

# The ldapsearch, ldapdelete and ldapmodify utilities

**ldapsearch** - ldapsearch is a shell accessible interface to the ldap\_search(3) library call. Use this utility to search for entries on your LDAP database backend.

The synopsis to call ldapsearch is the following (take a look at the ldapsearch man page to see what each option means):

```
ldapsearch [-n] [-u] [-v] [-k]
[-K] [-t] [-A] [-B] [-L]
[-R] [-d debuglevel] [-F sep] [-f file]
[-x] [-D binddn] [-W] [-w bindpasswd]
[-h ldaphost] [-p ldapport] [-b searchbase]
[-s base|one|sub]
[-a never|always|search|find] [-l timelimit]
[-z sizelimit] filter [attrs...]
```

**ldapsearch** opens a connection to an LDAP server, binds, and performs a search using the filter *filter*. The filter should conform to the string representation for LDAP filters as defined in RFC 1558. If ldapsearch finds one or more entries, the attributes specified by *attrs* are retrieved and the entries and values are printed to standard output. If no attrs are listed, all attributes are returned.

```
ldapsearch -x -b 'o=TUDELFT,c=NL' 'objectclass=*'

ldapsearch -b 'o=TUDELFT,c=NL' 'cn=Rene van Leuken'

ldasearch -u -b 'o=TUDELFT,c=NL' 'cn=Luiz Malere' sn mail
```

The -b option stands for searchbase (initial search point), the -u option stands for userfriendly output information and the -x option is used to specify simple authentication.

**ldapdelete** - ldapdelete is a shell accessible interface to the ldap\_delete(3) library call. Use this utility to delete entries on our LDAP database backend.

The synopsis to call ldapdelete is the following (take a look at the ldapdelete man page to see what each option means):

```
ldapdelete [-n] [-v] [-k] [-K]
[-c] [-d debuglevel] [-f file] [-D binddn]
[-W] [-w passwd] [-h ldaphost] [-p ldapport]
[dn]...
```

**ldapdelete** opens a connection to an LDAP server, binds, and deletes one or more entries. If one or more dn arguments are provided, entries with those Distinguished Names are deleted. Each dn should be a string-represented DN as defined in RFC 1779. If no dn arguments are provided, a list of DN's is read from standard input (or from file if the -f flag is used).

Here are some examples of the use of `ldapdelete`:

```
ldapdelete 'cn=Luiz Malere,o=TUDELFT,c=NL'

ldapdelete -v 'cn=Rene van Leuken,o=TUDELFT,c=NL' -D 'cn=Luiz
Malere,o=TUDELFT,c=NL' -W
```

The `-v` option stands for verbose mode, the `-D` option stands for Binddn (the dn to authenticate against) and the `-W` option stands for password prompt.

**ldapmodify** - `ldapmodify` is a shell accessible interface to the `ldap_modify(3)` and `ldap_add(3)` library calls. Use this utility to modify entries on our LDAP database backend.

The synopsis to call `ldapmodify` is the following (take a look at the `ldapmodify` man page to see what each option mean):

```
ldapmodify [-a] [-b] [-c] [-r]
[-n] [-v] [-k] [-d debuglevel]
[-D binddn] [-W] [-w passwd]
[-h ldaphost] [-p ldapport] [-f file]

ldapadd [-b] [-c] [-r] [-n]
[-v] [-k] [-K] [-d debuglevel]
[-D binddn] [-w passwd] [-h ldaphost]
[-p ldapport] [-f file]
```

**ldapadd** is implemented as a hard link to the `ldapmodify` tool. When invoked as `ldapadd` the `-a` (add new entry) flag of `ldapmodify` is turned on automatically. `ldapmodify` opens a connection to an LDAP server, binds, and modifies or adds entries. The entry information is read from standard input or from file through the use of the `-f` option.

Here are some examples of the use of `ldapmodify`:

Assuming that the file `/tmp/entrymods` exists and has the contents:

```
dn: cn=Modify Me, o=University of Michigan, c=US
changetype: modify
replace: mail
mail: modme@terminator.rs.itd.umich.edu
-
add: title
title: Grand Poobah
-
add: jpegPhoto
jpegPhoto: /tmp/modme.jpeg
-
delete: description
-
```

The command:

```
ldapmodify -b -r -f /tmp/entrymods
```

will replace the contents of the "Modify Me" entry's mail attribute with the value "modme@terminator.rs.itd.umich.edu", add a title of "Grand Poobah", and the contents of the file /tmp/modme.jpeg as a jpegPhoto, and completely remove the description attribute.

The same modifications as above can be performed using the older ldapmodify input format:

```
cn=Modify Me, o=University of Michigan, c=US
mail=modme@terminator.rs.itd.umich.edu
+title=Grand Poobah
+jpegPhoto=/tmp/modme.jpeg
-description
```

And plus the command bellow:

```
ldapmodify -b -r -f /tmp/entrymods
```

Assuming that the file /tmp/newentry exists and has the contents:

```
dn: cn=Barbara Jensen, o=University of Michigan, c=US
objectClass: person
cn: Barbara Jensen
cn: Babs Jensen
sn: Jensen
title: the world's most famous manager
mail: bjensen@terminator.rs.itd.umich.edu
uid: bjensen
```

The command:

```
ldapadd -f /tmp/entrymods
```

will add the entry with dn: cn=Barbara Jensen, o=University of Michigan, c=US if it's not already present. If an entry with this dn already exists, the command will point out the error and will not overwrite the entry.

Assuming that the file /tmp/newentry exists and has the contents:

```
dn: cn=Barbara Jensen, o=University of Michigan, c=US
changetype: delete
```

The command:

```
ldapmodify -f /tmp/entrymods
```

will remove Babs Jensen's entry.

The -f option stands for file (read the modification information from a file instead of standard input), the -b option stands for binary (any values starting with a '/' on the input file are interpreted as binaries), the -r stands for replace (replace existing values by default).