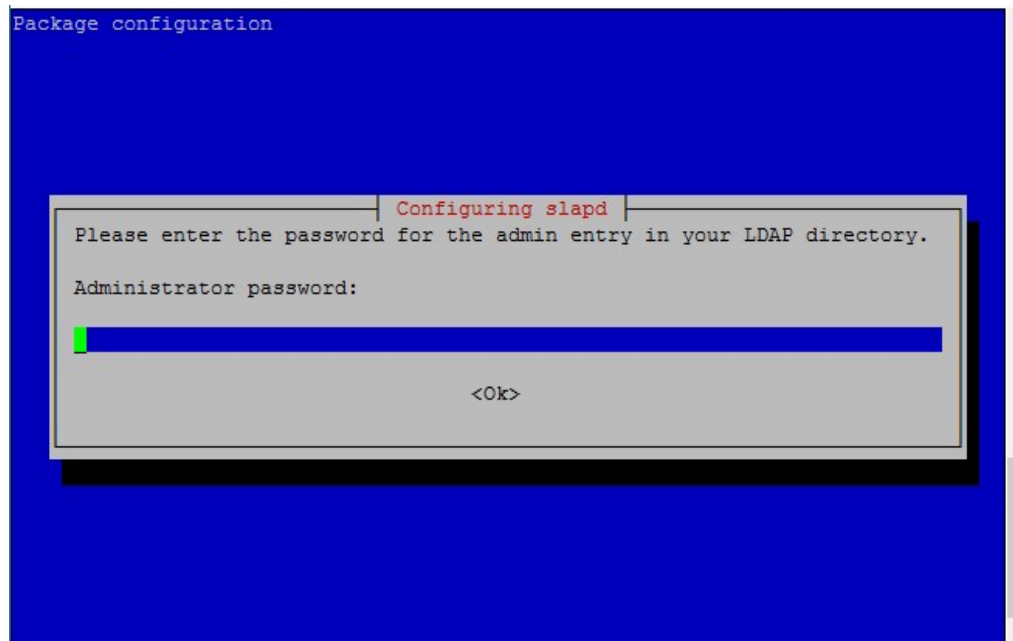# How to Install OpenLDAP

- Sudo apt-get update

- Sudo apt-get install slapd ldap-utils

Reconfiguring OpenLDAP

- Sudo dpkg-reconfigure slapd

```
Package configuration

                          ┤ Configuring slapd ├
    If you enable this option, no initial configuration or database will be
    created for you.

    Omit OpenLDAP server configuration?

                <Yes>                              <No>
```
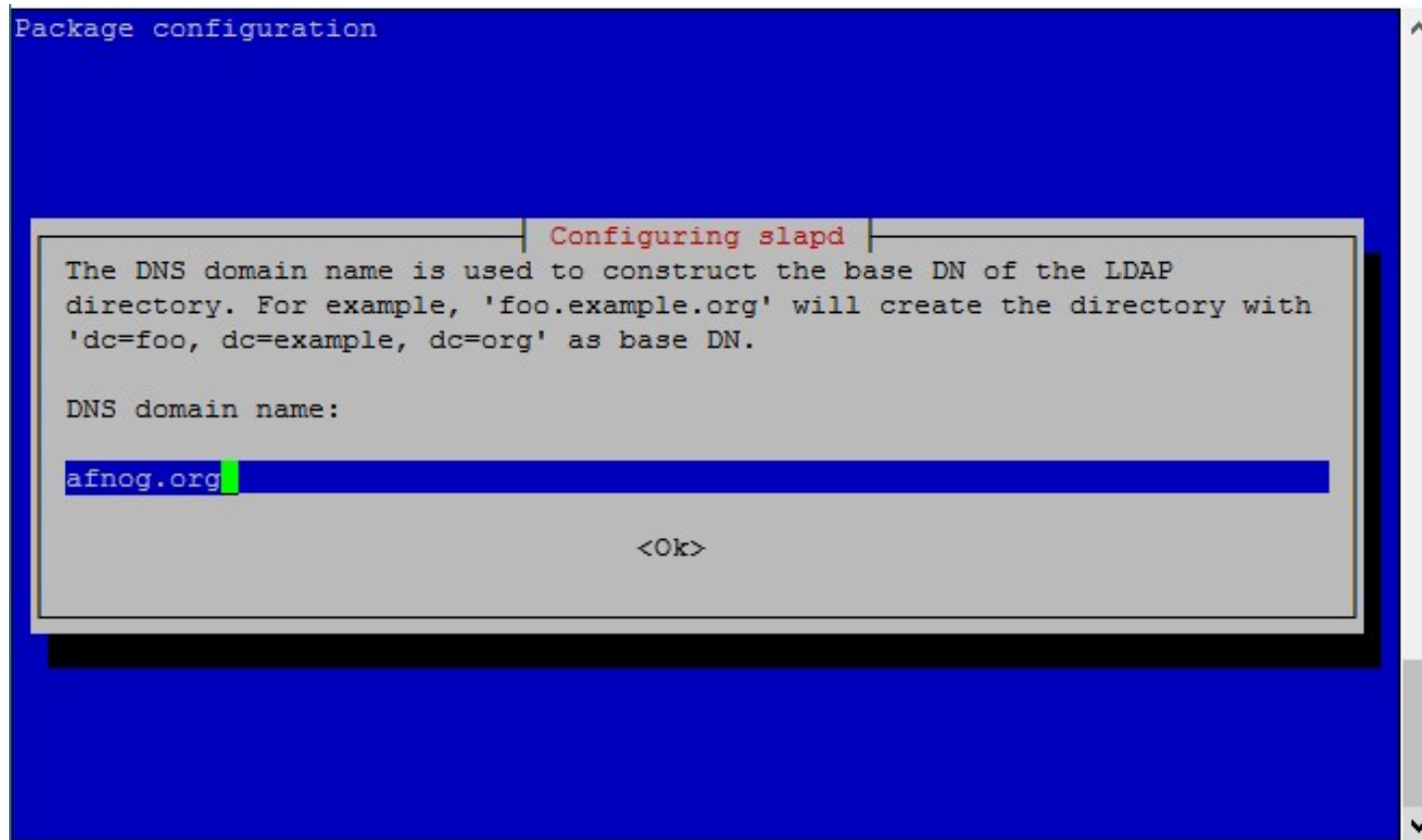
Reconfiguring OpenLDAP Continue

