168.1.db";
};
```

Y comprobaremos:

```
root@servidorana:/home/servidorana# named-checkconf /etc/bind/named.conf.local
root@servidorana:/home/servidorana#
```

Ahora vamos a crear la zona de configuración directa:

```
GNU nano 7.2                               /var/cache/bind/estaesmiclaseana.local.db
$TTL 604800
@ IN SOA      estaesmiclaseana.local. root.estaesmiclaseana.local. (
                  2           ; Serial
                  604800    ; Refresh
                  86400     ; Retry
                 2419200   ; Expire
                 604800 ) ; Negative Cache TTL

@      IN      NS      servidorana.estaesmiclaseana.local.
servidorana IN      A       192.168.1.96
clienteana1  IN      A       192.168.1.97
clienteana2  IN      A       192.168.1.98

dns      IN      CNAME   servidorana
ldap      IN      CNAME   servidorana
```

NOTA: a partir de aquí realicé la práctica con ssh.

Y la zona indirecta:

```
GNU nano 7.2                               /var/cache/bind/192.168.1.db
$TTL 604800
@ IN SOA      estaesmiclaseana.local. root.estaesmiclaseana.local. (
                  2           ; Serial
                  604800    ; Refresh
                  86400     ; Retry
                 2419200   ; Expire
                 604800 ) ; Default TTL

@      IN      NS      servidorana.estaesmiclaseana.local.
96     IN      PTR     servidorana.estaesmiclaseana.local.
97     IN      PTR     clienteana1.estaesmiclaseana.local.
98     IN      PTR     clienteana2.estaesmiclaseana.local.
```

Vamos a comprobarlo:

```
root@servidorana:/home/servidorana# named-checkzone estaesmiclaseana.local /var/cache/bind/estaesmiclaseana.local.db
zone estaesmiclaseana.local/IN: loaded serial 2
OK
root@servidorana:/home/servidorana# named-checkzone 1.168.192.in-addr.arpa /var/cache/bind/192.168.1.db
zone 1.168.192.in-addr.arpa/IN: loaded serial 2
OK
```

Vamos a modificar este archivo para que en caso de no tener alguna dirección, resuelva a otro servidor:

```
GNU nano 7.2                                     /etc/bind/named.conf.options *
acl safeclients {
    localhost;
    localnets;
};

options {
    directory "/var/cache/bind";

    // If there is a firewall between you and nameservers you want
    // to talk to, you may need to fix the firewall to allow multiple
    // ports to talk. See http://www.kb.cert.org/vuls/id/800113

    // If your ISP provided one or more IP addresses for stable
    // nameservers, you probably want to use them as forwarders.
    // Uncomment the following block, and insert the addresses replacing
    // the all-0's placeholder.

    allow-query { any; };
    allow-recursion { safeclients; };
    allow-query-cache {safeclients; };
    forwarders {
        8.8.8.8;
        8.8.4.4;
    };
}
```

```
//=====
dnssec-validation auto;

listen-on-v6 { any; };
};
```

Por último, vamos a poner que use siempre IPv4 para evitar errores:

```
root@servidorana:/home/ser X + | ^
GNU nano 7.2                                     /etc/default/named
#
# run resolvconf?
RESOLVCONF=no

# startup options for the server
OPTIONS="-u bind -4"
```

Por último reiniciamos el servidor y lo activamos:

```
root@servidorana:/home/servidorana# service bind9 restart
root@servidorana:/home/servidorana# service bind9 status
● named.service - BIND Domain Name Server
   Loaded: loaded (/usr/lib/systemd/system/named.service; enabled; preset: enabled)
   Active: active (running) since Fri 2024-12-13 15:44:20 UTC; 9s ago
     Docs: man:named(8)
 Main PID: 2827 (named)
    Status: "running"
       Tasks: 6 (limit: 6776)
      Memory: 5.5M (peak: 5.9M)
        CPU: 24ms
       CGroup: /system.slice/named.service
               └─2827 /usr/sbin/named -f -u bind -4

dic 13 15:44:20 servidorana named[2827]: zone 0.in-addr.arpa/IN: loaded serial 1
dic 13 15:44:20 servidorana named[2827]: zone 127.in-addr.arpa/IN: loaded serial 1
dic 13 15:44:20 servidorana named[2827]: zone localhost/IN: loaded serial 2
dic 13 15:44:20 servidorana systemd[1]: Started named.service - BIND Domain Name Server.
dic 13 15:44:20 servidorana named[2827]: all zones loaded
dic 13 15:44:20 servidorana named[2827]: running
dic 13 15:44:20 servidorana named[2827]: zone 1.168.192.in-addr.arpa/IN: sending notifies (serial 2)
dic 13 15:44:20 servidorana named[2827]: zone estaesmiclaseana.local/IN: sending notifies (serial 2)
dic 13 15:44:20 servidorana named[2827]: managed-keys-zone: Key 20326 for zone . is now trusted (acceptance timer complete)
dic 13 15:44:20 servidorana named[2827]: resolver priming query complete: success
```

Ahora que funciona, vamos a cambiar el dns y hacer comprobaciones:

```
root@servidorana:/home/ser X + v
GNU nano 7.2                               /etc/netplan/50-cloud-init.yaml *
# This file is generated from information provided by the datasource. Changes
# to it will not persist across an instance reboot. To disable cloud-init's
# network configuration capabilities, write a file
# /etc/cloud/cloud.cfg.d/99-disable-network-config.cfg with the following:
# network: {config: disabled}
network:
  ethernets:
    enp0s3:
      dhcp4: no
      addresses:
      - 192.168.1.96/24
      nameservers:
        addresses: [192.168.1.96]
        search: [estaesmiclaseana.local]
      routes:
      - to: default
        via: 192.168.1.1
version: 2
```

3. Realizar consultas dig/nslookup para comprobar el funcionamiento del servidor DNS.

```
root@servidorana:/home/servidorana# ls -l /etc/resolv.conf
lrwxrwxrwx 1 root root 39 ago 27 14:21 /etc/resolv.conf -> ../run/systemd/resolve/stub-resolv.conf
root@servidorana:/home/servidorana# ln -sf /run/systemd/resolve/resolv.conf /etc/resolv.conf
root@servidorana:/home/servidorana# cat /etc/resolv.conf
# This is /run/systemd/resolve/resolv.conf managed by man:systemd-resolved(8).
# Do not edit.
#
# This file might be symlinked as /etc/resolv.conf. If you're looking at
# /etc/resolv.conf and seeing this text, you have followed the symlink.
#
# This is a dynamic resolv.conf file for connecting local clients directly to
# all known uplink DNS servers. This file lists all configured search domains.
#
# Third party programs should typically not access this file directly, but only
# through the symlink at /etc/resolv.conf. To manage man:resolv.conf(5) in a
# different way, replace this symlink by a static file or a different symlink.
#
# See man:systemd-resolved.service(8) for details about the supported modes of
# operation for /etc/resolv.conf.

nameserver 192.168.1.96
search estaesmiclaseana.local
root@servidorana:/home/servidorana#
```

```
root@servidorana:/home/servidorana# nslookup clienteanal
Server:          192.168.1.96
Address:         192.168.1.96#53

Name:   clienteanal.estaesmiclaseana.local
Address: 192.168.1.97

root@servidorana:/home/servidorana# nslookup clienteana2
Server:          192.168.1.96
Address:         192.168.1.96#53

Name:   clienteana2.estaesmiclaseana.local
Address: 192.168.1.98

root@servidorana:/home/servidorana# nslookup google.com
Server:          192.168.1.96
Address:         192.168.1.96#53

Non-authoritative answer:
Name:   google.com
Address: 142.250.185.14
Name:   google.com
Address: 2a00:1450:4003:80c::200e
```

```

root@servidorana:/home/servidorana# nslookup 192.168.1.96
96.1.168.192.in-addr.arpa      name = servidorana.estaesmiclaseana.local.

root@servidorana:/home/servidorana# nslookup 192.168.1.97
97.1.168.192.in-addr.arpa      name = clienteana1.estaesmiclaseana.local.

root@servidorana:/home/servidorana# nslookup 192.168.1.98
98.1.168.192.in-addr.arpa      name = clienteana2.estaesmiclaseana.local.

root@servidorana:/home/servidorana# nslookup 8.8.8.8
8.8.8.8.in-addr.arpa      name = dns.google.

Authoritative answers can be found from:

```

```

root@servidorana:/home/servidorana# dig ldap.estaesmiclaseana.local

; <>> DiG 9.18.28-0ubuntu0.24.04.1-Ubuntu <>> ldap.estaesmiclaseana.local
;; global options: +cmd
;; Got answer:
;; WARNING: .local is reserved for Multicast DNS
;; You are currently testing what happens when an mDNS query is leaked to DNS
;; ->>HEADER<- opcode: QUERY, status: NXDOMAIN, id: 6697
;; flags: qr aa rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
; COOKIE: fbe64e8d4048755001000000675c590c9f0bcab9f09e22b3 (good)
; QUESTION SECTION:
;ldap.estaesmiclaseana.local. IN A

;; ANSWER SECTION:
ldap.estaesmiclaseana.local. 604800 IN CNAME servidorpm.estaesmiclaseana.local.

;; AUTHORITY SECTION:
estaesmiclaseana.local. 604800 IN SOA estaesmiclaseana.local. root.estaesmiclaseana.local. 2 604800 86400 2419
200 604800

;; Query time: 0 msec
;; SERVER: 192.168.1.96#53(192.168.1.96) (UDP)
;; WHEN: Fri Dec 13 15:55:56 UTC 2024
;; MSG SIZE rcvd: 150

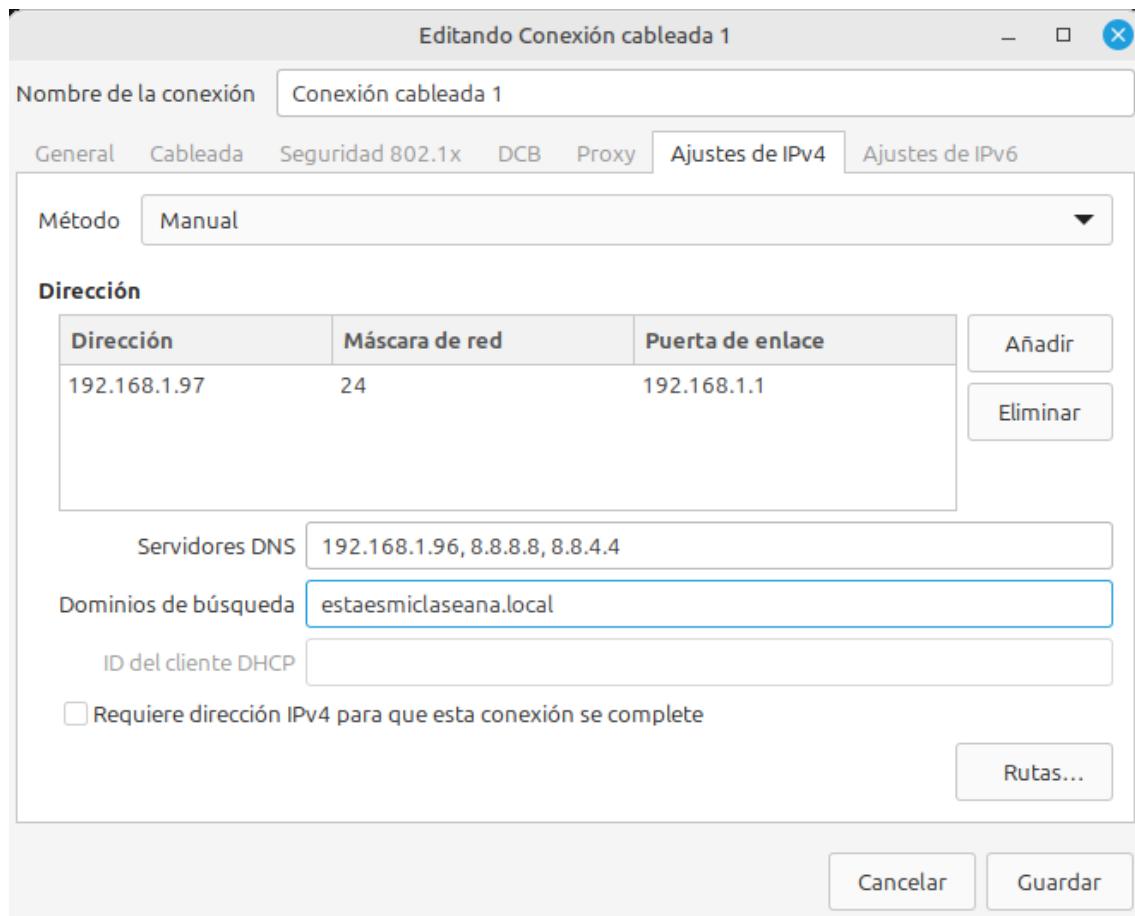
```

4. Instalar el Servidor LDAP, detallando los pasos seguidos.

Ahora voy a ir a los clientes y cambiaré los servidores dns preferidos:

Primero en clienteana1 y después en clienteana2.

Además comprobaré si hacen ping.



