Install and Configure LDAP

Server Configuration

Step 1: Install LDAP and LDAP Utils using

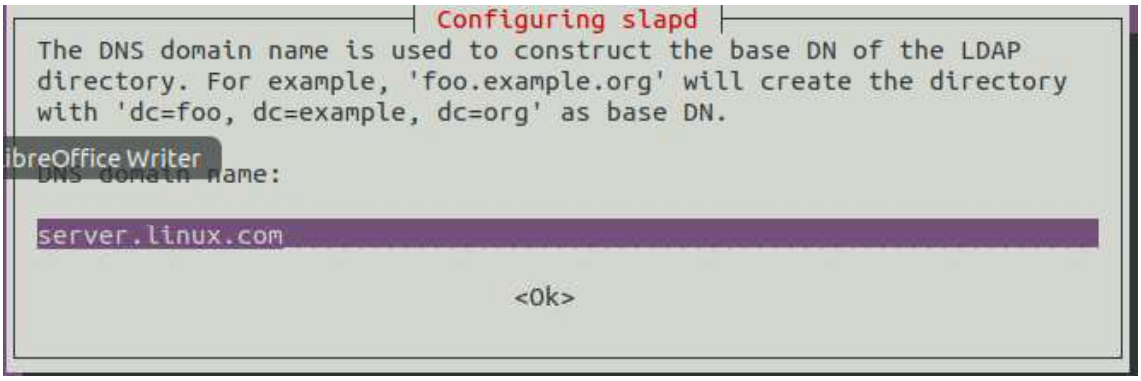
```
sudo apt -y install slapd ldap-utils
```

Step 2: Reconfigure the slapd package using

```
server@server:~$ sudo dpkg-reconfigure slapd
```

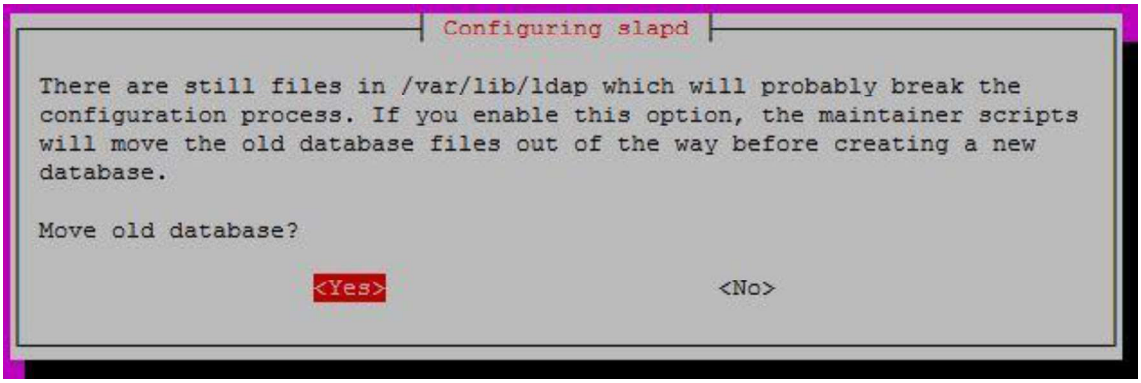
Step 3: Set up an admin password for LDAP.

Step 4: Enter the DNS server name.



Step 5: Enter the organization's name (We will just set it to Server Project).

Step 6: Choose MDB as LDAP's backend format and move the old database when asked.