Reconfiguring OpenLDAP Continue

Reconfiguring OpenLDAP Continue

Reconfiguring OpenLDAP Continue

Reconfiguring OpenLDAP Continue

Reconfiguring OpenLDAP Continue


```
Package configuration                                                    ^

               ┌────────────┤ Configuring slapd ├────────────┐
               │                                              │
               │ There are still files in /var/lib/ldap which will probably break the
               │ configuration process. If you enable this option, the maintainer scripts
               │ will move the old database files out of the way before creating a new
               │ database.
               │
               │ Move old database?
               │
               │         <Yes>                          <No>
               │
               └──────────────────────────────────────────────┘
```
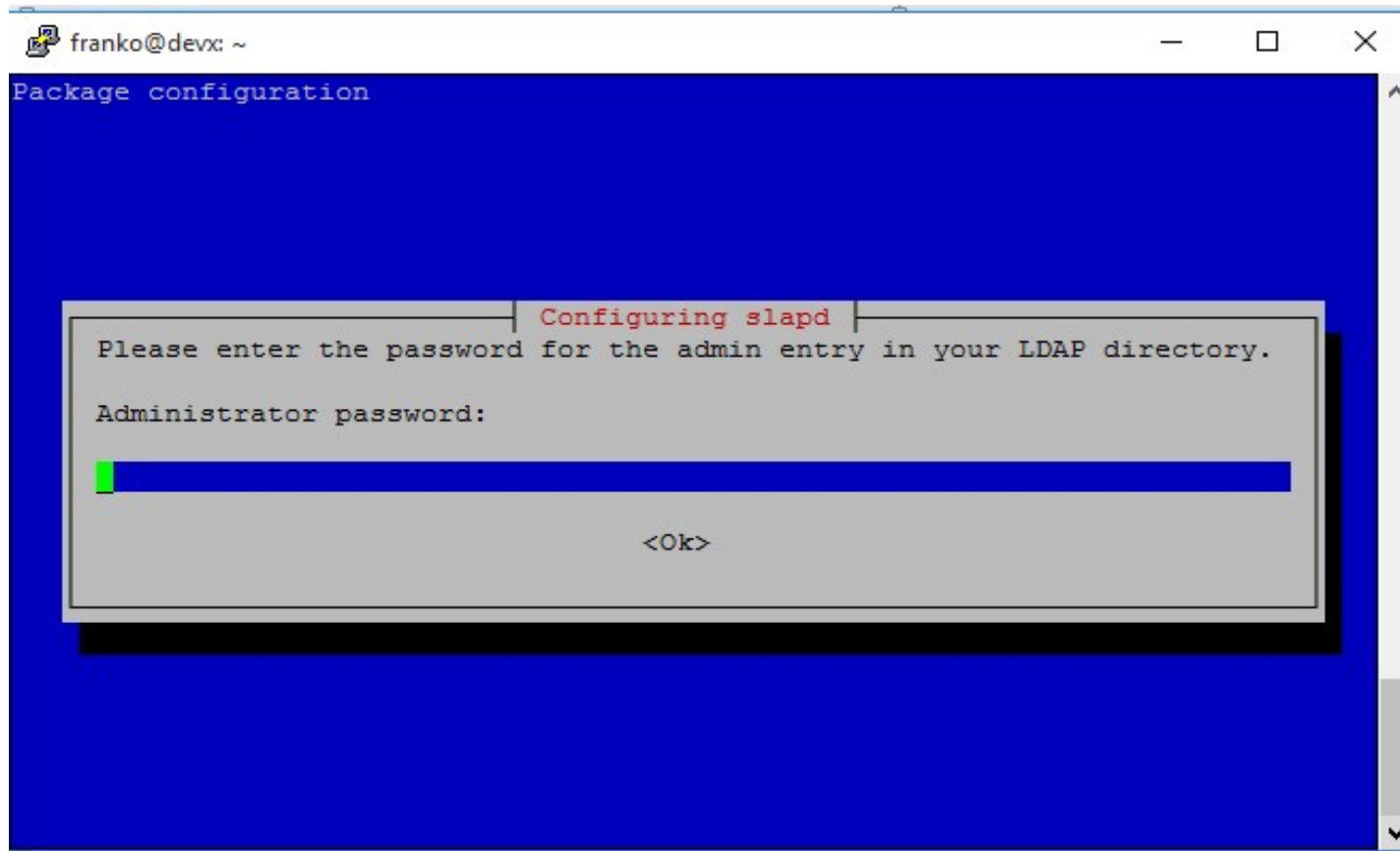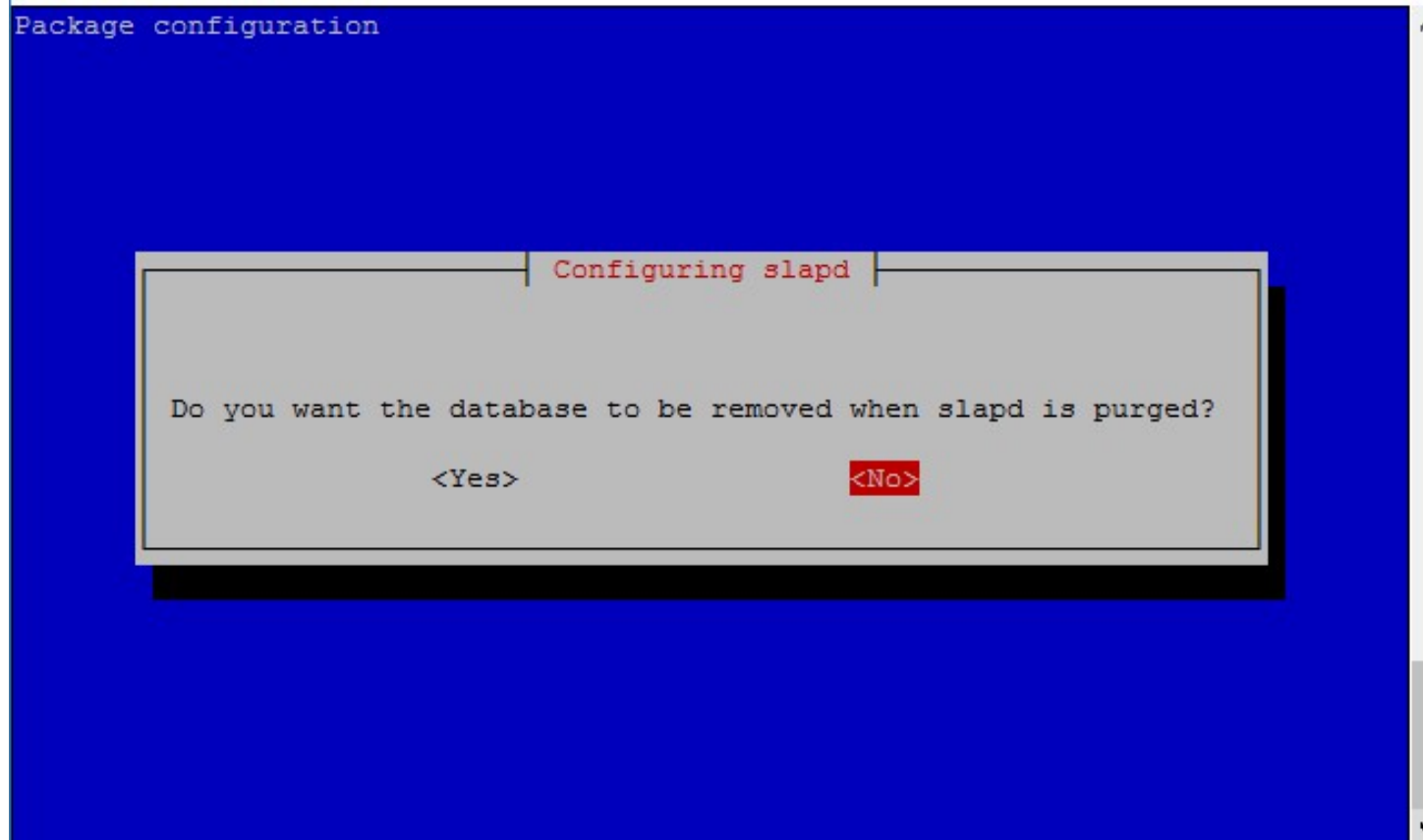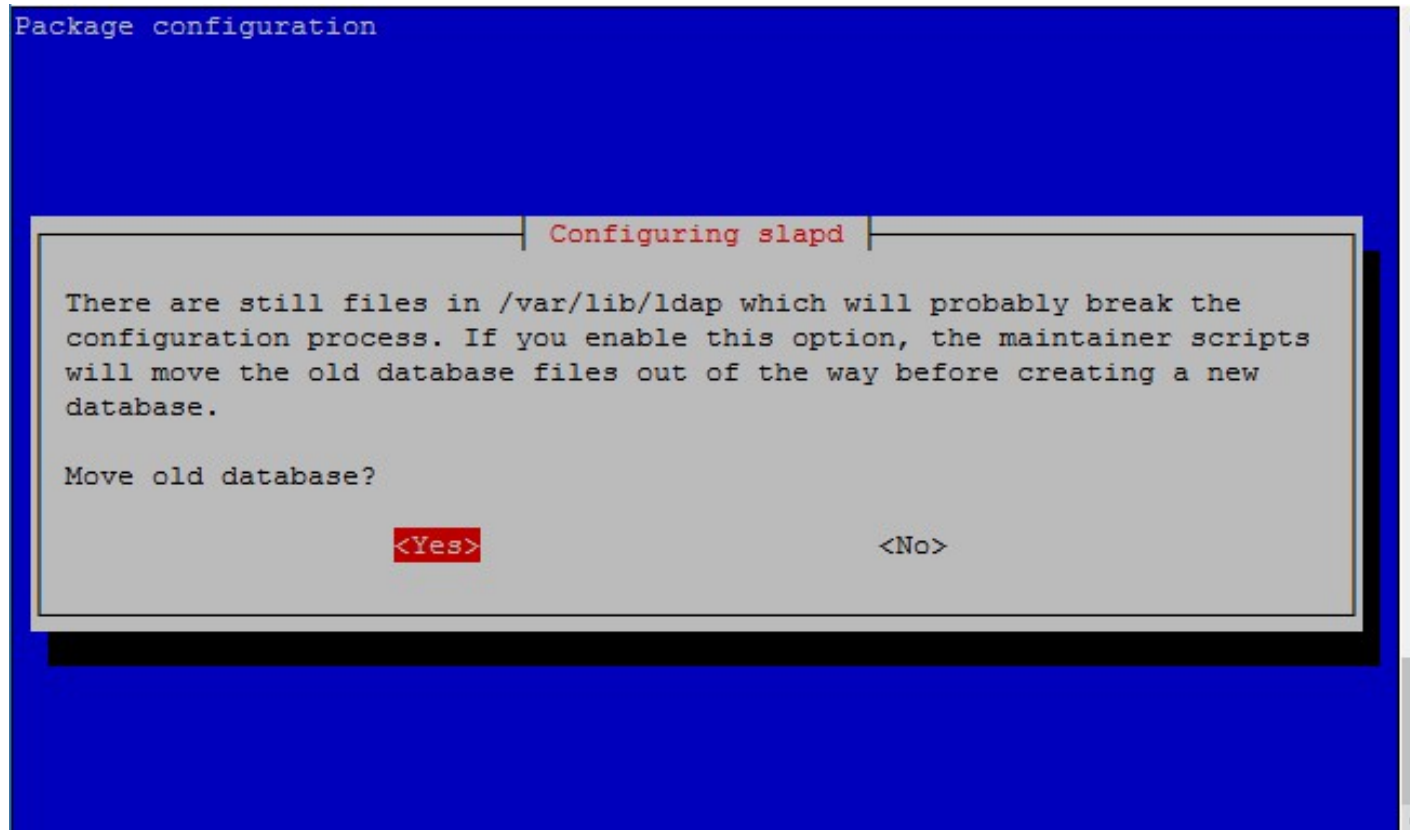
Reconfiguring OpenLDAP Continue