```
ana@clienteana1:~$ ping 192.168.1.1
PING 192.168.1.1 (192.168.1.1) 56(84) bytes of data.
64 bytes from 192.168.1.1: icmp_seq=1 ttl=64 time=0.952 ms
64 bytes from 192.168.1.1: icmp_seq=2 ttl=64 time=1.03 ms
^C
--- 192.168.1.1 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1005ms
rtt min/avg/max/mdev = 0.952/0.991/1.031/0.039 ms
ana@clienteana1:~$ ping www.google.com
PING www.google.com (172.217.168.164) 56(84) bytes of data.
64 bytes from mad07s10-in-f4.1e100.net (172.217.168.164): icmp_seq=1 ttl=119 time=17.3 ms
64 bytes from mad07s10-in-f4.1e100.net (172.217.168.164): icmp_seq=2 ttl=119 time=17.3 ms
64 bytes from mad07s10-in-f4.1e100.net (172.217.168.164): icmp_seq=3 ttl=119 time=15.4 ms
64 bytes from mad07s10-in-f4.1e100.net (172.217.168.164): icmp_seq=4 ttl=119 time=15.1 ms
^C
--- www.google.com ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 3021ms
rtt min/avg/max/mdev = 15.092/16.272/17.345/1.045 ms
```



```
C:\Users\clienteana2>ping 192.168.1.1

Haciendo ping a 192.168.1.1 con 32 bytes de datos:
Respuesta desde 192.168.1.1: bytes=32 tiempo=1ms TTL=64
Respuesta desde 192.168.1.1: bytes=32 tiempo=1ms TTL=64
Respuesta desde 192.168.1.1: bytes=32 tiempo=4ms TTL=64
Respuesta desde 192.168.1.1: bytes=32 tiempo=1ms TTL=64

Estadísticas de ping para 192.168.1.1:
    Paquetes: enviados = 4, recibidos = 4, perdidos = 0
                (0% perdidos),
Tiempos aproximados de ida y vuelta en milisegundos:
    Mínimo = 1ms, Máximo = 4ms, Media = 1ms

C:\Users\clienteana2>^X

C:\Users\clienteana2>ping 192.168.1.96

Haciendo ping a 192.168.1.96 con 32 bytes de datos:
Respuesta desde 192.168.1.96: bytes=32 tiempo<1m TTL=64
Respuesta desde 192.168.1.96: bytes=32 tiempo<1m TTL=64
Respuesta desde 192.168.1.96: bytes=32 tiempo<1m TTL=64

Estadísticas de ping para 192.168.1.96:
    Paquetes: enviados = 3, recibidos = 3, perdidos = 0
                (0% perdidos),
Tiempos aproximados de ida y vuelta en milisegundos:
    Mínimo = 0ms, Máximo = 0ms, Media = 0ms
Control-C
^C
C:\Users\clienteana2>ping www.google.com

Haciendo ping a www.google.com [142.250.200.100] con 32 bytes de dato
Respuesta desde 142.250.200.100: bytes=32 tiempo=17ms TTL=119
Respuesta desde 142.250.200.100: bytes=32 tiempo=14ms TTL=119
Respuesta desde 142.250.200.100: bytes=32 tiempo=14ms TTL=119
Respuesta desde 142.250.200.100: bytes=32 tiempo=15ms TTL=119
```

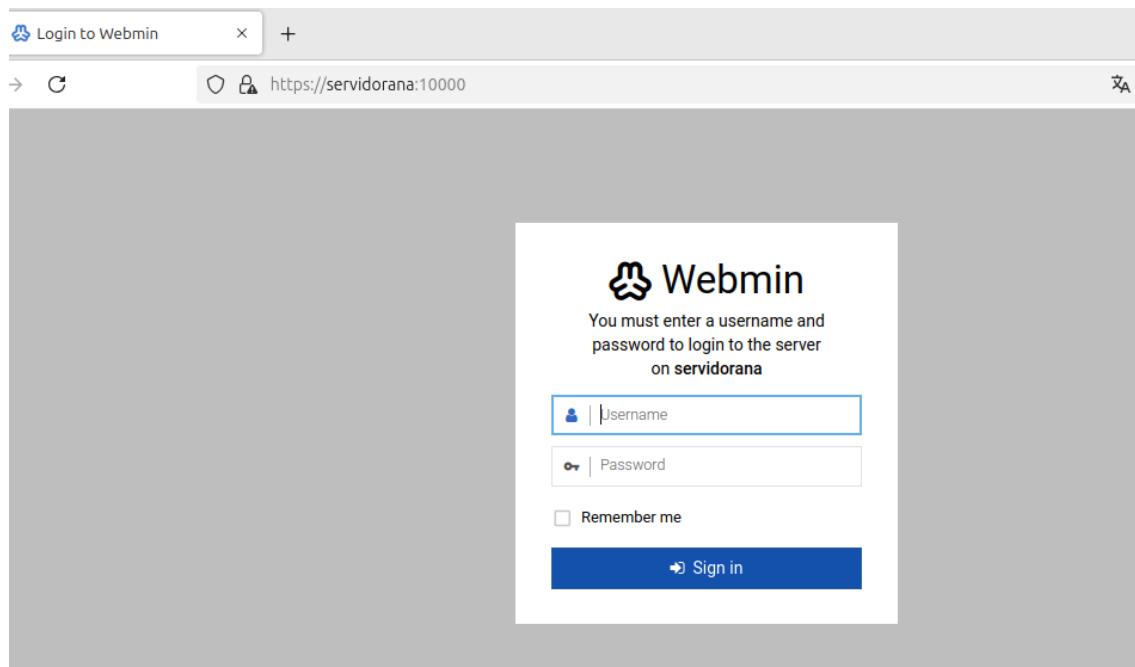
Ahora instalamos el Webmin a través de curl:

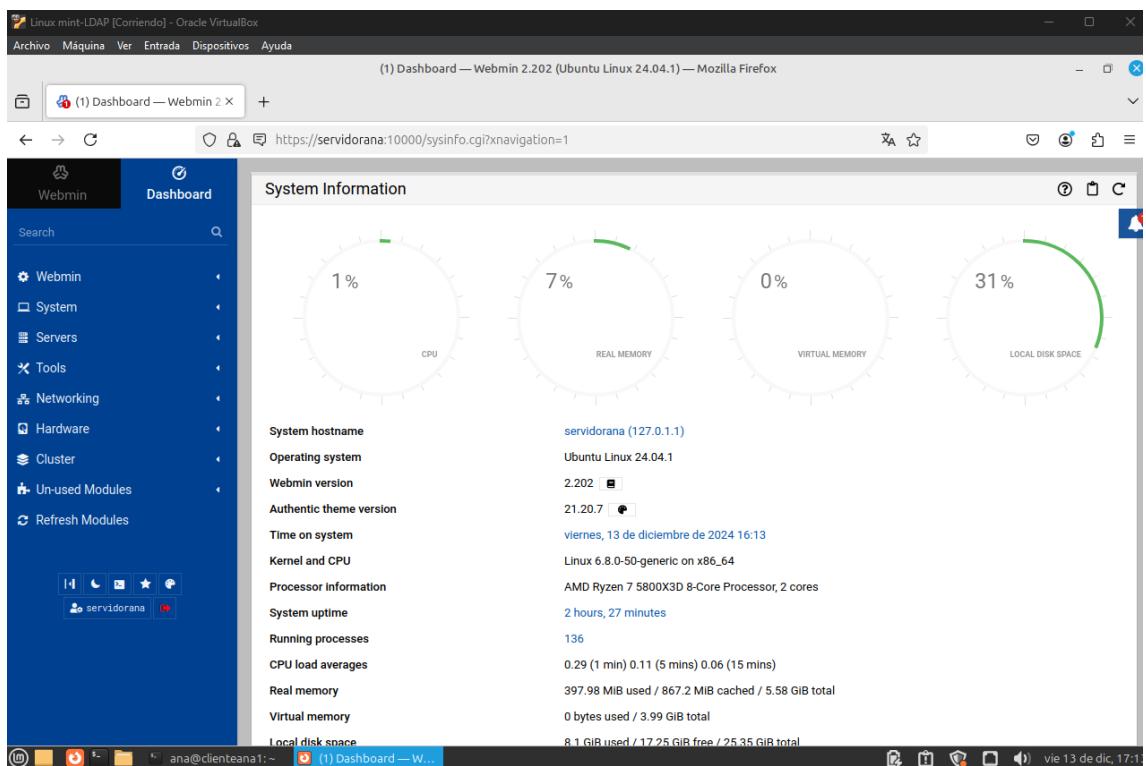
```
root@servidorana:/home/servidorana# curl -o webmin-setup-repos.sh https://raw.githubusercontent.com/webmin/webmin/master/webmin-setup-repos.sh
  % Total    % Received % Xferd  Average Speed   Time     Time      Current
          Dload  Upload Total   Spent    Left  Speed
100  5286  100  5286    0     0  20611      0 --:--:-- --:--:-- 20568
root@servidorana:/home/servidorana# sh webmin-setup-repos.sh
Setup Webmin repository? (y/N) y
Downloading Webmin key ...
.. done
Installing Webmin key ...
.. done
Setting up Webmin repository ...
.. done
Cleaning repository metadata ...
.. done
Downloading repository metadata ...
.. done
Webmin package can now be installed using apt-get install --install-recommends webmin command.
```

Y actualizamos los paquetes:

```
root@servidorana:/home/servidorana# apt-get update
Obj:1 http://security.ubuntu.com/ubuntu noble-security InRelease
Obj:2 http://es.archive.ubuntu.com/ubuntu noble InRelease
Obj:3 http://es.archive.ubuntu.com/ubuntu noble-updates InRelease
Obj:4 http://es.archive.ubuntu.com/ubuntu noble-backports InRelease
Ign:5 https://download.webmin.com/download/newkey/repository stable InRelease
Obj:6 https://download.webmin.com/download/newkey/repository stable Release
Leyendo lista de paquetes... Hecho
root@servidorana:/home/servidorana# apt-get install webmin --install-recommends
```

En clienteana1 iremos al webmin:





En el buscador ponemos LDAP Server y lo instalamos:

The screenshot shows the 'LDAP Server' configuration page. It informs the user that the OpenLDAP server program `slapd` was not found on the system. A green button labeled 'Install Now' is present. The 'Install Packages' section shows the following table:

Package	Current version	New version	Description
<code>libltdl7</code>	<code>None</code>	<code>2.4.7-7build1</code>	
<code>libodbc2</code>	<code>None</code>	<code>2.3.12-1ubuntu0.24.04.1</code>	
<code>slapd</code>	<code>None</code>	<code>2.6.7+dfsg-1~exp1ubuntu8.1</code>	
<code>ldap-utils</code>	<code>None</code>	<code>2.6.7+dfsg-1~exp1ubuntu8.1</code>	

A blue button at the bottom left says 'Return to LDAP Server'.

https://servidorana:10000/package-updates/update.cgi?xnavigation=1

Install Packages

Now installing slapd ..

Installing package(s) with command apt-get -y install slapd..