Step 7: Install phpLDAPadmin for managing the LDAP objects.

```
server@server:~$ sudo apt-get install phpldapadmin
```

Step 8: Configure the LDAP config file using

```
sudo nano /etc/phpldapadmin/config.php
```

Find the following files and edit them like

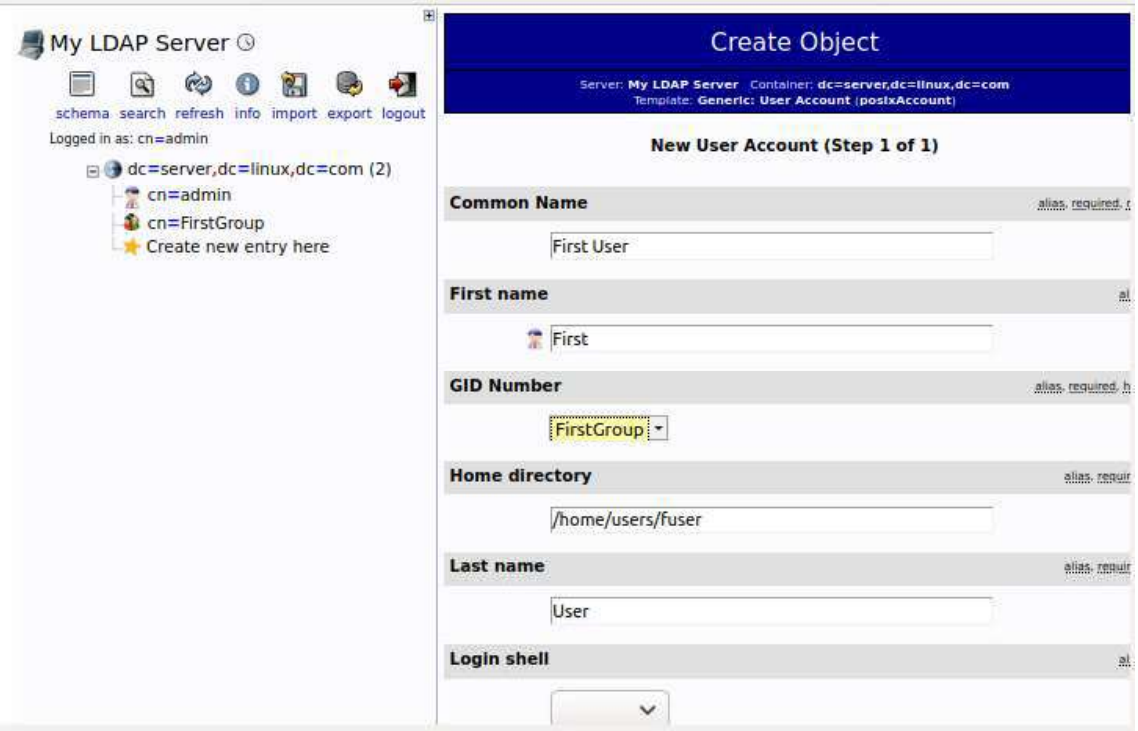
```
$servers->setValue('server','host','server.linux.com');
```

```
$servers-
>setValue('login','bind_id','cn=admin,dc=server,dc=linux,dc=com');
```

Note: linux.com is our DNS server as configured earlier

Step 9: Log into the phpLDAPadmin by visiting Server'sIP/phpldapadmin

Step 10: Create a new entry and create a new Group, then create a new user.



