LDAP

Deb 1

shuhari@ldap: ~

```
GNU nano 3.2                                      /etc/hosts

127.0.0.1          localhost
127.0.1.1          ldap.shuharilabs.local          ldap
192.168.80.135     ldap.shuharilabs.local          ldap

# The following lines are desirable for IPv6 capable hosts
::1        localhost ip6-localhost ip6-loopback
ff02::1 ip6-allnodes
ff02::2 ip6-allrouters
```


shuhari@ldap: ~

```
GNU nano 3.2                          /etc/hostname

ldap
```

```
shuhari@ldap:~$ sudo ss -ant
State      Recv-Q     Send-Q     Local Address:Port          Peer Address:Port
LISTEN     0          128             0.0.0.0:22                  0.0.0.0:*
ESTAB      0          0          192.168.80.135:22          192.168.80.1:54821
LISTEN     0          128                   *:80                        *:*
LISTEN     0          128                [::]:22                     [::]:*
shuhari@ldap:~$ sudo ss -anu
State      Recv-Q     Send-Q     Local Address:Port          Peer Address:Port
UNCONN     0          0               0.0.0.0:68                  0.0.0.0:*
```

Check 389 LDAP PORT   is working or not   in above image ldap is not working

```
shuhari@ldap:~$ sudo hostname -d
shuharilabs.local
shuhari@ldap:~$ sudo hostname -s
ldap
shuhari@ldap:~$ sudo hostname -f
ldap.shuharilabs.local
```

Sudo apt-get install slapd
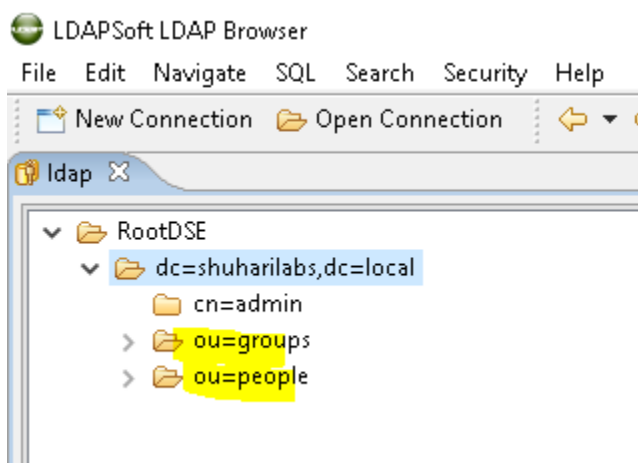
Sudo apt-get update

Sudo slpacat

sudo apt-get install ldap-utils

sudo ldapsearch -x -LLL -b "dc = shuharilabs, dc = local"

sudo nano base.ldif

sudo ldapadd -x -D cn=admin,dc=shuharilabs,dc=local -W -f base.ldif

```
shuhari@ldap:~$ sudo cat base.ldif
dn: ou=people,dc=shuharilabs,dc=local
objectClass: organizationalUnit
ou:people

dn: ou=groups,dc=shuharilabs,dc=local
objectClass: organizationalUnit
ou:groups

shuhari@ldap:~$ sudo ldapadd -x -D cn=admin,dc=shuharilabs,dc=local -W -f base.ldif
```
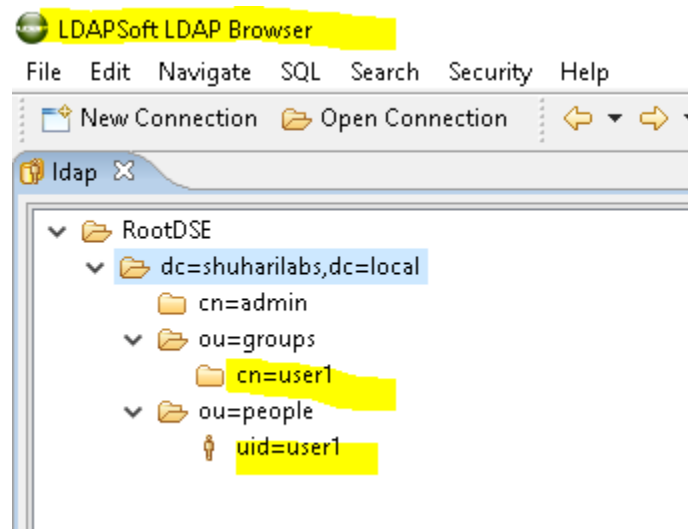
LDAPSoft LDAP Browser

