

OpenLDAP

OpenLDAP Installation and Configuration

In this guide, we will attempt to show you how to install and configure OpenLDAP ready for use as an authentication method for both Apache and PAM.

There are some pre-requisites that should be also considered and these are listed in the table below (Items 1 -3).

You should really read through this guide in it's entirety before proceeding to complete any of these steps below.

Required Software :

Install Order	Product	Version Used	Download URL	Description
1.	Libtool	1.5.22	http://www.gnu.org/software/libtool/libtool.html	Library tool extensions
2.	Berkeley DB	4.4.20	http://www.sleepycat.com/	Berkeley Database v4
3.	OpenSSL	0.9.8b	http://www.openssl.org	SSL Extensions
4.	OpenLDAP	2.3.24	http://www.openldap.org/software/download/	LDAP Server

N.B. First download and extract these packages. In this document we will use /home/downloads/ as our central location (you can use whatever you like)

Package Building

Each package needs a little configuration before building. We will guide you through each of these as we go on. Remember, when running 'make install', you must be root to run that command.

LibTool :

```
cd libtool-version      (Where version is the version that you downloaded)
./configure              (There is no need to specify anything here, unless you want to deviate from the
defaults)
make
make install             ('make install' will install all the files in '/usr/local/bin', '/usr/local/lib')
```

Berkeley DB :

```
cd db-version/build_unix (Where db-version is the version that you downloaded)
../dist/configure         (We run the build script from this location so that the script knows what
platform we are on)
make                     (This can take 5 - 10 mins)
make install             (This will install the files in the local default directory of /usr/local
/BerkeleyDB.4.4)
```

OpenSSL :

```
cd openssl-version      (Where OpenSSL-version is the version you downloaded)
./config --prefix=/usr/local/openssl/ (This tells the config script to install in the specified directory)
make
make test
make install             (This will install the files in the directory specified in the .
/config script)
```

OpenLDAP :

```
cd openldap-version      (Where openldap-version is the version you downloaded)
./configure --enable-syslog --enable-slapd --enable-cleartext --enable-crypt --disable-sql --enable-ldap --with-
tls
make depend
make
make test                (This step can take as long as 1hr, depending on system performance.)
make install
```

Configuring Applications

Now you need to edit the slapd.conf file in /usr/local/etc/openldap/ making sure that the following entries are present.

```
include      /usr/local/etc/openldap/schema/core.schema
include      /usr/local/etc/openldap/schema/cosine.schema
include      /usr/local/etc/openldap/schema/nis.schema
include      /usr/local/etc/openldap/inetorgperson.schema

schemacheck  on

pidfile      /var/run/slapd/slapd.pid

argsfile     /var/run/slapd.args

loglevel     0

modulepath   /usr/local/lib
moduleload   back_bdb

backend      bdb
checkpoint 512 30

database     bdb

suffix       "dc=mydomain,dc=com"

directory    "/var/lib/ldap"

index        objectClass eq

lastmod      on

access to attrs=userPassword
    by dn="cn=admin,dc=mydomain,dc=com" write
    by anonymous auth
    by self write
    by * none

access to dn.base="" by * read

    by dn="cn=admin,dc=mydomain,dc=com" write
    by * read
```

You now have a very basic configuration for LDAP to work from. You obviously should set the paths to whatever you need, remembering to substitute the ones in this guide accordingly.