```
Reading package lists...
Building dependency tree...
Reading state information...
The following additional packages will be installed:
  ldap-utils libltdl7 libodbc2
Suggested packages:
  libsasl2-modules-gssapi-mit | libsasl2-modules-gssapi-heimdal
  odbc-postgresql tdsodbc
The following NEW packages will be installed:
  ldap-utils libltdl7 libodbc2 slapd
0 upgraded, 4 newly installed, 0 to remove and 2 not upgraded.
Need to get 1904 kB of archives.
After this operation, 6499 kB of additional disk space will be used.
Get:1 http://es.archive.ubuntu.com/ubuntu noble/main amd64 libltdl7 amd64 2.4.7-7build1 [40.3 kB]
Get:2 http://es.archive.ubuntu.com/ubuntu noble-updates/main amd64 libodbc2 amd64 2.3.12-1ubuntu0.24.04.1 [158 kB]
Get:3 http://es.archive.ubuntu.com/ubuntu noble-updates/main amd64 slapd amd64 2.6.7+dfsg-1~exp1ubuntu8.1 [1553 kB]
Get:4 http://es.archive.ubuntu.com/ubuntu noble-updates/main amd64 ldap-utils amd64 2.6.7+dfsg-1~exp1ubuntu8.1 [153 kB]
```

Y ya lo tendremos instalado:

https://servidorana:10000/ldap-server/?xnavigation=1

LDAP Server

OpenLDAP 2.6.7

OpenLDAP Server Configuration Manage Schema LDAP Access Control Browse Database Create Tree

Apply Configuration Click this button to activate the current OpenLDAP server configuration.

Stop Server Click this button to shut down the running OpenLDAP server. Beware that this may prevent user accounts or mail aliases stored in the LDAP database from working.

Start at boot? Yes No Change this selection to determine if the OpenLDAP server is started at boot time or not.

4. Crear el dominio estaesmiclaseana.local cuyo usuario administrador se llamará administrador.

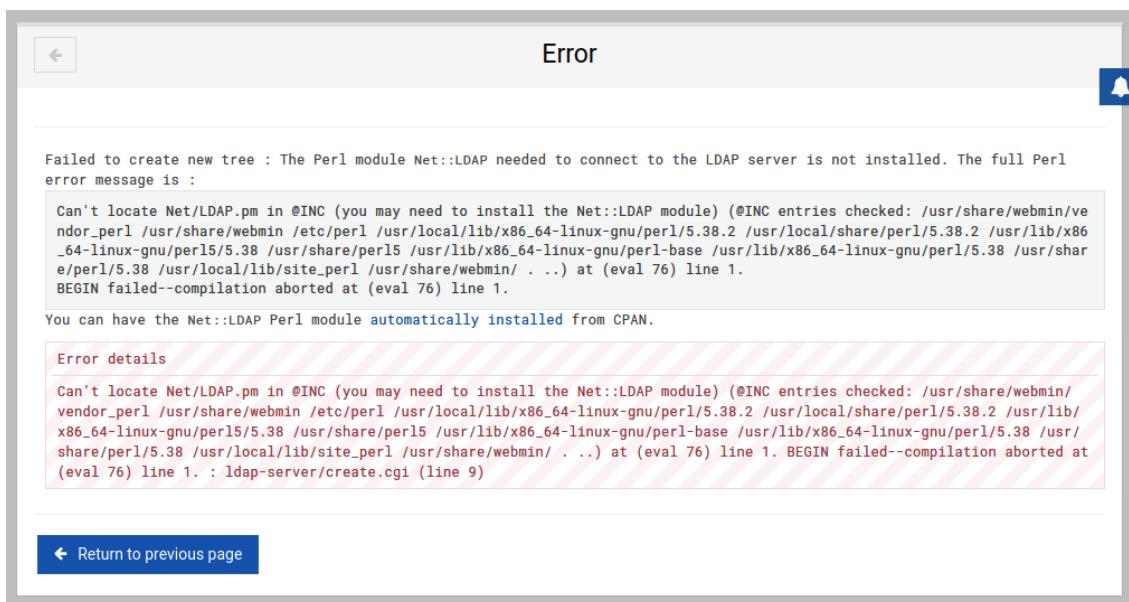
En la ventana anterior del Servidor LDAP le daremos a la configuración principal:

The screenshot shows the 'OpenLDAP Server Configuration' interface. Under 'Global LDAP server options', the 'Root DN for LDAP database' is set to 'dc=estaesmiclaseana,dc=local'. The 'Administration login DN' is 'cn=administrador,dc=estaesmiclaseana,dc=local' and the 'Administration password' is 'SSHA encrypted Iri0s9cR1418obfP+UJkZqg4kg/linRN'. On the right, there are fields for 'New administration password' (set to 'amazonas'), 'Database entries to cache' (Default), and 'Maximum number of search results to return' (Default (500)). A 'Save' button is at the bottom left, and a note about generating an SSL certificate is at the bottom right.

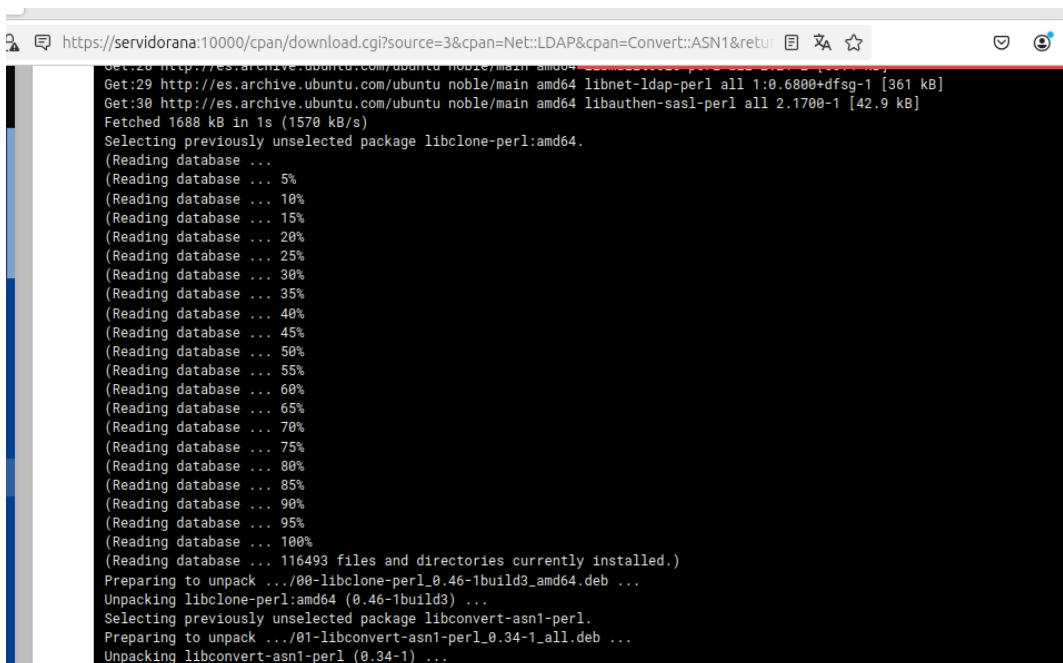
Crearemos un nuevo árbol:

The screenshot shows the 'Create Tree' interface. It says 'This page provided a convenient way to create DN that will be the base of a new tree in the database. It can also create an example user or email alias under the tree, as a template for your own objects.' Under 'New LDAP DN tree options', there's a 'Name for new DN' section with 'Distinguished name' set to 'dc=estaesmiclaseana,dc=local'. Below it, 'Create example object under new DN?' has 'No' selected. A 'Create' button is at the bottom.

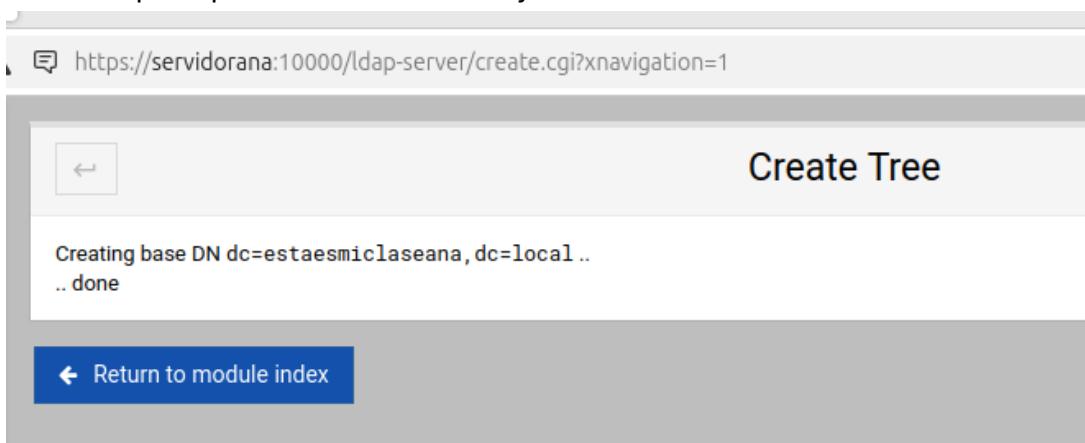
Dará este error y le haremos click “automatically installed” :



Y empezará la instalación:



Justo después probaremos de nuevo y esta vez sí funcionará:



6. Crear las unidades organizativas misgrupos y misusuarios, para grupos y usuarios, respectivamente.

Ahora en el menú LDAP le damos a “Browse Database” y crearemos un nuevo “child object”:

The screenshot shows the 'Browse Database' interface. The URL in the address bar is `https://servidorana:10000/ldap-server/edit_browser.cgi?xnavigation=1`. The main title is 'Browse Database'. The 'Browsing' field contains `dc=estaesmiclaseana,dc=local`. Below it, there are tabs for 'Child objects' (selected) and 'Object attributes'. A message states 'This object has no child objects.' There is a button 'Add new sub-object'. At the bottom, a blue button says 'Return to module index'.

Creamos la unidad organizativa mis usuarios:

The screenshot shows the 'Create Object' interface. The URL in the address bar is `https://servidorana:10000/ldap-server/add_form.cgi?base=dc%3Destaesmiclaseana%2Cdc%3Dlocal&xnavigation=1`. The main title is 'Create Object'. The sub-section is 'New LDAP object details'. It shows 'New object DN' as `ou = misusuarios` and 'Parent object DN' as `dc=estaesmiclaseana,dc=local`. Under 'Object classes', 'organizationalUnit' is selected. In the 'Other attributes' section, there is a table with one row showing 'ou' with value 'misusuarios'.

Attribute	Values
ou	misusuarios

Ahora copiaré esa unidad organizativa y le cambiaré los parámetros:

Browsing: ou=misusuarios, dc=estaesmiclaseana,dc=local

Child objects Object attributes

Select all Invert selection Add attribute to object Clone this object

Attribute	Values
objectClass	organizationalUnit, top
ou	misusuarios

Select all Invert selection Add attribute to object Clone this object

✖ Remove Selected Attributes

[Return to module index](#)

Y esta vez será mis grupos:

New LDAP object details

New object DN: ou = misgrupos

Parent object DN: dc=estaesmiclaseana,dc=local

Object classes:

organizationalUnit
top

Other attributes

Attribute	Values
ou	misgrupos

✚ Create

Browsing: dc=estaesmiclaseana,dc=local

Child objects Object attributes

Select all Invert selection Add new sub-object

Sub-object

ou=misgrupos,dc=estaesmiclaseana,dc=local
 ou=misusuarios,dc=estaesmiclaseana,dc=local

Select all Invert selection Add new sub-object

✖ Remove Selected Children

7. Crear los grupos jefes y subordinados en la unidad organizativa misgrupos.

Dentro de la unidad organizativa mis grupos crearemos jefe y subordinados.

Para ello haremos clic en misgrupos y seleccionamos “child objects” > “add new sub-object”:

Browsing: ou=misgrupos,dc=estaesmiclaseana,dc=local

Child objects Object attributes

This object has no child objects.

Add new sub-object

https://servidorana:10000/ldap-server/add_form.cgi?base=ou%3Dmisgrupos%2Cdc%3Destaesmiclase

Create Object

New LDAP object details

New object DN	Parent object DN
cn = jefes	ou=misgrupos,dc=estaesmiclaseana,dc=local

Object classes

- top
- posixGroup

Other attributes

Attribute	Values
gidNumber	2000
cn	jefes

Create

https://servidorana:10000/ldap-server/add_form.cgi?base=cn%3Djefes%2Cou%3Dmisgrupos%2Cdc%3Destaesmiclase

Create Object

New LDAP object details

New object DN	Parent object DN
cn = subordinados	ou=misgrupos,dc=estaesmiclaseana,dc=local

Object classes

- top
- posixGroup

Other attributes

Attribute	Values
gidNumber	2001
cn	subordinados

Create

8. Crear los usuarios Juan García y Rosa López y hacerlos pertenecer al grupo Jefes. Estos usuarios contarán con perfiles móviles y sus directorios personales se crearán en /home/users.

De la misma manera vamos a crear los usuarios “misusuarios”:

The screenshot shows a web-based LDAP management interface titled "Browse Database". The URL in the address bar is `https://servidorana:10000/ldap-server/edit_browser.cgi?base=ou%3Dmisusuarios%2Cdc%3Destae`. The search bar contains the query `ou=misusuarios,dc=estaesmiclaseana,dc=local`. Below the search bar, there are two tabs: "Child objects" (selected) and "Object attributes". A message states "This object has no child objects." A button labeled "Add new sub-object" is visible. At the bottom left is a blue button labeled "Return to module index".

Juan:

The screenshot shows the same LDAP management interface for the user "Juan". The URL is now `https://servidorana:10000/ldap-server/edit_browser.cgi?base=uid%3Djuan%2Cou%3Dmisusuarios%2Cdc%3Destae`. The search bar contains the query `uid=juan,ou=misusuarios,dc=estaesmiclaseana,dc=local`. The "Object attributes" tab is selected. A table lists the attributes and their values for the user "Juan":

Attribute	Values	Actions
cn	Juan Garcia	Edit
gidNumber	2000	Edit
givenName	Juan Garcia	Edit
homeDirectory	/home/users/juan	Edit
loginShell	/bin/bash	Edit
objectClass	top, posixAccount, inetOrgPerson, person, shadowAccount	Edit
shadowExpire	-1	Edit
shadowFlag	7	Edit
shadowMin	6	Edit
sn	Garcia	Edit
uid	Juan	Edit
uidNumber	3000	Edit
userPassword	amazonas	Edit

At the bottom, there are buttons for "Select all", "Invert selection", "Add attribute to object", "Clone this object", and a prominent red button labeled "Remove Selected Attributes".

Rosa:

The screenshot shows a web-based LDAP browser interface titled "Browse Database". The URL in the address bar is https://servidorana:10000/ldap-server/edit_browser.cgi?base=uid%3Drosa%2C%20ou%3Dmisusuarios%2C%20dc%3Destaesmiclaseana%2C%20dc%3Dlocal. The search bar at the top contains the query "uid=rosa, ou=misusuarios,dc=estaesmiclaseana,dc=local". Below the search bar are two tabs: "Child objects" (selected) and "Object attributes". The main area displays a table of attributes and their values for the user "Rosa". The table has columns for "Attribute", "Values", and "Actions". The attributes listed are: cn, gidNumber, givenName, homeDirectory, loginShell, objectClass, shadowExpire, shadowFlag, shadowMin, sn, uid, uidNumber, and userPassword. The values for each attribute are: cn=Rosa Lopez, gidNumber=2000, givenName=Rosa Lopez, homeDirectory=/home/users/rosa, loginShell/bin/bash, objectClass=top, posixAccount, inetOrgPerson, person, shadowAccount, shadowExpire=-1, shadowFlag=7, shadowMin=6, sn=Lopez, uid=rosa, uidNumber=3001, and userPassword=amazonas. Each row has an "Edit" button in the "Actions" column.

Attribute	Values	Actions
cn	Rosa Lopez	Edit
gidNumber	2000	Edit
givenName	Rosa Lopez	Edit
homeDirectory	/home/users/rosa	Edit
loginShell	/bin/bash	Edit
objectClass	top, posixAccount, inetOrgPerson, person, shadowAccount	Edit
shadowExpire	-1	Edit
shadowFlag	7	Edit
shadowMin	6	Edit
sn	Lopez	Edit
uid	rosa	Edit
uidNumber	3001	Edit
userPassword	amazonas	Edit

9. Crear también los usuarios Luis Gutiérrez, Ana García, Antonio Martínez y Patricia Torres pertenecientes al grupo subordinados. Estos usuarios tendrán perfiles locales y su directorio personal coincidirá con el login de usuario, directamente en el directorio /home.

Vamos a hacerlo de la misma forma:

Luis:

The screenshot shows the 'Browse Database' interface for user 'uid=luis'. The 'Object attributes' tab is selected. The table lists attributes such as cn, gidNumber, givenName, homeDirectory, loginShell, objectClass, shadowExpire, shadowFlag, shadowMin, sn, uid, uidNumber, and userPassword, each with their corresponding values and an 'Edit' button.

Attribute	Values	Actions
cn	Luis Gutierrez	Edit
gidNumber	2001	Edit
givenName	Luis Gutierrez	Edit
homeDirectory	/home/luis	Edit
loginShell	/bin/bash	Edit
objectClass	top, posixAccount, inetOrgPerson, person, shadowAccount	Edit
shadowExpire	-1	Edit
shadowFlag	7	Edit
shadowMin	6	Edit
sn	Gutierrez	Edit
uid	luis	Edit
uidNumber	3002	Edit
userPassword	amazonas	Edit

Ana:

The screenshot shows the 'Browse Database' interface for user 'uid=ana'. The 'Object attributes' tab is selected. The table lists attributes such as cn, gidNumber, givenName, homeDirectory, loginShell, objectClass, shadowExpire, shadowFlag, shadowMin, sn, uid, uidNumber, and userPassword, each with their corresponding values and an 'Edit' button.

Attribute	Values	Actions
cn	Ana Garcia	Edit
gidNumber	2001	Edit
givenName	Ana Garcia	Edit
homeDirectory	/home/ana	Edit
loginShell	/bin/bash	Edit
objectClass	top, posixAccount, inetOrgPerson, person, shadowAccount	Edit
shadowExpire	-1	Edit
shadowFlag	7	Edit
shadowMin	6	Edit
sn	Garcia	Edit
uid	ana	Edit
uidNumber	3003	Edit
userPassword	amazonas	Edit

Antonio:

The screenshot shows a web-based LDAP browser interface titled "Browse Database". The URL in the address bar is https://servidorana:10000/ldap-server/edit_browser.cgi?base=uid%3Dantonio%2C ou%3Dmisusuarios,dc=estaesmiclaseana,dc=local. The search bar contains "uid=antonio, ou=usuarios,dc=estaesmiclaseana,dc=local". The main table displays the attributes and values for the "antonio" user, including cn, gidNumber, givenName, homeDirectory, loginShell, objectClass, shadowExpire, shadowFlag, shadowMin, sn, uid, uidNumber, and userPassword. Each row has an "Edit" button in the "Actions" column.

Attribute	Values	Actions
cn	Antonio Martinez	Edit
gidNumber	2001	Edit
givenName	Antonio Martinez	Edit
homeDirectory	/home/antonio	Edit
loginShell	/bin/bash	Edit
objectClass	top, posixAccount, inetOrgPerson, person, shadowAccount	Edit
shadowExpire	-1	Edit
shadowFlag	7	Edit
shadowMin	6	Edit
sn	Martinez	Edit
uid	antonio	Edit
uidNumber	3004	Edit
userPassword	amazonas	Edit

Patricia:

The screenshot shows a web-based LDAP browser interface titled "Browse Database". The URL in the address bar is https://servidorana:10000/ldap-server/edit_browser.cgi?base=uid%3Dpatricia%2C ou%3Dmisusuarios,dc=estaesmiclaseana,dc=local. The search bar contains "uid=patricia, ou=usuarios,dc=estaesmiclaseana,dc=local". The main table displays the attributes and values for the "patricia" user, including cn, gidNumber, givenName, homeDirectory, loginShell, objectClass, shadowExpire, shadowFlag, shadowMin, sn, uid, uidNumber, and userPassword. Each row has an "Edit" button in the "Actions" column.

Attribute	Values	Actions
cn	Patricia Torres	Edit
gidNumber	2001	Edit
givenName	Patricia Torres	Edit
homeDirectory	/home/patricia	Edit
loginShell	/bin/bash	Edit
objectClass	top, posixAccount, inetOrgPerson, person, shadowAccount	Edit
shadowExpire	-1	Edit
shadowFlag	7	Edit
shadowMin	6	Edit
sn	Torres	Edit
uid	patricia	Edit
uidNumber	3005	Edit
userPassword	amazonas	Edit

10. ¿En qué se diferencia la instalación de perfiles móviles de los perfiles locales? ¿Qué paquetes hay que instalar en el servidor? ¿Y en el cliente?

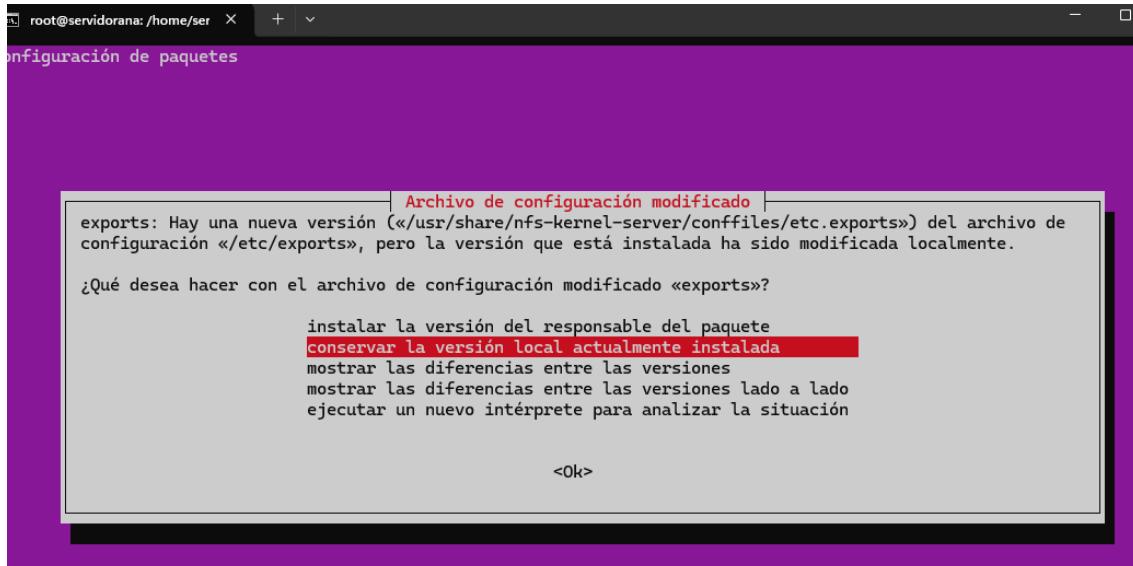
Los perfiles móviles permiten que esos usuarios accedan a datos y configuración desde cualquier dispositivo que se conecte desde la red porque se almacenan en el servidor.

Los perfiles locales, se almacenan en un dispositivo concreto por lo que no podremos acceder a datos y configuraciones desde otros dispositivos.

Servidor:

Para crear perfiles móviles instalaremos:

```
root@servidorana:/home/servidorana# apt-get install nfs-kernel-server nfs-common rpcbind
Leyendo lista de paquetes... Hecho
Creando árbol de dependencias... Hecho
Leyendo la información de estado... Hecho
Se instalarán los siguientes paquetes adicionales:
  keyutils libnfsidmap1
Paquetes sugeridos:
  watchdog
Se instalarán los siguientes paquetes NUEVOS:
  keyutils libnfsidmap1 nfs-common nfs-kernel-server rpcbind
0 actualizados, 5 nuevos se instalarán, 0 para eliminar y 8 no actualizados.
Se necesita descargar 569 kB de archivos.
Se utilizarán 2.022 kB de espacio de disco adicional después de esta operación.
¿Desea continuar? [S/n] s
Des:1 http://es.archive.ubuntu.com/ubuntu/noble/main amd64 libnfsidmap1 amd64 1:2.6-4~ubuntus5 [48.2 kB]
```



Y crearemos una carpeta donde se almacenarán:

```
root@servidorana:/home/servidorana# mkdir /moviles
root@servidorana:/home/servidorana# chown nobody:nogroup /moviles
```

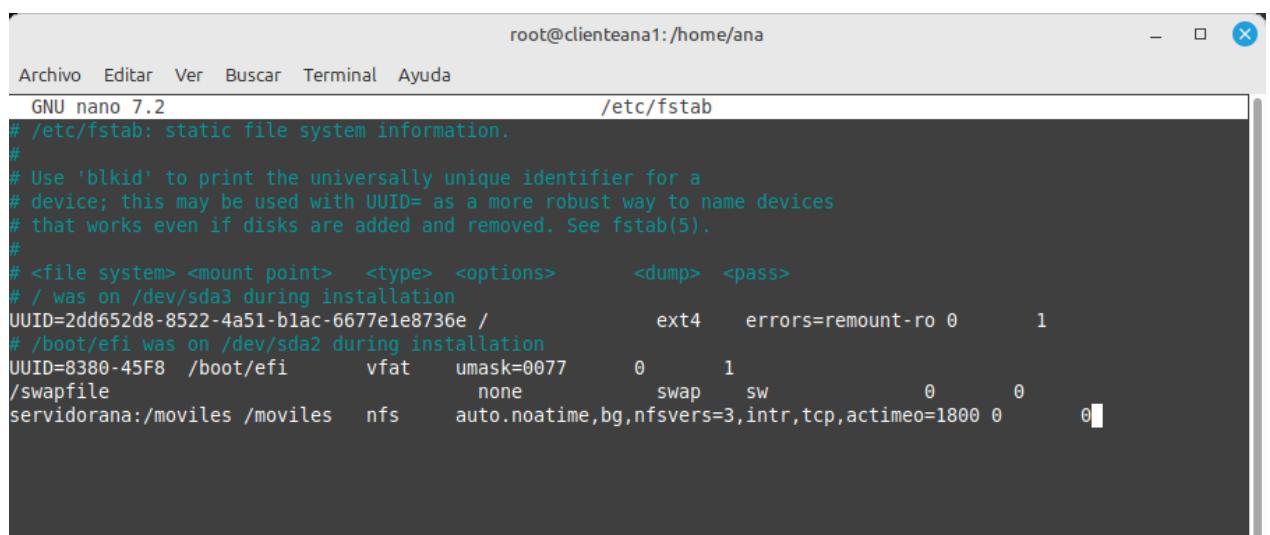
Reiniciaremos:

```
root@servidorana:/home/servidorana# /etc/init.d/nfs-kernel-server restart
Restarting nfs-kernel-server (via systemctl): nfs-kernel-server.service.
root@servidorana:/home/servidorana#
```

Clienteana1:

```
ana@clienteana1:~$ sudo apt-get install nfs-common rpcbind
[sudo] contraseña para ana:
Leyendo lista de paquetes... Hecho
Creando árbol de dependencias... Hecho
Leyendo la información de estado... Hecho
Se instalarán los siguientes paquetes adicionales:
  libevent-core-2.1-7t64
Paquetes sugeridos:
```

Editaremos este archivo:



The screenshot shows a terminal window titled "root@clienteana1:/home/ana". The window contains a text editor displaying the "/etc/fstab" file. The file includes entries for the root partition, swap, and an NFS mount point for the "/moviles" directory on the server.