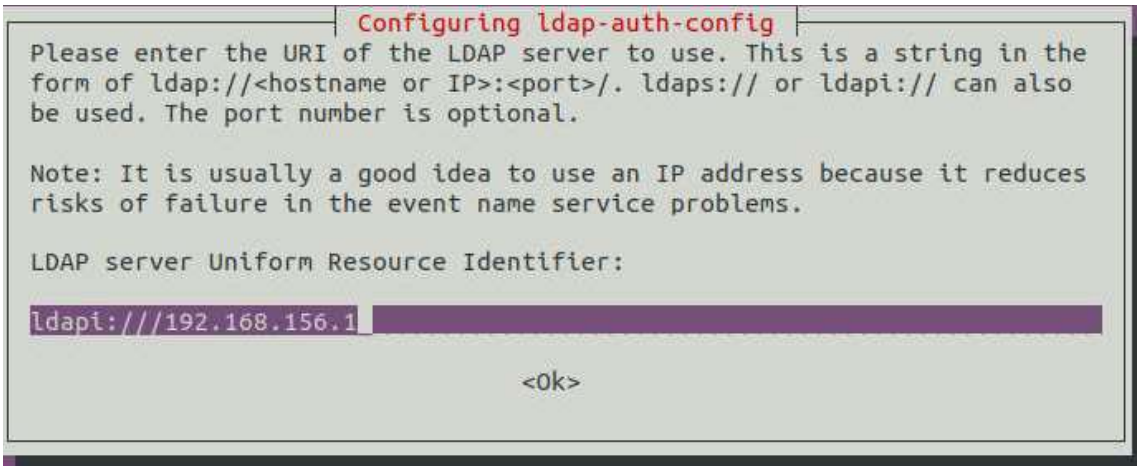
Client Configuration

Step 1: Install client LDAP utilities by using

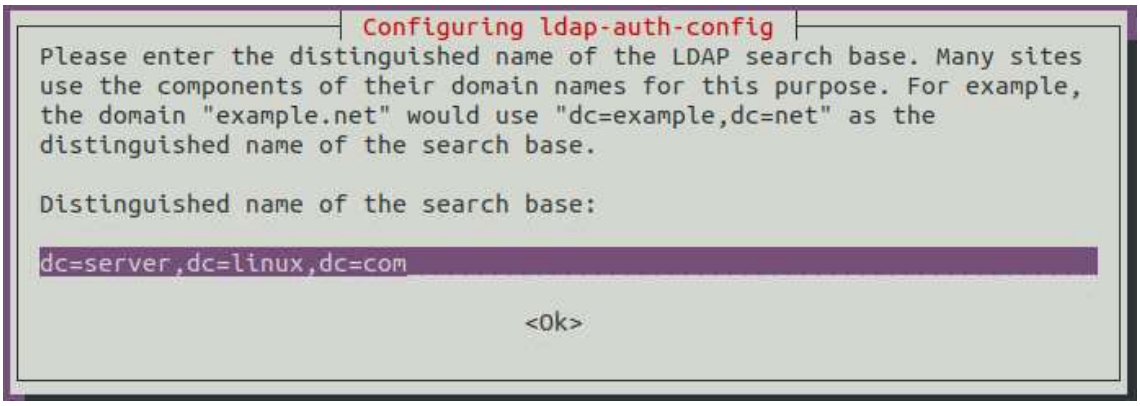
```
client@client-VirtualBox:~$ sudo apt -y install  libnss-ldap libpam-ldap ldap-u
tils
```

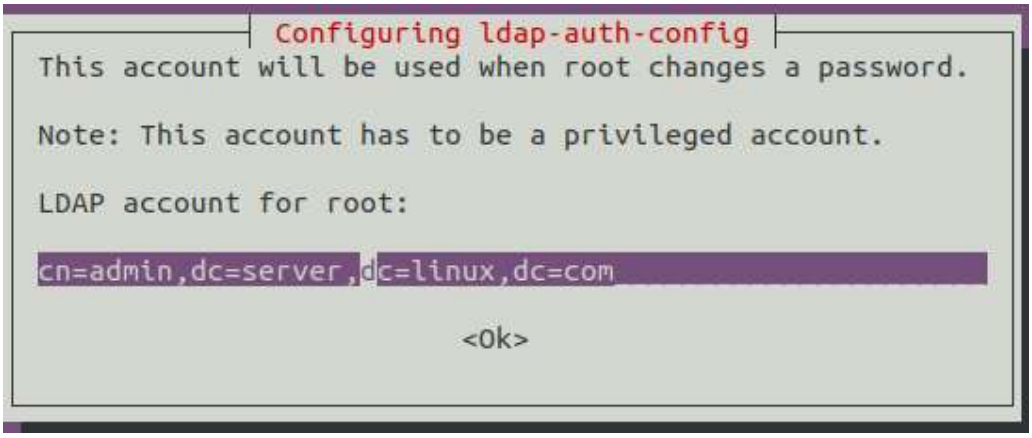
Step 2: Configure the LDAP to contact the LDAP Server with the IP address of the server

```
client@client-VirtualBox:~$ sudo dpkg-reconfigure ldap-auth-config
```



Step 3: Enter the distinguished name of the search base as set up in the server-side configuration. Choose LDAP version 3 in the next step.