File   Edit   Navigate   SQL   Search   Security   Help

New Connection   Open Connection

ldap

- RootDSE
  - dc=shuharilabs,dc=local
    - cn=admin
    - ou=groups
    - ou=people

```
shuhari@ldap:~$ sudo ldapsearch -x -LLL -b "dc = shuharilabs, dc = local"
dn: dc=shuharilabs,dc=local
objectClass: top
objectClass: dcObject
objectClass: organization
o: shuharilabs.local
dc: shuharilabs

dn: cn=admin,dc=shuharilabs,dc=local
objectClass: simpleSecurityObject
objectClass: organizationalRole
cn: admin
description: LDAP administrator

dn: ou=people,dc=shuharilabs,dc=local
objectClass: organizationalUnit
ou: people

dn: ou=groups,dc=shuharilabs,dc=local
objectClass: organizationalUnit
ou: groups
```

Sudo slappasswd

Sudo nano user.ldif

shuhari@ldap: ~

```
  GNU nano 3.2                                              user.ldif

dn: uid=user1,ou=people,dc=shuharilabs,dc=local
objectClass: inetOrgPerson
objectClass: posixAccount
objectClass: shadowAccount
cn: user1
sn: user1
userPassword: {SSHA}XrzuRDNh24zzuRj68rJaFkUOXXL+/OwD
loginShell: /bin/bash
uidNumber: 2000
gidNumber: 2000
homeDirectory: /home/user1

dn: cn=user1,ou=groups,dc=shuharilabs,dc=local
objectClass: posixGroup
cn: user1
gidNumber: 2000
memberUid: user1
```

```
shuhari@ldap:~$ sudo ldapadd -x -D cn=admin,dc=shuharilabs,dc=local -W -f user.ldif
Enter LDAP Password:
adding new entry "uid=user1,ou=people,dc=shuharilabs,dc=local"
```

LDAPSoft LDAP Browser

File   Edit   Navigate   SQL   Search   Security   Help

New Connection   Open Connection

ldap

- RootDSE
  - dc=shuharilabs,dc=local
    - cn=admin
    - ou=groups
      - cn=user1
    - ou=people
      - uid=user1

DEB 2 CLIENT SIDE

```
python@debian:~$ sudo apt-get update
[sudo] password for python:
Hit:1 http://192.168.1.251/sw/repo/deb10 buster InRelease
Reading package lists... Done
python@debian:~$ sudo apt-get install libnss-ldapd
Reading package lists... Done
Building dependency tree
Reading state information... Done
libnss-ldapd is already the newest version (0.9.10-2).
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
python@debian:~$ sudo apt-get install libpam-ldapd
Reading package lists... Done
Building dependency tree
Reading state information... Done
libpam-ldapd is already the newest version (0.9.10-2).
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
python@debian:~$
```

Mention deb1 ip here (ldap)

Comment the certificate

Check both boxes

PAM configuration

Pluggable Authentication Modules (PAM) determine how authentication, authorization, and password changing are handled on the system, as well as allowing configuration of additional actions to take when starting user sessions.

Some PAM module packages provide profiles that can be used to automatically adjust the behavior of all PAM-using applications on the system. Please indicate which of these behaviors you wish to enable.