Installing and configuring PhpLdapAdmin

- Apt-get install apache2
- Apt-get –y install php5 libapache2-mod-php5
- Service apache2 restart
- Apt-get install phpldapadmin
- Vi /etc/phpldapadmin/config.php
- Search for the following sections and modify them accordingly.

configuring PhpLdapAdmin continue

- Change the red value to the way you will be referencing your server, either through domain name or IP address.

```
$servers->setValue('server','host','192.168.85.132');
```

configuring PhpLdapAdmin continue

- Edit the following entry to reflect the name you selected (ours is "afnog.org" as you recall):

```
$servers->setValue('server','base',array('dc=afnog,dc=org'));
```

configuring PhpLdapAdmin continue

- The next value to modify will use the same domain components that you just set up in the last entry. Add these after the "cn=admin" in the entry below:

```
$servers->setValue('login','bind_id','cn=admin,dc=afnog,dc=org');
```
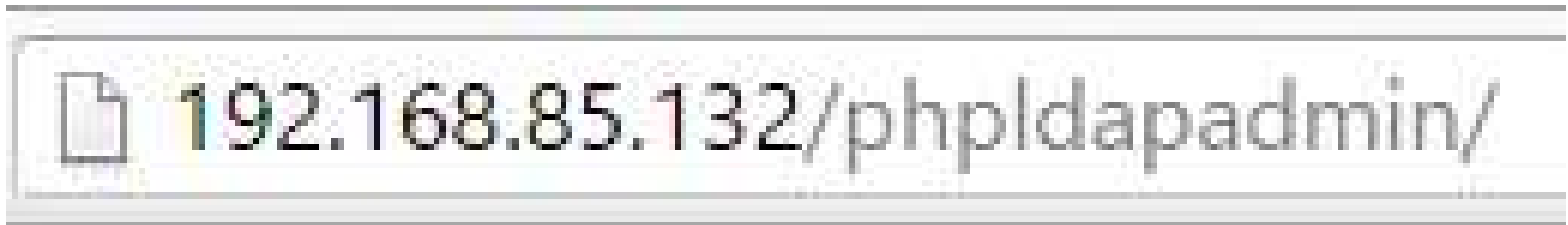
configuring PhpLdapAdmin continue

- Search for the following section about the "hide*template*warning" attribute. We want to uncomment this line and set the value to "true" to avoid some annoying warnings that are unimportant.

```
$config->custom->appearance['hide_template_warning'] = true;
```

configuring PhpLdapAdmin continue

- Login to the PhpLdapAdmin page using a browser with your IP Address followed by phpldapadmin

192.168.85.132/phpldapadmin/

configuring PhpLdapAdmin continue

- Click on login in your left pane and enter your ldap admin password

Authenticate to server My LDAP Server

Warning: This web connection is unencrypted.