```
root@clienteana1:/home/ana
Archivo Editar Ver Buscar Terminal Ayuda
GNU nano 7.2
/etc/fstab
# /etc/fstab: static file system information.
#
# Use 'blkid' to print the universally unique identifier for a
# device; this may be used with UUID= as a more robust way to name devices
# that works even if disks are added and removed. See fstab(5).
#
# <file system> <mount point> <type> <options> <dump> <pass>
# / was on /dev/sda3 during installation
UUID=2dd652d8-8522-4a51-b1ac-6677e1e8736e / ext4 errors=remount-ro 0 1
# /boot/efi was on /dev/sda2 during installation
UUID=8380-45F8 /boot/efi vfat umask=0077 0 1
/swappfile none swap sw 0 0
servidorana:/moviles /moviles nfs auto,noatime,bg,nfsvers=3,intr,tcp,actimeo=1800 0 0
```

Cambiamos a perfumes móviles:

https://servidorana:10000/ldap-server/edit_browser.cgi?base=uid%3Drosa%2Cou%3Dm

Browse Database

Browsing: uid=rosa,ou=misusuarios,dc=estaesmiclaseana,dc=local

Show Browse Parent

Child objects Object attributes

Select all Invert selection Add attribute to object Clone this object

Attribute	Values
<input type="checkbox"/> cn	Rosa Lopez
<input type="checkbox"/> gidNumber	2000
<input type="checkbox"/> givenName	Rosa Lopez
<input type="checkbox"/> homeDirectory	/moviles/rosa
<input type="checkbox"/> loginShell	/bin/bash
<input type="checkbox"/> objectClass	top, posixAccount, inetOrgPerson, person, shadowAc

https://servidorana:10000/ldap-server/edit_browser.cgi?base=uid%3Djuan%2Cou%3Dm

Browse Database

Browsing: uid=juan,ou=misusuarios,dc=estaesmiclaseana,dc=local

Show Browse Parent

Child objects Object attributes

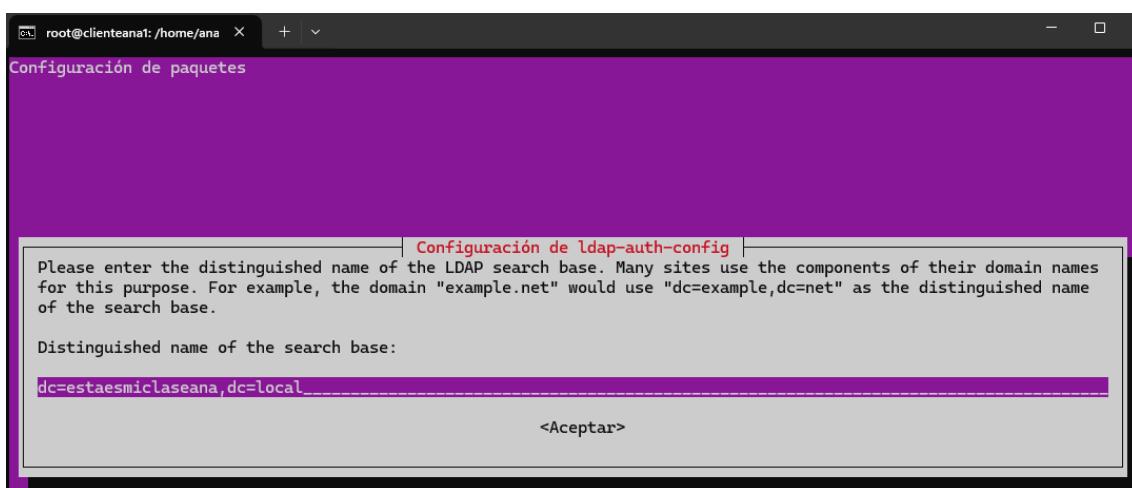
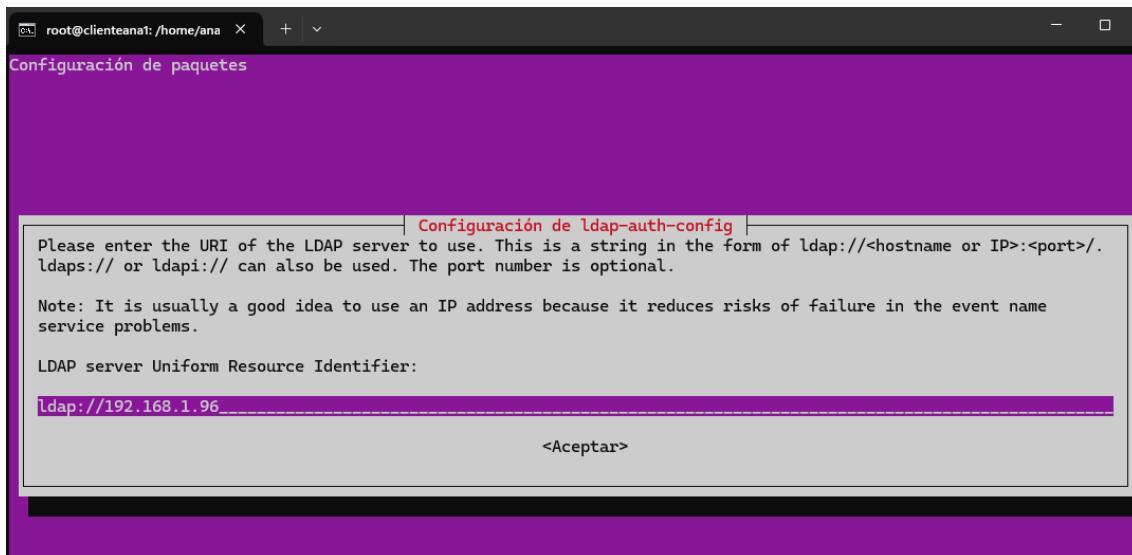
Select all Invert selection Add attribute to object Clone this object

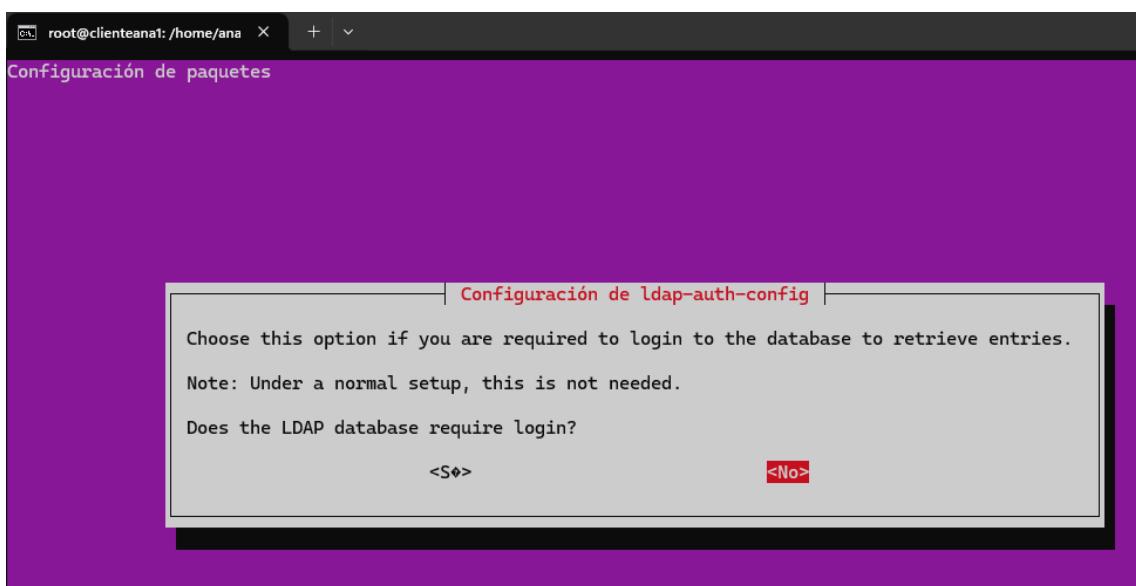
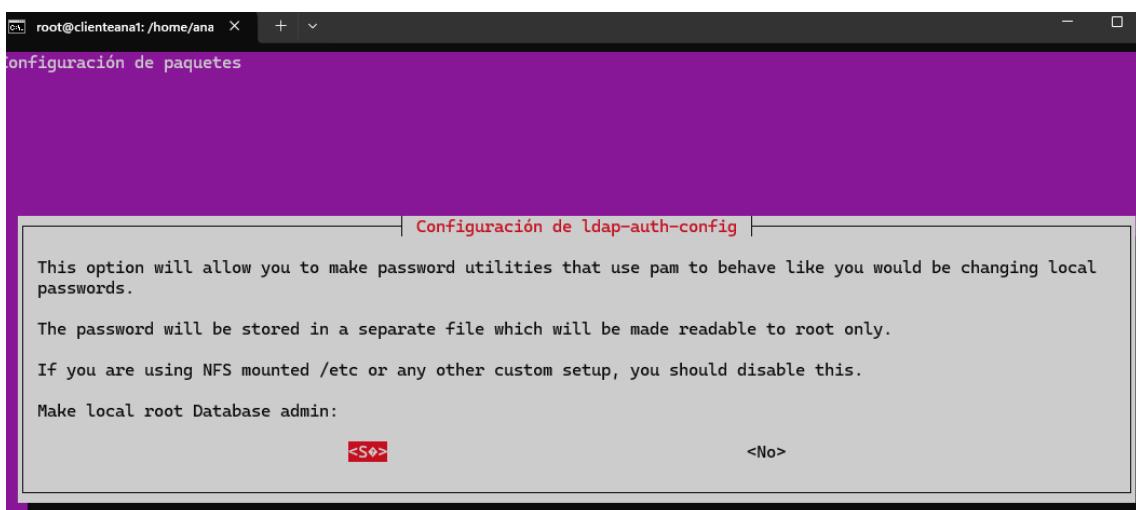
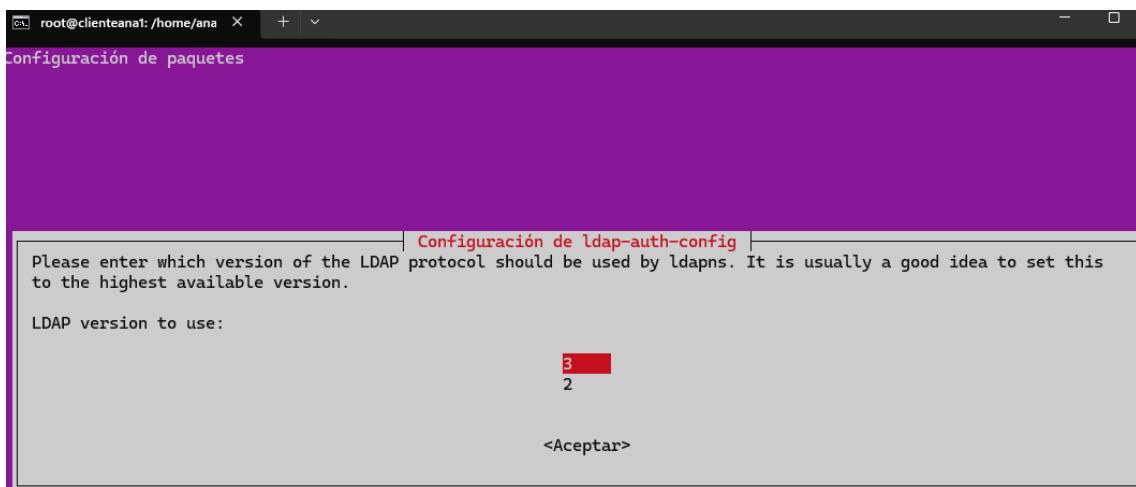
Attribute	Values
<input type="checkbox"/> cn	Juan Garcia
<input type="checkbox"/> gidNumber	2000
<input type="checkbox"/> givenName	Juan Garcia
<input type="checkbox"/> homeDirectory	/moviles/juan
<input type="checkbox"/> loginShell	/bin/bash
<input type="checkbox"/> objectClass	top, posixAccount, inetOrgPerson, person, shadowAc

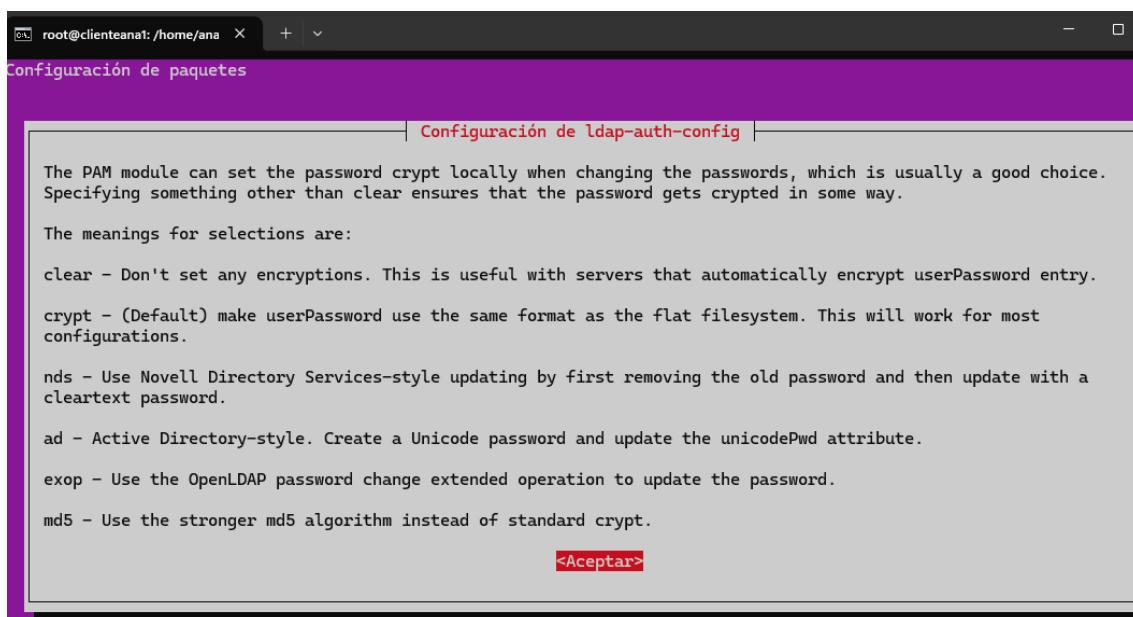
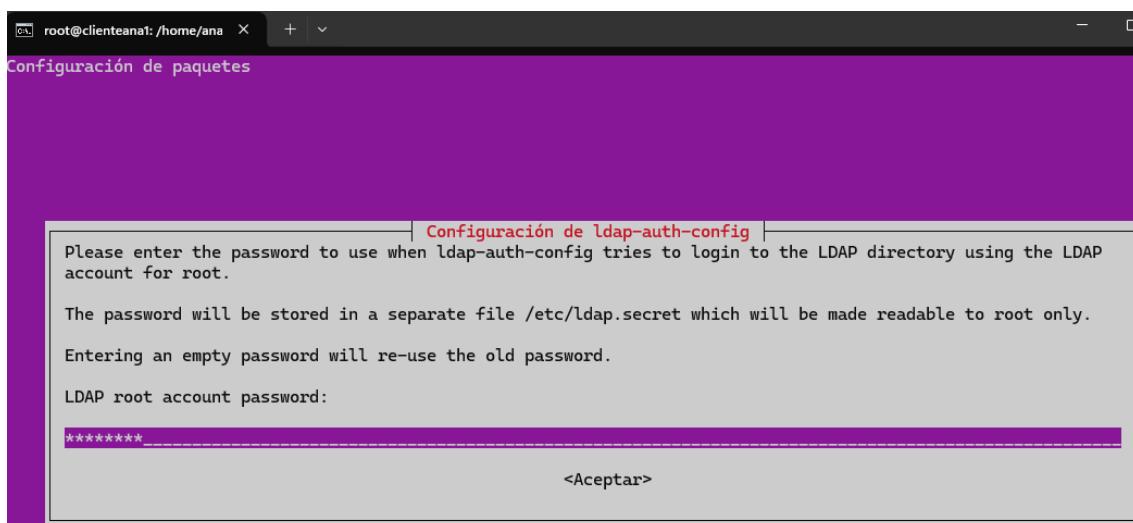
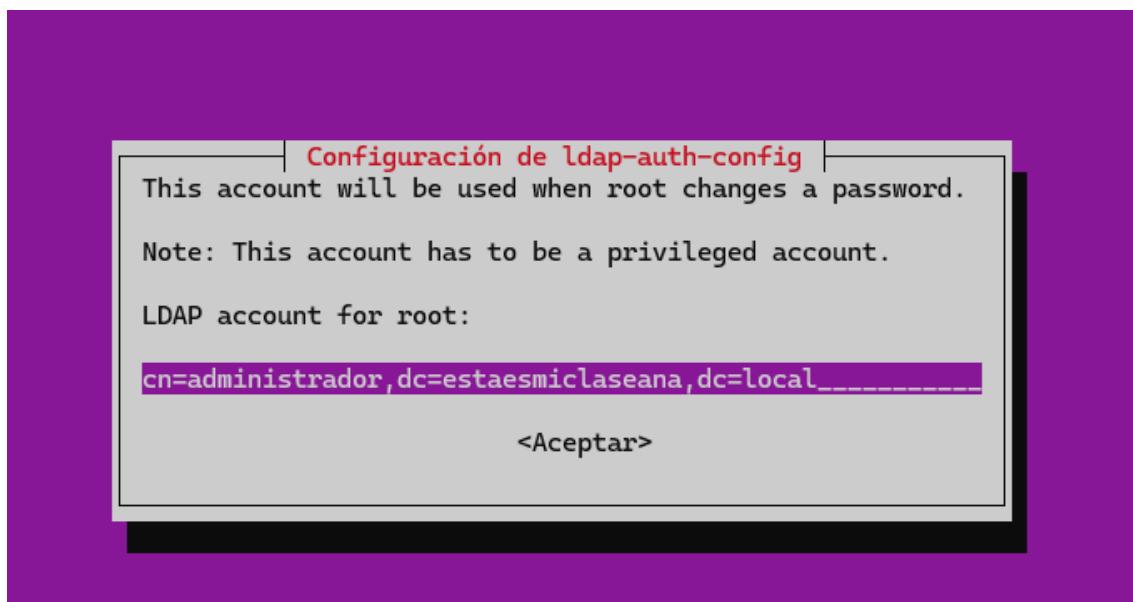
11. Comprobar el acceso de los dos tipos de usuarios (perfiles móviles y locales) al dominio.

Ponemos este comando:

```
apt-get install libnss-ldap libpam-ldap ldap-utils -y
```







Vamos a cambiar este archivo, donde añadiremos ldap:

```
root@clienteana1:/home/ana ~ + | ~
GNU nano 7.2 /etc/nsswitch.conf *
# /etc/nsswitch.conf
#
# Example configuration of GNU Name Service Switch functionality.
# If you have the 'glibc-doc-reference' and 'info' packages installed, try:
# `info libc "Name Service Switch"' for information about this file.

passwd:      files  systemd  ldap
group:       files  systemd  ldap
shadow:      files  systemd  ldap
gshadow:     files  systemd

hosts:        files  mdns4_minimal [NOTFOUND=return] dns myhostname
networks:    files

protocols:   db  files
services:    db  files
ethers:      db  files
rpc:         db  files

netgroup:    nis
```

Haremos la comprobación con getent password: (esta captura es de antes de cambiar el directorio)

```
root@clienteana1:/home/ana ~ + | ~
tss:x:104:103:TPM software stack,,,,:/var/lib/tpm:/bin/false
rtkit:x:105:104:RealtimeKit,,,,:/proc:/usr/sbin/nologin
systemd-coredump:x:989:989:systemd Core Dumper:/:/usr/sbin/nologin
kernoops:x:106:65534:Kernel Oops Tracking Daemon,,,:/usr/sbin/nologin
uuidd:x:107:107:/:/run/uuidd:/usr/sbin/nologin
cups-pk-helper:x:108:105:user for cups-pk-helper service,,,:/nonexistent:/usr/sbin/nologin
avahi-autoipd:x:109:111:Avahi autoip daemon,,,:/var/lib/avahi-autoipd:/usr/sbin/nologin
_flatpak:x:110:112:Flatpak system-wide installation helper,,,:/nonexistent:/usr/sbin/nologin
avahi:x:111:113:Avahi mDNS daemon,,,:/run/avahi-daemon:/usr/sbin/nologin
geoclue:x:112:116:/:/var/lib/geoclue:/usr/sbin/nologin
dnsmasq:x:999:65534:dnsmasq:/var/lib/misc:/usr/sbin/nologin
nm-openvpn:x:113:117:NetworkManager OpenVPN,,,:/var/lib/openvpn/chroot:/usr/sbin/nologin
lightdm:x:114:118:Light Display Manager:/var/lib/lightdm:/bin/false
tcpdump:x:115:120:/:/nonexistent:/usr/sbin/nologin
speech-dispatcher:x:116:29:Speech Dispatcher,,,:/run/speech-dispatcher:/bin/false
fwupd-refresh:x:988:988:Firmware update daemon:/var/lib/fwupd:/usr/sbin/nologin
cups-browsed:x:117:105:/:/nonexistent:/usr/sbin/nologin
saned:x:118:123:/:/var/lib/saned:/usr/sbin/nologin
hplip:x:119:7:HPLIP system user,,,:/run/hplip:/bin/false
colord:x:120:124:colord colour management daemon,,,:/var/lib/colord:/usr/sbin/nologin
ana:x:1000:1000:ana,,,,:/home/ana:/bin/bash
sssd:x:121:126:sssd system user,,,:/var/lib/sssd:/usr/sbin/nologin
sshd:x:122:65534:/:/run/sshd:/usr/sbin/nologin
nslcd:x:123:127:nslcd name service LDAP connection daemon,,,:/run/nslcd:/usr/sbin/nologin
juan:x:3000:2000:Juan Garcia:/home/users/juan:/bin/bash
rosa:x:3001:2000:Rosa Lopez:/home/users/rosa:/bin/bash
luis:x:3002:2001:Luis Gutierrez:/home/luis:/bin/bash
ana:x:3003:2001:Ana Garcia:/home/ana:/bin/bash
antonio:x:3004:2001:Antonio Martinez:/home/antonio:/bin/bash
patricia:x:3005:2001:Patricia Torres:/home/patricia:/bin/bash
```

```

instcu:x:127:
jefes:*:2000:
subordinados:*:2001:
root@clienteanal:/home/ana#

```

Vamos al archivo /etc/pam.d/common-password y eliminamos use-authok.

