

By Ganesh Kumar

Published: 2007-02-16 16:41

## Step-by-step OpenLDAP Installation and Configuration

This tutorial describes how to install and configure an OpenLDAP server and also an OpenLDAP client.**Step by Step Installation and Configuration OpenLDAP Server**

Software: OS-Cent OS 4.4, openldap 2.2.13-6.4E

System name: *ldap.adminmart.com*

Domain name: *adminmart.com*

System IP: *192.168.1.212*

Note: Use your domain name and IP instead of *adminmart*.

Easy steps for adding users:

1. Create unix user
  2. Create unix user's ldap passwd file
  3. Convert passwd.file to ldif file
  4. Add ldap file to LDAP Directory using ldapadd
- ### Step #1. Requirements

```
compat-openldap.i386 0:2.1.30-6.4E
openldap-clients.i386 0:2.2.13-6.4E
openldap-devel.i386 0:2.2.13-6.4E
openldap-servers.i386 0:2.2.13-6.4E
openldap-servers-sql.i386 0:2.2.13-6.4E
```

You can install them using the command:

```
yum install *openldap* -y
```

## Step #2. Start the service

```
[root@ldap ~]# chkconfig --levels 235 ldap on
[root@ldap ~]# service ldap start
```

## Step #3. Create LDAP root user password

```
[root@ldap ~]# slappasswd
New password:
Re-enter new password:
{SSHA}cWB1VzxDXZLf6F4pwvyNvApBQ8G/DltW
[root@ldap ~]#
```

## Step #4. Update /etc/openldap/slapd.conf for the root password

```
[root@ldap ~]# vi /etc/openldap/slapd.conf
```

```
#68 database      bdb
#69 suffix        "dc=adminmart,dc=com"
#70 rootdn       "cn=Manager,dc=adminmart,dc=com"
#71 rootpw       {SSHA}cWB1VzxDXZLf6F4pwvyNvApBQ8G/DltW
```

## Step #5. Apply Changes

```
[root@ldap ~]# service ldap restart
```

## Step #6. Create test users

```
[root@ldap ~]# useradd test1
[root@ldap ~]# passwd test1
Changing password for user test1.
New UNIX password:
Retype new UNIX password:
```

```
passwd: all authentication tokens updated successfully.
[root@ldap ~]# useradd test2
[root@ldap ~]# passwd test2
Changing password for user test2.
New UNIX password:
Retype new UNIX password:
passwd: all authentication tokens updated successfully.
[root@ldap ~]#
```

**Note:** Repeat the same for the rest of users **Step #7. Migrate local users to LDAP**

```
[root@ldap ~]# grep root /etc/passwd > /etc/openldap/passwd.root
[root@ldap ~]# grep test1 /etc/passwd > /etc/openldap/passwd.test1
[root@ldap ~]# grep test2 /etc/passwd > /etc/openldap/passwd.test2
```

**Note:** Repeat the same for the rest of users **Step #8. Update default settings on file /usr/share/openldap/migration/migrate\_common.ph**

```
#71 $DEFAULT_MAIL_DOMAIN = "adminmart.com";
#74 $DEFAULT_BASE = "dc=adminmart,dc=com";
```

**Step #9. Convert passwd.file to ldif (LDAP Data Interchange Format) file**

```
[root@ldap ~]# /usr/share/openldap/migration/migrate_passwd.pl /etc/openldap/passwd.root /etc/openldap/root.ldif
[root@ldap ~]# /usr/share/openldap/migration/migrate_passwd.pl /etc/openldap/passwd.test1 /etc/openldap/test1.ldif
[root@ldap ~]# /usr/share/openldap/migration/migrate_passwd.pl /etc/openldap/passwd.test2 /etc/openldap/test2.ldif
```

**Note:** Repeat the same for the rest of users **Step #10. Update root.ldif file for the "Manager" of LDAP Server**

```
[root@ldap ~]# vi /etc/openldap/root.ldif
```

```
#1 dn: uid=root,ou=People,dc=adminmart,dc=com
#2 uid: root
#3 cn: Manager
#4 objectClass: account
```

## Step #11. Create a domain ldif file (/etc/openldap/adminmart.com.ldif)

```
[root@ldap ~]# cat /etc/openldap/adminmart.com.ldif
```

```
dn: dc=adminmart,dc=com
dc: adminmart
description: LDAP Admin
objectClass: dcObject
objectClass: organizationalUnit
ou: rootobject
dn: ou=People, dc=adminmart,dc=com
ou: People
description: Users of adminmart
objectClass: organizationalUnit
```

## Step #12. Import all users in to the LDAP

Add the Domain ldif file

```
[root@ldap ~]# ldapadd -x -D "cn=Manager,dc=adminmart,dc=com" -W -f /etc/openldap/adminmart.com.ldif
Enter LDAP Password:
adding new entry "dc=adminmart,dc=com"
adding new entry "ou=People, dc=adminmart,dc=com"
[root@ldap ~]#
```

Add the users:

```
[root@ldap ~]# ldapadd -x -D "cn=Manager,dc=adminmart,dc=com" -W -f /etc/openldap/root.ldif
Enter LDAP Password:
adding new entry "uid=root,ou=People,dc=adminmart,dc=com"
adding new entry "uid=operator,ou=People,dc=adminmart,dc=com"
[root@ldap ~]#

[root@ldap ~]# ldapadd -x -D "cn=Manager,dc=adminmart,dc=com" -W -f /etc/openldap/test1.ldif
Enter LDAP Password:
adding new entry "uid=test1,ou=People,dc=adminmart,dc=com"
[root@ldap ~]#

[root@ldap ~]# ldapadd -x -D "cn=Manager,dc=adminmart,dc=com" -W -f /etc/openldap/test2.ldif
Enter LDAP Password:
adding new entry "uid=test2,ou=People,dc=adminmart,dc=com"
[root@ldap ~]#
```

**Note:** Repeat the same for the rest of users **Step #13. Apply Changes**

```
[root@ldap ~]# service ldap restart
```

## Step #14. Test LDAP Server

It prints all the user information:

```
[root@ldap ~]# ldapsearch -x -b 'dc=adminmart,dc=com' '(objectclass=*)'
```

## Step-by-step OpenLDAP Installation and Configuration of Client System

### LDAP Client Configuration **Step #1. Installation**

```
[root@ldapclient ~]# yum install authconfig
```

#### **Step #2. Run the command**

```
[root@ldapclient ~]# authconfig
```

#### **Step #3. Settings**

Use LDAP     Use LDAP Authentication

[Both should be checked]

Click "Next".

Use TLS

Server: ldap.adminmart.com

Base DN: dc=adminmart,dc=com

Click "Ok" to confirm.

Note: Use your domain name instead of *adminmart*.

---