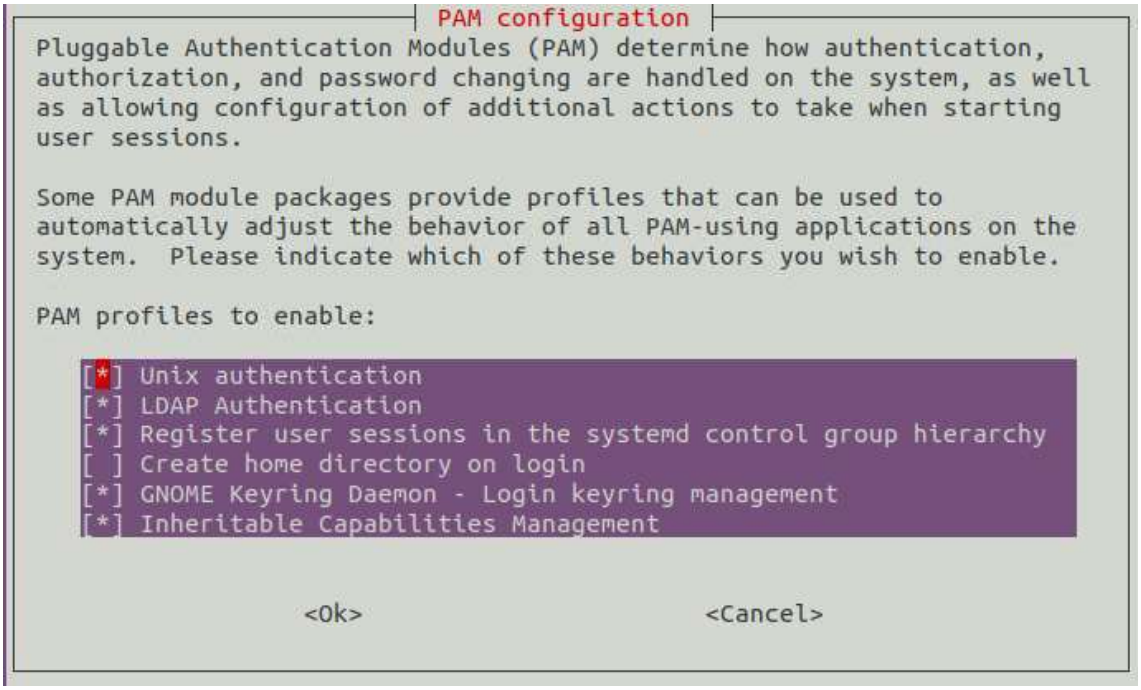


Step 4: Next, configure the LDAP profile for NSS by running.

```
client@client-VirtualBox:~$ sudo auth-client-config -t nss -p lac_ldap
```

Step 5: Configure the system to use LDAP for authentication by updating PAM configurations.

```
client@client-VirtualBox:~$ sudo pam-auth-update
```



Step 6: Restart the service for these changes to be implemented.

```
client@client-VirtualBox:~$ sudo systemctl restart nscd
client@client-VirtualBox:~$ sudo systemctl enable nscd
Synchronizing state of nscd.service with SysV service script with /lib/systemd/
systemd-sysv-install.
Executing: /lib/systemd/systemd-sysv-install enable nscd
client@client-VirtualBox:~$
```

Step 7: Check if the client can contact the LDAP server.

Unfortunately, our client cannot contact the LDAP server, we were not able to get the LDAP client to work due to limited meetings and time. But all the required services were installed.

```
client@client-VirtualBox:~$ ldapsearch -x
ldap_sasl_bind(SIMPLE): Can't contact LDAP server (-1)
client@client-VirtualBox:~$
```