Login DN:

cn=admin,dc=afnog,dc=org

Password:

Anonymous ☐

Authenticate

configuring PhpLdapAdmin continue

- If successfully loged in, you should see an interface as below

configuring PhpLdapAdmin continue

- **Create Organizational Units , Groups, Users**
- **Click on the "Create new entry here" link on the left-hand side**
- **Click on the "Generic: Organizational Unit" template as below**
- **We will be asked to create a name for our organizational unit.**
- **Type Groups and repeat the same procedure to create users group as well.**
- **Slides on the next slide demonstrate the process**

configuring PhpLdapAdmin continue

configuring PhpLdapAdmin continue

Create Object

Server: **My LDAP Server** Container: **dc=afnog,dc=org**
Template: **Generic: Organisational Unit (ou)**

New Organisational Unit (Step 1 of 1)

Organisational Unit alias, required, rdn, hint

groups *

Create Object

configuring PhpLdapAdmin continue

- Click on Commit to save changes

configuring PhpLdapAdmin continue

- When you are done, you should see the configuration as shown on your left hand side.

configuring PhpLdapAdmin continue

- Create Groups
- We can create two different groups that could be used to organize users into different "access" groups based on their privileges they require.
- Those groups are "admin" and "user" groups.
- In the main pane, click on the "Create a child entry" within the groups category.
- We will choose the "Generic: Posix Group" Category
- The next slide shows the guidelines for creating those groups.

configuring PhpLdapAdmin continue

• Click on the "Generic: Posix Group" highlighted in yellow colour

configuring PhpLdapAdmin continue

Create Object

Server: **My LDAP Server**   Container: **ou=groups,dc=afnog,dc=org**
Template: **Generic: Posix Group (posixGroup)**

New Posix Group (Step 1 of 1)

GID Number	alias, required, hint, ro
500	

Group	alias, required, rdn
admin	*

Users	alias, hint

Create Object

configuring PhpLdapAdmin continue

- Both groups after creation will look as below in the left hand side

configuring PhpLdapAdmin continue

• Click on the "view 2 children" as highlighted in yellow

ou=groups

Server: **My LDAP Server**   Distinguished Name: **ou=groups,dc=afnog,dc=org**
Template: **Default**

Refresh   Show internal attributes

Switch Template   Export

Copy or move this entry   Delete this entry

Rename   Compare with another entry

Create a child entry   Add new attribute

Hint: To delete an attribute, empty the text field and click save.

View 2 children   Export subtree

Hint: To view the schema for an attribute, click the attribute name.

configuring PhpLdapAdmin continue

- The output of the view 2 childres is as shown below

```
ou=groups,dc=afnog,dc=org

Entries found: 2

(0 seconds)


 cn=admin
    dn              cn=admin,ou=groups,dc=afnog,dc=org
    cn              admin
    gidNumber       500
    objectClass     posixGroup
                    top


 cn=user
    dn              cn=user,ou=groups,dc=afnog,dc=org
    cn              user
    gidNumber       501
    objectClass     posixGroup
                    top
```

- Create Users
- Next, we will create users to put in these groups. Start by clicking on "ou=users" category. Click on Create a child entry.
- We will choose "Generic: User Account" for these entries
- We will be given a lot of fields to fill out:

- The picture below shows the template to be filled

Select a template for the creation process

Templates:

- Courier Mail: Account
- Courier Mail: Alias
- Generic: Address Book Entry
- Generic: DNS Entry
- Generic: LDAP Alias
- Generic: Organisational Role
- Generic: Organisational Unit
- Generic: Posix Group
- Generic: Simple Security Object
- Generic: User Account
- Kolab: User Entry
- Samba: Account

- ⊗ Samba: Domain
- Samba: Group Mapping
- Samba: Machine
- ⊗ Sendmail: Alias
- ⊗ Sendmail: Cluster
- ⊗ Sendmail: Domain
- ⊗ Sendmail: Relays
- ⊗ Sendmail: Virtual Domain
- ⊗ Sendmail: Virtual Users
- Thunderbird: Address Book Entry
- Default

New User Account (Step 1 of 1)

Common Name   alias, required, rdn

Test User1   *

First name   alias

Test

GID Number   alias, required, hint

user ▼   *

Home directory   alias, required

/home/users/tuser1   *

Last name   alias, required

User1   *

Login shell   alias

/bin/sh ▼

Password   alias, hint

> •••••   md5 ▼
>
> •••••   (confirm)
>
> Check password...

UID Number   alias, required, hint, ro

> 1000

User ID   alias, required

> tuser1   *

> Create Object

Do you want to create this entry?

Attribute	New Value	Skip
cn=Test User1,ou=users,dc=afnog,dc=org		
Common Name	Test User1	☐
First name	Test	☐
GID Number	501	☐
Home directory	/home/users/tuser1	☐
Last name	User1	☐
Login shell	/bin/sh	☐
objectClass	inetOrgPerson posixAccount	☐
Password	****************	☐
UID Number	1000	☐
User ID	tuser1	☐

[Commit] [Cancel]