



# FixPak FP510H-01 README for IBM Directory Server 5.1 HPUX





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## FixPak FP510H-01

FixPak: FP510H-01

Date: April, 2003

IBM® Directory Server Version 5.1

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### General description

The FixPak contains fixes for problems encountered in IBM Directory Server Version 5.1. The APAR number for the problem is listed in **Problems fixed**. Refer to the specific APAR for more detail.

For information on changes and fixes that occurred after the product documentation had been translated, see the *IBM Directory Server Version 5.1 README Addendum*. The Addendum file is in English only and can also be found on the IBM Directory Server Library Web page:

<ftp://ftp.software.ibm.com/software/network/directory/library/v51/addendum51.pdf>

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### Problems fixed

New fixes in FP510H-01:

**APAR IR50993 (CMVC 75622 )**

Allow DN like: cn="www.youhoo.com, (C)"

Fixed a problem preventing the addition of DNs than have a comma in them.

**APAR IR50961 (CMVC 77303)**

Server memory fault on Linux under stress

The server exits after many stress test scenarios with infinite loops to stress the server and change log enabled.

**APAR IR50962 (CMVC 77553)**

Master server hangs after restarting replica if ibmslapd has left tables locked that it needs to read.

**APAR IR50987 (CMVC 77575)**

Hang when bind DN in group being modified

Server hangs when attempting to modify group that user is a member of and does not have perm to modify.

**APAR IR50988 (CMVC 77589)**

IDS server becomes unresponsive

This problem is encountered when multiple asynchronous operations are performed on a single client connection, causing deadlocks on the server.

**APAR IR50963 (CMVC 77605)**

Replication DIT constraints do not work

An ibm-replicationGroup can be created under any objectclass (other than the ibm-replication context objectclass), but once the other replication topology objects get added to the database without having a proper

replication context object created first, the server can't start the next time if the server/context happens to be a Master server.

**APAR IR50992 (CMVC 75615)**

DNs containing extended ASCII return protocol error

Protocol error occurs when handling multi-byte characters are improperly truncated at the end of a buffer.

**APAR IR50991 (CMVC 77673)**

Double ber\_free() in search.c traps windows client

**APAR IR50990 (CMVC 77714)**

Memory leak in filterkey when stressed

When concurrent updates and searches are run, the slapd server can leak the filterkey and the idl list if the filter cache has just been flushed.

**APAR IR50989 (CMVC 77725)**

**bulkload:** Performance issues wrt acl src table

**APAR IR50965 (CMVC 77756)**

Password cannot be modified if adding bad ibm-filteraclentry value

An attempt to add an entry with an invalid ibm-filteraclentry value (left out the filter part) results in an "Error, Password cannot be modified" message.

**APAR IR50966 (CMVC 77757)**

Deleting a subtree of an object that does not exist (parent does) returns an "Unwilling to perform" error

**APAR IR50967 (CMVC 77778)**

Allow an escaped # anywhere in the value of a DN

**APAR IR50968 (CMVC 77792)**

Nested grp code not detecting groupOfURLs type

**APAR IR50969 (CMVC 77824)**

Check for null password in replication bind w/GSSAPI

In the event that there is a ibm-replicaCredentials entry that contains the replicaBindDN attribute, but not the ibm-replicaCredentials attribute, errors appear in the server's error log.

**APAR IR50972 (CMVC 77836)**

Server freezes for several minutes during Denial of Service Tests

With certain Denial of Service tests, CPU utilization shoots up at 100% when the server processes certain DN's in a tight loop.

**APAR IR50971 (CMVC 77857)**

Dynamic update with scope entire may cause server to crash

**APAR IR50973 (CMVC 77908)**

Server core due to freeing fkey/fidl/idl in rdbm\_search\_cache.cpp

**APAR IR50974 (CMVC 77909)**

Improve server startup time

Use "SELECT EID FROM LDAPDB2.SRC WHERE OWNSRC<>-1 OR (ACLSRC<>-1 AND ACLSRC<>-2) FETCH FIRST 2 ROWS ONLY"; instead of "SELECT COUNT(\*)..." in AclsDefinedinDB() in acltables.cpp to reduce server startup time.