PAM profiles to enable:

```
[*] Unix authentication
[*] Create home directory on login
```

```
<Ok>                                    <Cancel>
```
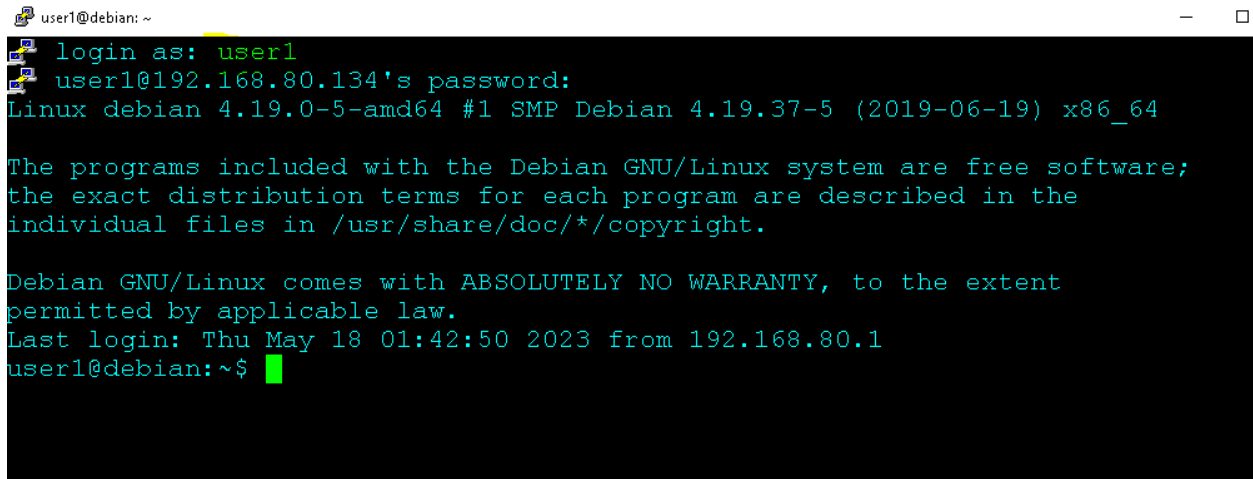
```
shuhari@debian:~$ sudo pam-auth-update
shuhari@debian:~$ sudo systemctl restart nslcd
shuhari@debian:~$ sudo systemctl status nslcd
● nslcd.service - LSB: LDAP connection daemon
   Loaded: loaded (/etc/init.d/nslcd; generated)
   Active: active (running) since Wed 2023-05-17 14:13:20 EDT; 9s ago
     Docs: man:systemd-sysv-generator(8)
  Process: 3781 ExecStart=/etc/init.d/nslcd start (code=exited, status=0/SUCCESS)
    Tasks: 6 (limit: 2352)
   Memory: 1.7M
   CGroup: /system.slice/nslcd.service
           └─3790 /usr/sbin/nslcd

May 17 14:13:20 debian systemd[1]: nslcd.service: Succeeded.
May 17 14:13:20 debian systemd[1]: Stopped LSB: LDAP connection daemon.
May 17 14:13:20 debian systemd[1]: Starting LSB: LDAP connection daemon...
May 17 14:13:20 debian nslcd[3790]: version 0.9.10 starting
May 17 14:13:20 debian nslcd[3790]: accepting connections
May 17 14:13:20 debian nslcd[3781]: Starting LDAP connection daemon: nslcd.
May 17 14:13:20 debian systemd[1]: Started LSB: LDAP connection daemon.
shuhari@debian:~$
```

```
shuhari@debian:~$ sudo getent passwd user1
user1:x:2000:2000:user1:/home/user1:/bin/bash
```

No w

Login through putty of client


```
login as: user1
user1@192.168.80.134's password:
Linux debian 4.19.0-5-amd64 #1 SMP Debian 4.19.37-5 (2019-06-19) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Thu May 18 01:42:50 2023 from 192.168.80.1
user1@debian:~$
```