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Rocky Enterprise Linux 9.2 Manual Pages on command 'ldif.5'

\$ man ldif.5

LDIF(5) File Formats Manual LDIF(5)

NAME

ldif - LDAP Data Interchange Format

DESCRIPTION

The LDAP Data Interchange Format (LDIF) is used to represent LDAP entries and change records in text form. LDAP tools, such as `ldapadd(1)` and `ldapsearch(1)`, read and write LDIF entry records. `ldapmodify(1)` reads LDIF change records.

This manual page provides a basic description of LDIF. A formal specification of LDIF is published in RFC 2849.

ENTRY RECORDS

LDIF entry records are used to represent directory entries. The basic form of an entry record is:

```
dn: <distinguished name>
<attrdesc>: <attrvalue>
<attrdesc>: <attrvalue>
<attrdesc>:: <base64-encoded-value>
<attrdesc>:< <URL>
```

...

The value may be specified as UTF-8 text or as base64 encoded data, or a URI may be provided to the location of the attribute value.

A line may be continued by starting the next line with a single space or tab, e.g.,

```
dn: cn=Barbara J Jensen,dc=exam  
    ple,dc=com
```

Lines beginning with a sharp sign ('#') are ignored.

Multiple attribute values are specified on separate lines, e.g.,

```
cn: Barbara J Jensen  
cn: Babs Jensen
```

If an value contains a non-printing character, or begins with a space or a colon ':', the <attrtype> is followed by a double colon and the value is encoded in base 64 notation. e.g., the value " begins with a space" would be encoded like this:

```
cn:: IGJlZ2lucyB3aXRoIGEgc3BhY2U=
```

If the attribute value is located in a file, the <attrtype> is followed by a '<' and a file: URI. e.g., the value contained in the file /tmp/value would be listed like this:

```
cn:< file:///tmp/value
```

Other URI schemes (ftp,http) may be supported as well.

Multiple entries within the same LDIF file are separated by blank lines.

ENTRY RECORD EXAMPLE

Here is an example of an LDIF file containing three entries.

```
dn: cn=Barbara J Jensen,dc=example,dc=com  
cn: Barbara J Jensen  
cn: Babs Jensen  
objectclass: person  
description:< file:///tmp/babs  
sn: Jensen  
dn: cn=Bjorn J Jensen,dc=example,dc=com  
cn: Bjorn J Jensen
```

```
cn: Bjorn Jensen
objectclass: person
sn: Jensen
dn: cn=Jennifer J Jensen,dc=example,dc=com
cn: Jennifer J Jensen
cn: Jennifer Jensen
objectclass: person
sn: Jensen
jpegPhoto:: /9j/4AAQSkZJRgABAAAAAQABAAD/2wBDABALD
A4MChAODQ4SERATGCgaGBYWGDEjJR0oOjM9PDkzODdASFxOQ
ERXRTc4UG1RV19iZ2hnPk1xeXBkeFxlZ2P/2wBDARESEhgVG
...
```

Note that the description in Barbara Jensen's entry is read from file:///tmp/babs and the jpegPhoto in Jennifer Jensen's entry is encoded using base 64.

CHANGE RECORDS

LDIF change records are used to represent directory change requests. Each change record starts with line indicating the distinguished name of the entry being changed:

```
dn: <distinguishedname>
changetype: <[modify|add|delete|modrdn]>
```

Finally, the change information itself is given, the format of which depends on what kind of change was specified above. For a changetype of modify, the format is one or more of the following:

```
add: <attributetype>
<attrdesc>: <value1>
<attrdesc>: <value2>
...
-
```

Or, for a replace modification:

```
replace: <attributetype>
<attrdesc>: <value1>
<attrdesc>: <value2>
```

...

-

If no attributetype lines are given to replace, the entire attribute is to be deleted (if present).

Or, for a delete modification:

delete: <attributetype>

<attrdesc>: <value1>

<attrdesc>: <value2>

...

-

If no attributetype lines are given to delete, the entire attribute is to be deleted.

For a changetype of add, the format is:

<attrdesc1>: <value1>

<attrdesc1>: <value2>

...

<attrdescN>: <value1>

<attrdescN>: <value2>

For a changetype of modrdn or moddn, the format is:

newrdn: <newrdn>

deleteoldrdn: 0 | 1

newsuperior: <DN>

where a value of 1 for deleteoldrdn means to delete the values forming the old rdn from the entry, and a value of 0 means to leave the values as non-distinguished attributes in the entry. The newsuperior line is optional and, if present, specifies the new superior to move the entry to.

For a changetype of delete, no additional information is needed in the record.

Note that attribute values may be presented using base64 or in files as described for entry records. Lines in change records may be continued in the manner described for entry records as well.

The following sample LDIF file contains a change record of each type of change.

```
dn: cn=Babs Jensen,dc=example,dc=com
changetype: add
objectclass: person
objectclass: extensibleObject
cn: babs
cn: babs jensen
sn: jensen
dn: cn=Babs Jensen,dc=example,dc=com
changetype: modify
add: givenName
givenName: Barbara
givenName: babs
-
replace: description
description: the fabulous babs
-
delete: sn
sn: jensen
-
dn: cn=Babs Jensen,dc=example,dc=com
changetype: modrdn
newrdn: cn=Barbara J Jensen
deleteoldrdn: 0
newsuperior: ou=People,dc=example,dc=com
dn: cn=Barbara J Jensen,ou=People,dc=example,dc=com
changetype: delete
```

INCLUDE STATEMENT

The LDIF parser has been extended to support an include statement for referencing other LDIF files. The include statement must be separated from other records by a blank line. The referenced file is specified using a file: URI and all of its contents are incorporated as if they

were part of the original LDIF file. As above, other URI schemes may be supported. For example:

```
dn: dc=example,dc=com
```

```
objectclass: domain
```

```
dc: example
```

```
include: file:///tmp/example.com.ldif
```

```
dn: dc=example,dc=org
```

```
objectclass: domain
```

```
dc: example
```

This feature is not part of the LDIF specification in RFC 2849 but is expected to appear in a future revision of this spec. It is supported by the `ldapadd(1)`, `ldapmodify(1)`, and `slapadd(8)` commands.

SEE ALSO

`ldap(3)`, `ldapsearch(1)`, `ldapadd(1)`, `ldapmodify(1)`, `slapadd(8)`, `slapcat(8)`, `slapd-ldif(5)`.

"LDAP Data Interchange Format," Good, G., RFC 2849.

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