```

GNU nano 7.2                               /etc/pam.d/common-password
#between Debian 11 and older releases replace "yescrypt" with "sha512"
#for compatibility . The "obscure" option replaces the old
#'OBSCURE_CHECKS_ENAB' option in login.defs. See the pam_unix manpage
#for other options.

# As of pam 1.0.1-6, this file is managed by pam-auth-update by default.
# To take advantage of this, it is recommended that you configure any
# local modules either before or after the default block, and use
# pam-auth-update to manage selection of other modules. See
# pam-auth-update(8) for details.

# here are the per-package modules (the "Primary" block)
password      [success=2 default=ignore]      pam_unix.so obscure yescrypt
password      [success=1 user_unknown=ignore default=die]    pam_ldap.so try_first_pass
# here's the fallback if no module succeeds
password      requisite          pam_deny.so
# prime the stack with a positive return value if there isn't one already;
# this avoids us returning an error just because nothing sets a success code
# since the modules above will each just jump around
password      required          pam_permit.so
# and here are more per-package modules (the "Additional" block)
password      optional          pam_gnome_keyring.so
password      optional          pam_ecryptfs.so
# end of pam-auth-update config

```

También modificamos este archivo añadiendo al final este texto:

```

GNU nano 7.2                               /etc/pam.d/common-session *
#
# As of pam 1.0.1-6, this file is managed by pam-auth-update by default.
# To take advantage of this, it is recommended that you configure any
# local modules either before or after the default block, and use
# pam-auth-update to manage selection of other modules. See
# pam-auth-update(8) for details.

# here are the per-package modules (the "Primary" block)
session [default=1]          pam_permit.so
# here's the fallback if no module succeeds
session requisite          pam_deny.so
# prime the stack with a positive return value if there isn't one already;
# this avoids us returning an error just because nothing sets a success code
# since the modules above will each just jump around
session required          pam_permit.so
# The pam_umask module will set the umask according to the system default in
# /etc/login.defs and user settings, solving the problem of different
# umask settings with different shells, display managers, remote sessions etc.
# See "man pam_umask".
session optional          pam_umask.so
# and here are more per-package modules (the "Additional" block)
session required          pam_unix.so
session optional          pam_ldap.so
session optional          pam_systemd.so
session optional          pam_ecryptfs.so unwrap
# end of pam-auth-update config
session optional          pam_mkhomedir.so skel=/etc/skel umask=077

```

Vamos a comprobar que el fichero está bien usando este comando:

```
ldapsearch -x -H ldap://192.168.2.110 -b "dc=estaesmiclaseana,dc=local"
```

```
root@clienteana1:/home/ana ~ + | 
loginShell: /bin/bash
shadowMin: 6
shadowExpire: -1
shadowFlag: 7

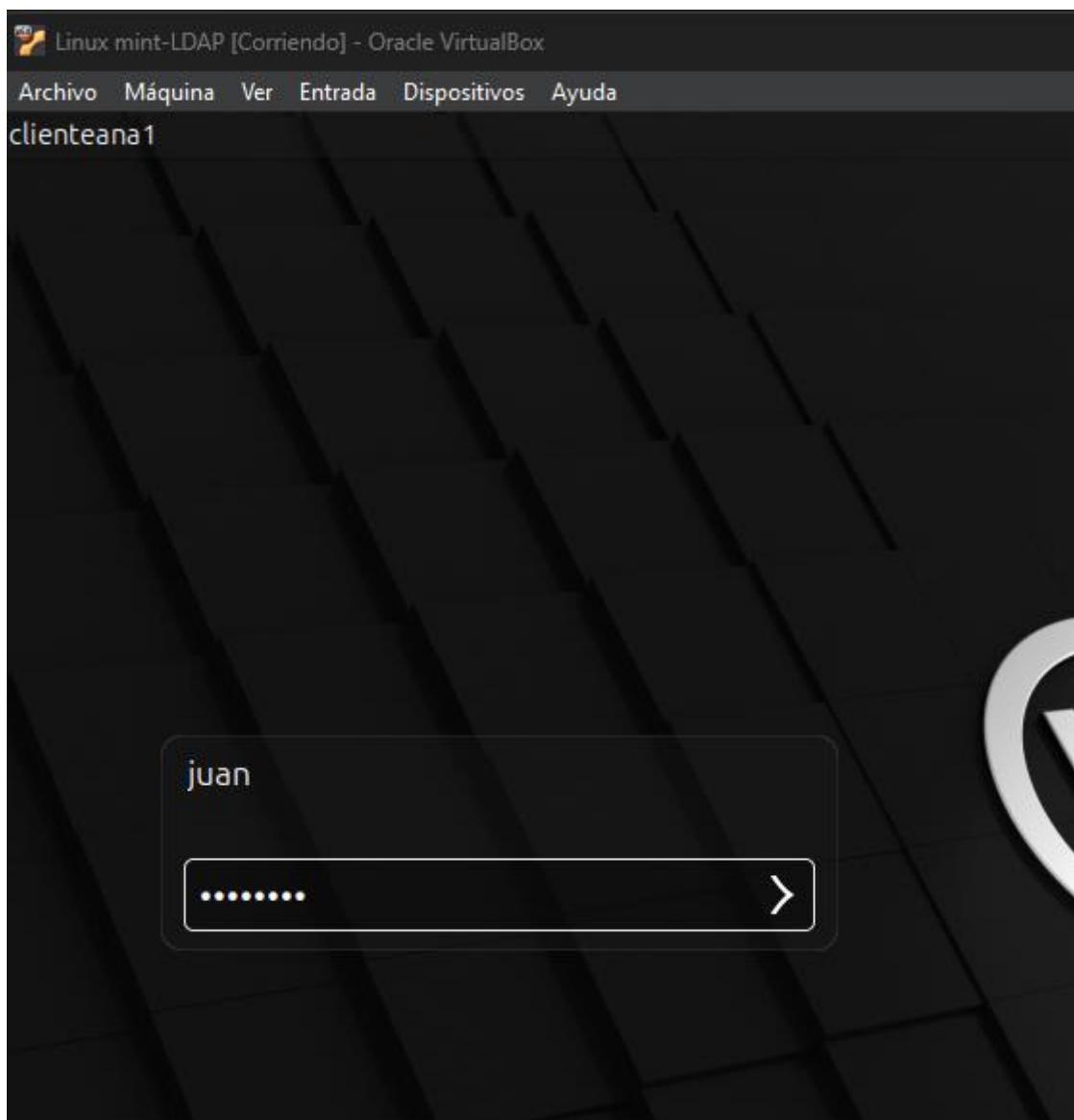
# patricia, misusuarios, estaesmiclaseana.local
dn: uid=patricia,ou=misusuarios,dc=estaesmiclaseana,dc=local
objectClass: top
objectClass: posixAccount
objectClass: inetOrgPerson
objectClass: person
objectClass: shadowAccount
cn: Patricia Torres
uid: patricia
uidNumber: 3005
gidNumber: 2001
homeDirectory: /home/patricia
sn: Torres
givenName: Patricia Torres
loginShell: /bin/bash
shadowMin: 6
shadowExpire: -1
shadowFlag: 7

# search result
search: 2
result: 0 Success

# numResponses: 12
# numEntries: 11
root@clienteana1:/home/ana#
```

Iniciamos sesión con cada uno para que creen los directorios:

```
root@clienteanal:/home# sudo su - rosa
Creando directorio «/moviles/rosa».
rosa@clienteanal:~$ exit
cerrar sesión
root@clienteanal:/home# sudo su - juan
Creando directorio «/moviles/juan».
juan@clienteanal:~$ ^C
juan@clienteanal:~$ exit
cerrar sesión
root@clienteanal:/home# ls -l
total 28
drwxr-x--- 16 ana      ana          4096 dic 16 20:56 ana
drwx-----  5 anag     subordinados 4096 dic 16 20:23 anag
drwx-----  5 antonio  subordinados 4096 dic 16 20:24 antonio
drwxr-x---  4    1001    1001 4096 dic 14 17:11 juan
drwx-----  5 luis     subordinados 4096 dic 16 20:24 luis
drwx-----  5 patricia subordinados 4096 dic 16 20:24 patricia
drwxr-xr-x  2 root     root         4096 dic 14 17:17 users
root@clienteanal:/home#
```

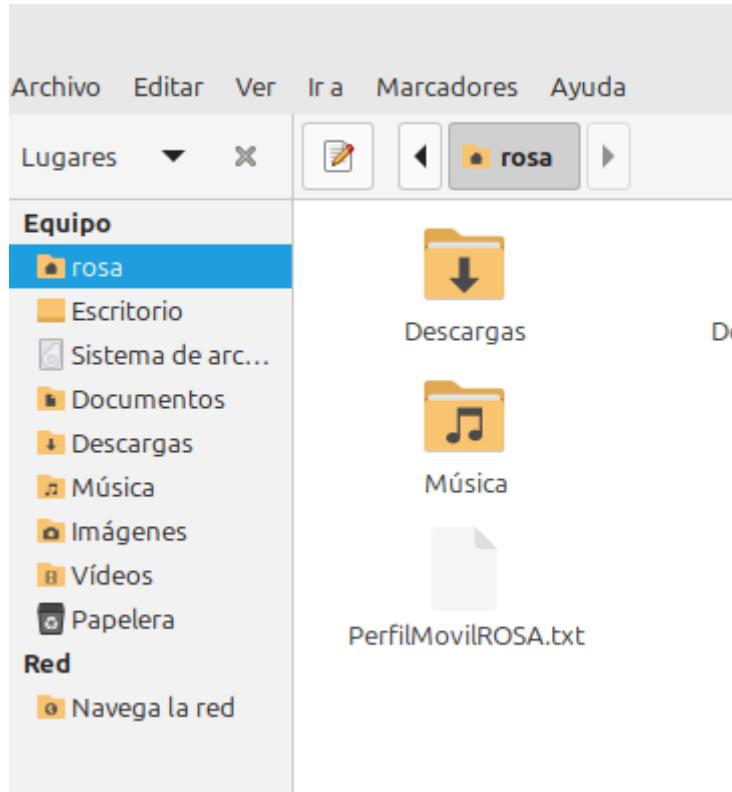


Comprobamos las carpetas del directorio

```
juan@clienteana1:~$ cd /home
juan@clienteana1:/home$ ls -l
total 28
drwxr-x--- 16 ana      ana          4096 dic 14 18:12 ana
drwx-----  5 anag     subordinados 4096 dic 16 20:23 anag
drwx-----  5 antonio  subordinados 4096 dic 16 20:24 antonio
drwxr-x---  4    1001    1001        4096 dic 14 17:11 juan
drwx-----  5 luis     subordinados 4096 dic 16 20:24 luis
drwx-----  5 patricia subordinados 4096 dic 16 20:24 patricia
drwxr-xr-x  2 root    root         4096 dic 14 17:17 users
juan@clienteana1:/home$
```

12. Comprobar que el perfil móvil funciona correctamente.

Voy a crear un archivo .txt para probar.



```
rosa@clienteanal:~$ ls -l
total 32
drwxr-xr-x 2 rosa jefes 4096 dic 16 20:27 Descargas
drwxr-xr-x 2 rosa jefes 4096 dic 16 20:27 Documentos
drwxr-xr-x 2 rosa jefes 4096 dic 16 20:27 Escritorio
drwxr-xr-x 2 rosa jefes 4096 dic 16 20:27 Imágenes
drwxr-xr-x 2 rosa jefes 4096 dic 16 20:27 Música
-rw-r--r-- 1 rosa jefes    0 dic 16 20:27 PerfilMovilROSA.txt
drwxr-xr-x 2 rosa jefes 4096 dic 16 20:27 Plantillas
drwxr-xr-x 2 rosa jefes 4096 dic 16 20:27 Público
drwxr-xr-x 2 rosa jefes 4096 dic 16 20:27 Vídeos
```

Compruebo en el servidor:

```
root@servidorana:/moviles/rosa# ls -l
total 32
drwxr-xr-x 2 3001 2000 4096 dic 16 20:02 Descargas
drwxr-xr-x 2 3001 2000 4096 dic 16 20:02 Documentos
drwxr-xr-x 2 3001 2000 4096 dic 16 20:02 Escritorio
drwxr-xr-x 2 3001 2000 4096 dic 16 20:02 Imágenes
drwxr-xr-x 2 3001 2000 4096 dic 16 20:02 Música
-rw-r--r-- 1 3001 2000 0 dic 16 20:02 PerfilMovilROSA.txt
drwxr-xr-x 2 3001 2000 4096 dic 16 20:02 Plantillas
drwxr-xr-x 2 3001 2000 4096 dic 16 20:02 Público
drwxr-xr-x 2 3001 2000 4096 dic 16 20:02 Vídeos
```

También lo haré con juan:

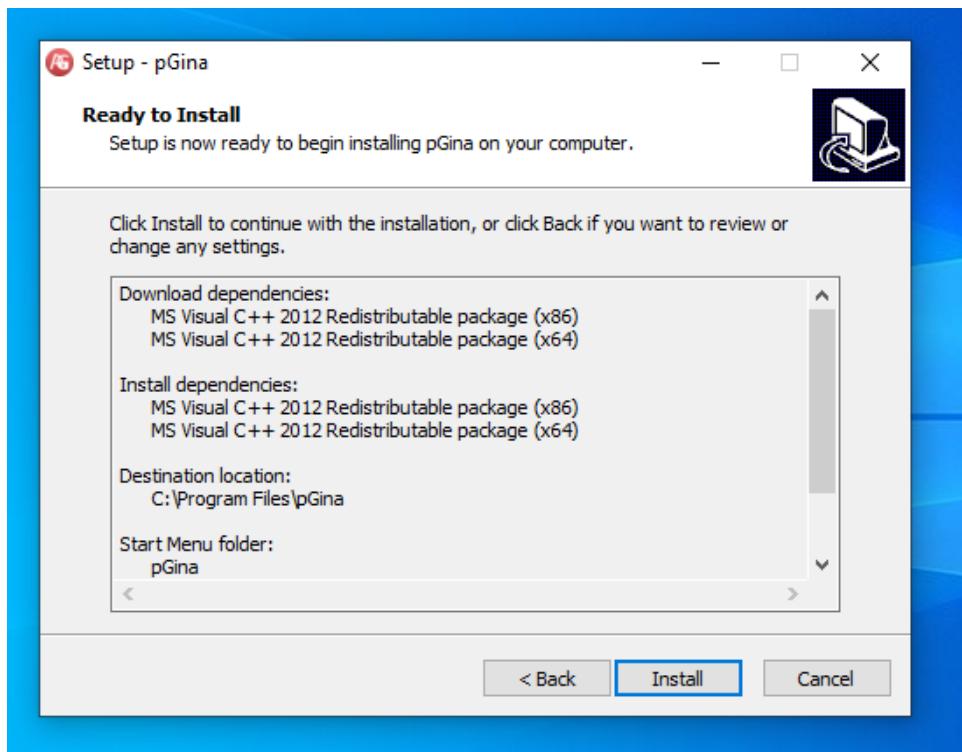
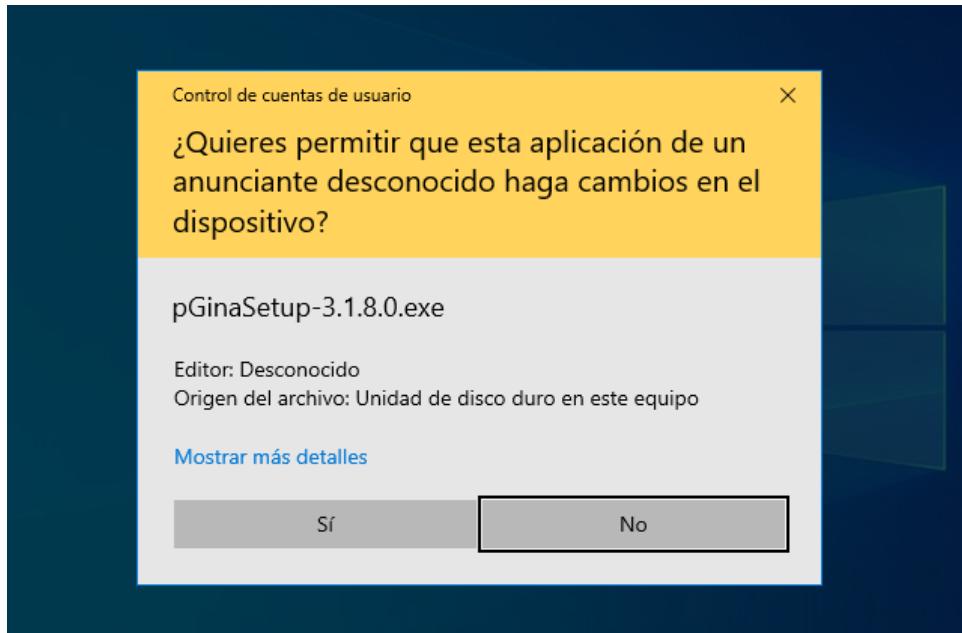
```
juan@clienteana1:~
Archivo Editar Ver Buscar Terminal Ayuda
juan@clienteana1:~$ ls -l
total 32
drwxr-xr-x 2 juan jefes 4096 dic 16 21:04 Descargas
drwxr-xr-x 2 juan jefes 4096 dic 16 21:04 Documentos
drwxr-xr-x 2 juan jefes 4096 dic 16 21:04 Escritorio
drwxr-xr-x 2 juan jefes 4096 dic 16 21:04 Imágenes
drwxr-xr-x 2 juan jefes 4096 dic 16 21:04 Música
-rw-r--r-- 1 juan jefes 0 dic 16 21:05 PerfilMovilJUAN.txt
drwxr-xr-x 2 juan jefes 4096 dic 16 21:04 Plantillas
drwxr-xr-x 2 juan jefes 4096 dic 16 21:04 Público
drwxr-xr-x 2 juan jefes 4096 dic 16 21:04 Vídeos
juan@clienteana1:~$
```

Y compruebo en el servidor:

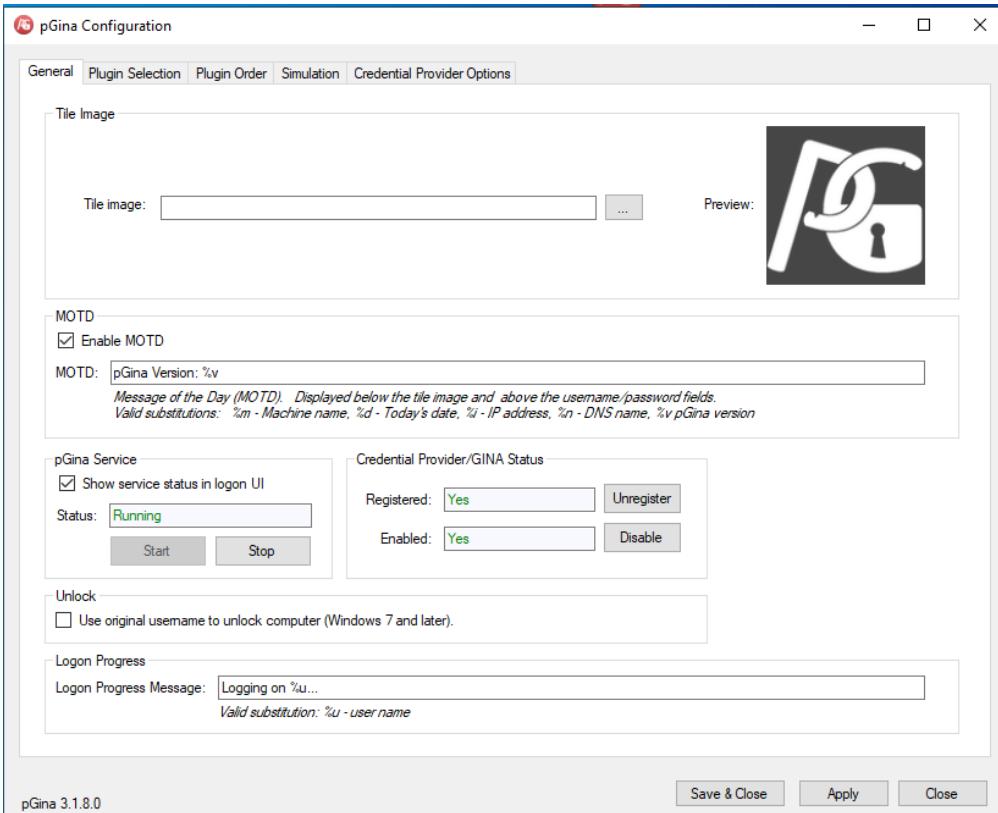
```
root@servidorana:/moviles/rosa# cd /moviles/juan
root@servidorana:/moviles/juan# ls -l
total 32
drwxr-xr-x 2 3000 2000 4096 dic 16 20:04 Descargas
drwxr-xr-x 2 3000 2000 4096 dic 16 20:04 Documentos
drwxr-xr-x 2 3000 2000 4096 dic 16 20:04 Escritorio
drwxr-xr-x 2 3000 2000 4096 dic 16 20:04 Imágenes
drwxr-xr-x 2 3000 2000 4096 dic 16 20:04 Música
-rw-r--r-- 1 3000 2000 0 dic 16 20:05 PerfilMovilJUAN.txt
drwxr-xr-x 2 3000 2000 4096 dic 16 20:04 Plantillas
drwxr-xr-x 2 3000 2000 4096 dic 16 20:04 Público
drwxr-xr-x 2 3000 2000 4096 dic 16 20:04 Vídeos
root@servidorana:/moviles/juan#
```

13. Configurar el cliente de Windows 10 e incorporarlo al dominio y comprobar su correcto funcionamiento.

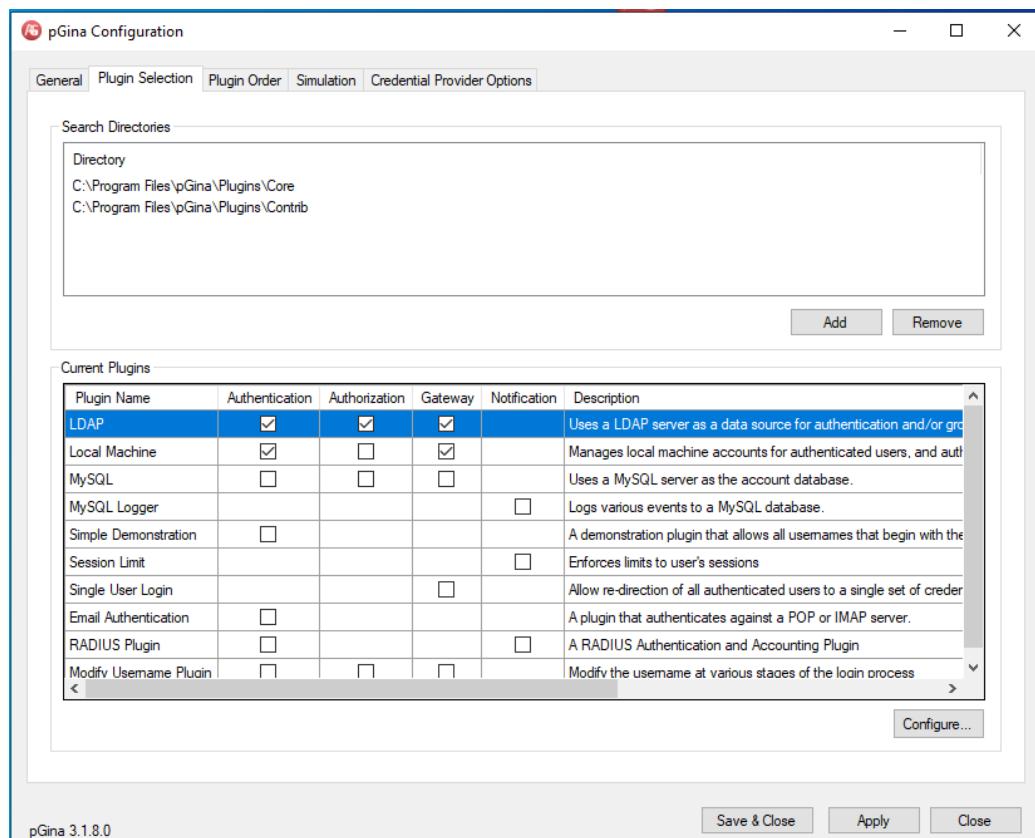
Descargo el programa pGina desde Classroom y voy a instalarlo:



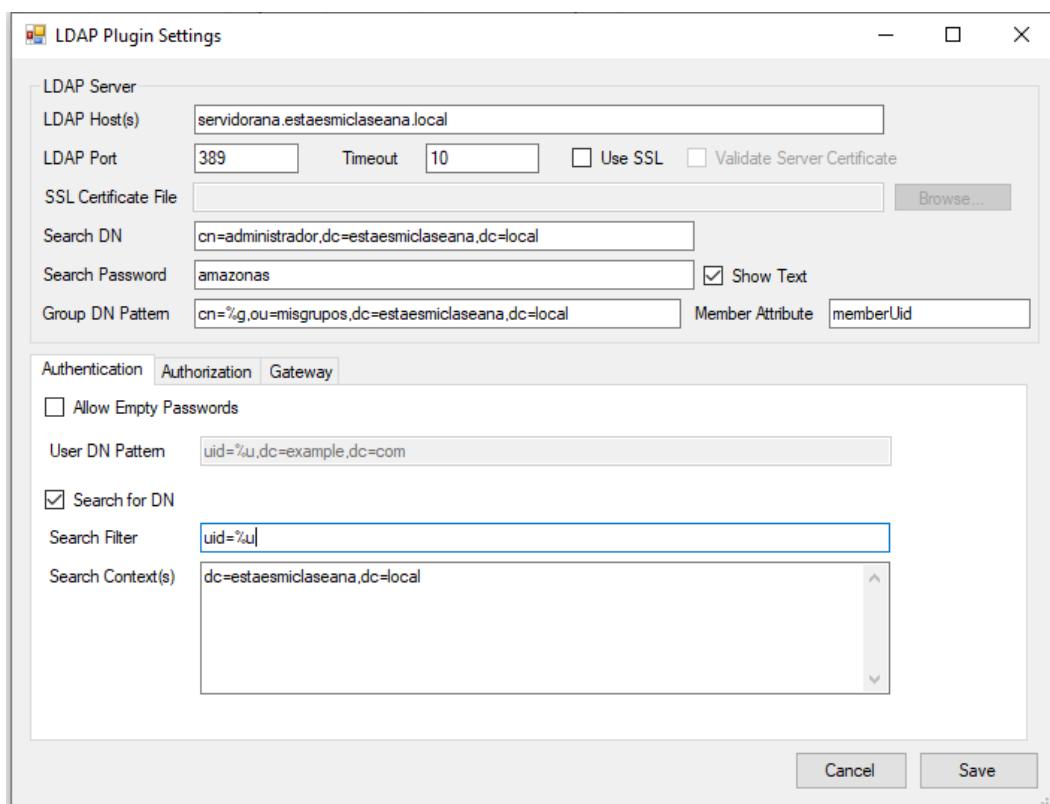
Ahora abriremos el programa y nos iremos a Plugin selection:



Aquí haremos clic en todas las opciones de LDAP y aplicaremos:

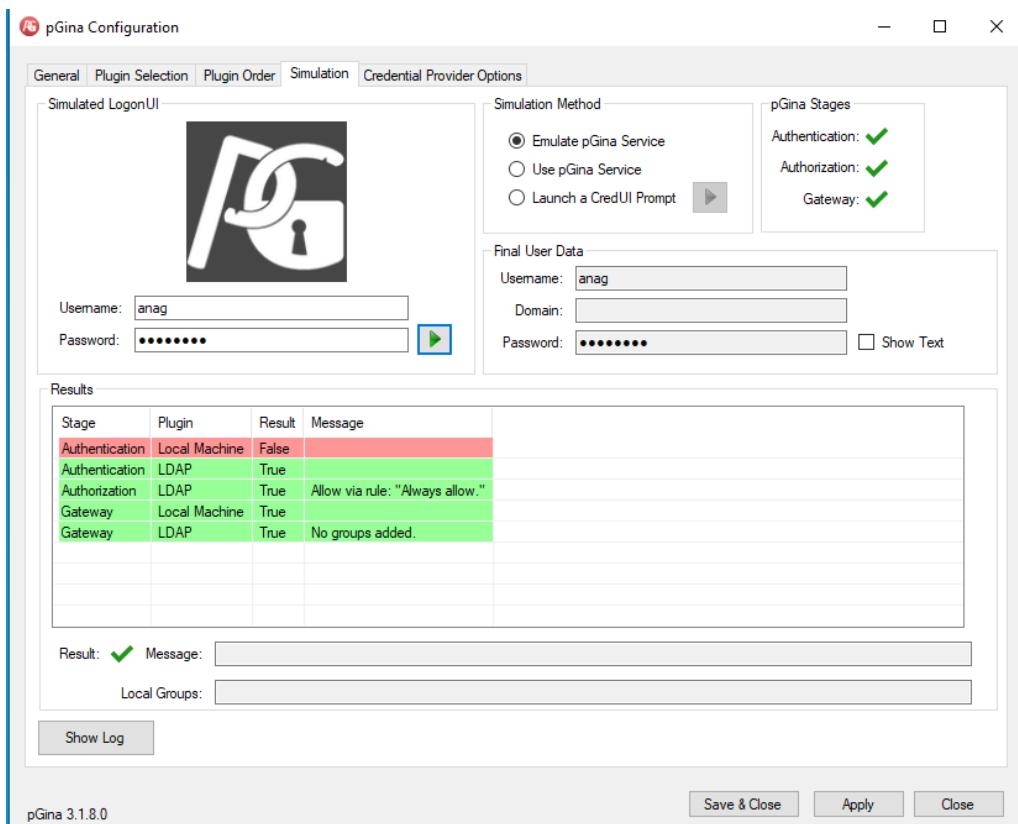


Para poder hacer la conexión le daremos a configure.. Y pondremos los datos de nuestro LDAP, el nombre, el administrador y en group dn pattern pondremos la ruta donde debe buscar los usuarios.

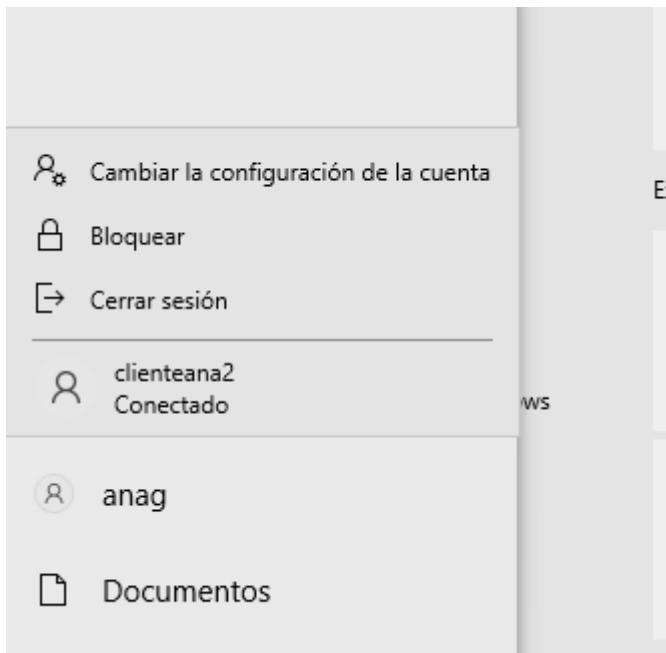
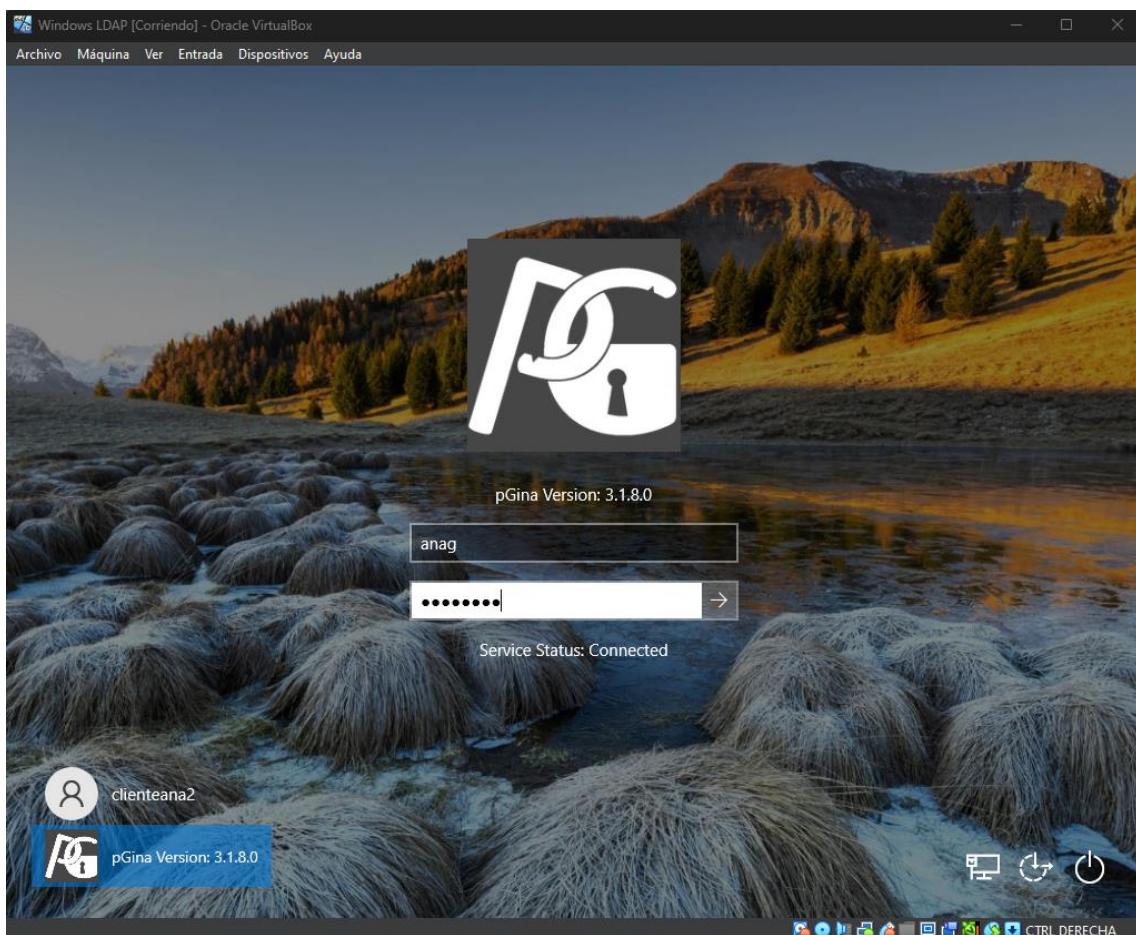


Comprobaremos en la simulación con el usuario anag.

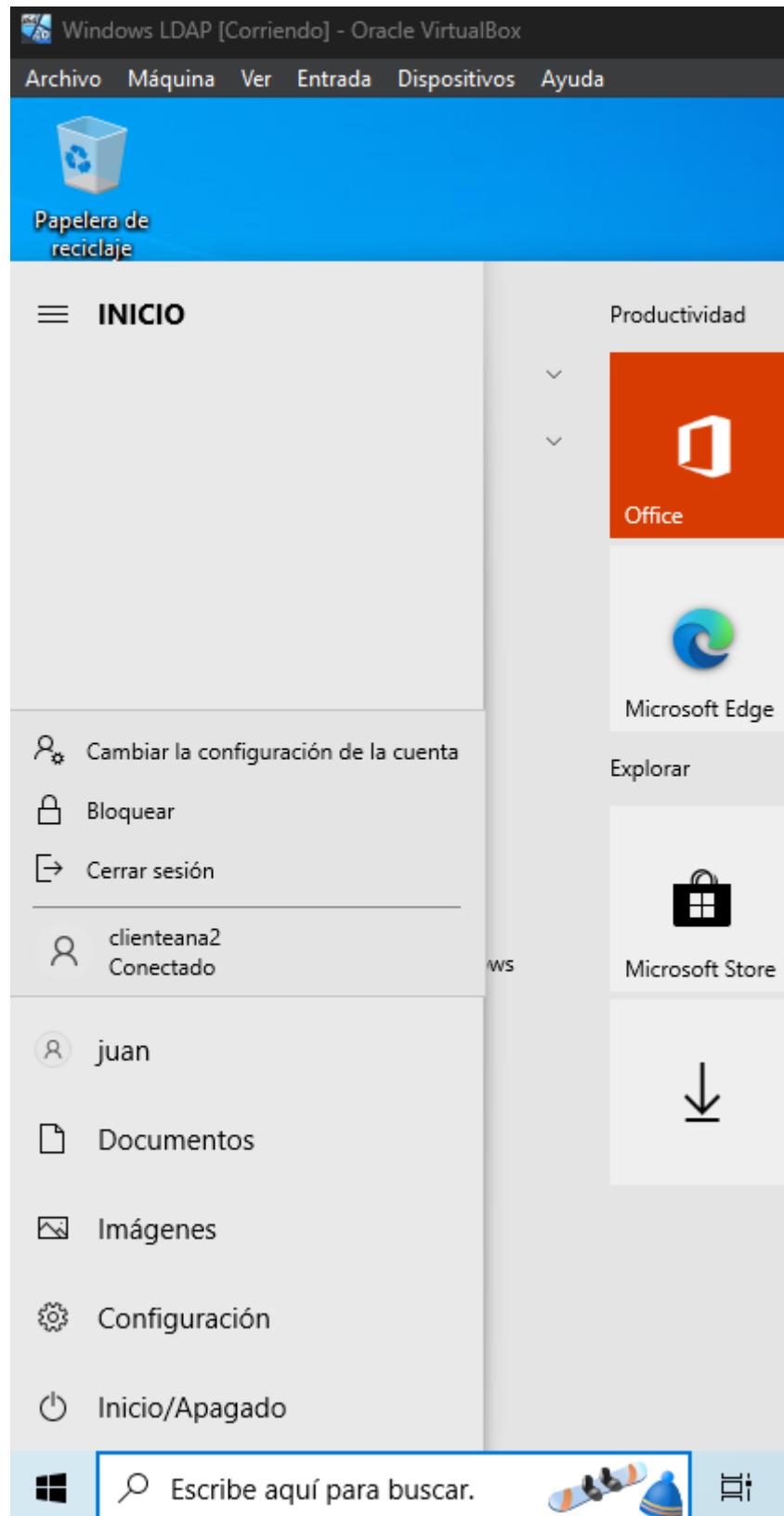
El error que da es porque busca el usuario en el Windows que estamos usando.



Ahora sí comprobaremos accediendo



Y también con juan



Incidencias

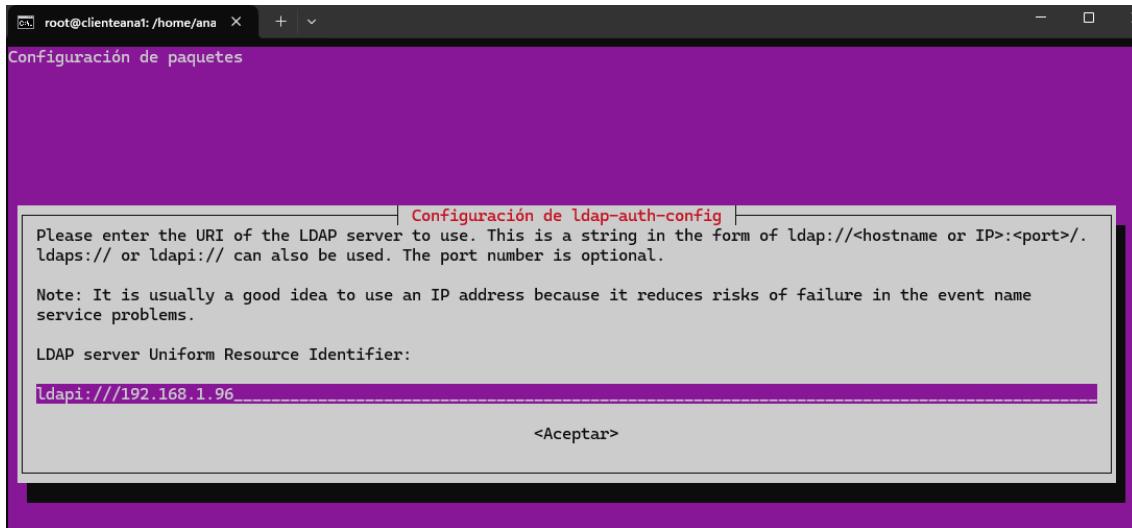
Tuve este fallo:

```
# patricia, misuarios, estaesmiclaseana.local
dn: uid=patricia,ou=misuarios,dc=estaesmiclaseana,dc=local
objectClass: top
objectClass: posixAccount
objectClass: inetOrgPerson
objectClass: person
objectClass: shadowAccount
cn: Patricia Torres
uid: patricia
uidNumber: 3005
gidNumber: 2001
homeDirectory: /home/patricia
sn: Torres
givenName: Patricia Torres
loginShell: /bin/bash
shadowMin: 6
shadowExpire: -1
shadowFlag: 7

# search result
search: 2
result: 0 Success

# numResponses: 12
# numEntries: 11
root@clienteanal:/home/ana# sudo su - luis
su: user luis does not exist or the user entry does not contain all the required fields
root@clienteanal:/home/ana# sudo su - patricia
su: user patricia does not exist or the user entry does not contain all the required fields
```

Y fue porque al hacer apt-get install libnss-ldap libpam-ldap ldap-utils -y no eliminé los caracteres sobrantes:



También tengo un error con juan que me ha creado carpeta con nombre de uid.

Además, el usuario ana es el mío y anag es el usuario de ana García.

He tenido incidencias de tonterías como nombres o ips mal puestas.

Valoración

Esta práctica me ha resultado más complicada, es la práctica a la que más horas he echado de todo el curso y más incidencias he tenido aunque fueran tontas.

Pero también sé que LDAP es importante en muchas empresas así que será útil.