- APAR IR50975 (CMVC 77972)**  
Replication changes may not be processed in order received
- APAR IR50976 (CMVC 78004)**  
Server cores when running `ldif2db`  
  
The `ldif2db` and `db2ldif` utilities do not turn off the caches. This is causing `ldif2db` to crash on AIX® because the process eventually runs out of memory.
- APAR IR50977 (CMVC 78029)**  
Server crashes on startup if referrals are defined
- APAR IR50978 (CMVC 78043)**  
Schema changes are not recorded under changelog
- APAR IR50979 (CMVC 78061)**  
`ldapsearch` fails with Out of Memory
- APAR IR50980 (CMVC 78083)**  
Hung server during abandon/unbind operations
- APAR IR50981 (CMVC 78123)**  
Server traps if cn=authenticated in ACL
- APAR IR50982 (CMVC 78195)**  
Segmentation error occurs while adding replication agreement
- APAR IR51067 (CMVC 78444)**  
slapd process intermittently abends under stress with multiple reads/updates to entries over 40 KB
- APAR IR51117 (CMVC 78037)**  
`ldif2db` does not load all data
- APAR IR51118 (CMVC 78204)**  
Editing replica agreement does not replicate in master forwarder replica
- APAR IR51119 (CMVC 78254)**  
Memory leak in `rdbm_pwd.cpp` for SHA
- APAR IR51121 (CMVC 78325)**  
Replace on `ldapmodify` fails when attribute does not exist
- APAR IR51122 (CMVC 78337)**  
`AddModifyChangeEntry` leaks memory
- APAR IR51126 (CMVC 78378)**  
`ldapmodify` deadlocks
- APAR IR51065 (CMVC 78367)**  
`ldif2db` does not work if it contains `pwdpolicy` attributes
- APAR IR51067 (CMVC 78444)**  
Core doing search/updates on Linux with multi-processor machine
- APAR IR51154 (CMVC 78285)**  
Unable to re-add a replication agreement after deletion
- APAR IR51177 (CMVC 78397)**  
`ldapsearch` fails to return DBCS characters
- APAR IR51179 (CMVC 78144)**  
`newExtednedOP` adds null extop to list in error condition

**APAR IR57780 (CMVC 78468)**

Memory leaks in front end ber extended operations

**APAR IR51181 (CMVC 78191)**

ldapdelete unable to delete subtree from master

**APAR IR51182 (CMVC 78277)**

Server traps while modifying a schedule object

## Dependencies

IBM Directory Server 5.1 must be installed.

## FixPak contents

The archive for this FixPak is named FP510H-01.tar.Z. The client install includes the following files:

File	bytes	sum -r
bin/FP510H-01Readme.pdf	-	-
bin/FP510H-01.txt	55	44313
bin/ibmdirctl	77976	34310
bin/ldapchangepwd	80392	46364
bin/ldapdelete	78736	48947
bin/ldapexop	133208	30276
bin/ldapmodify	101624	05360
bin/ldapmodrdn	79072	13156
bin/ldapsearch	108464	55506
bin/ldamsq	30912	48292
examples/ldapchangepwd.c	30414	62655
examples/ldapdelete.c	26547	63942
examples/ldapmodify.c	56577	10665
examples/ldapmodrdn.c	29118	16725
examples/ldapsearch.c	59018	53079
examples/makefile.ex	3479	36593
examples/sample.ldif	17338	32229
include/lber.h	1633	62011
include/ldap.h	48303	31465
include/ldif.h	4336	46572
include/audit-plugin-list.h	2010	16334
include/audit-plugin.h	11964	45154
include/ldaplocale.h	5142	50698
include/ldapssl.h	17949	17290
include/slapi-plugin.h	11865	27914
lib/ldap_plugin_sasl_cram-md5.sl	57312	40823
lib/libibldap.sl	1170328	13637
lib/libldapiconv.sl	21320	61094
lib/libldapstatic.a	1513932	62251
lib/libldif.sl	53104	42434

The Web Administration install includes the following files:

File	bytes	sum -r
bin/FP510H-01Readme.pdf	-	-
bin/FP510H-01.txt	55	44313
idstools/dsml/DSML.zip	711844	39323
idstools/IDSWebApp.war	11881351	30921

The server install includes the following files:

File	bytes	sum -r
bin/FP510H-01Readme.pdf	-	-
bin/FP510H-01.txt	55	44313

bin/IDSProxyExe	33576	07039
bin/dbback	68032	58708
bin/dbrestore	68440	41759
bin/ibmdiradm	909320	11620
bin/ibmslapd	2313184	22422
bin/ldapcfg	15328	13917
bin/ldapdiff	8949	02641
bin/ldapdiff.jar	125742	01272
bin/ldaqdsp	21024	38765
lib/libavl.sl	38216	17436
lib/libcfg32.sl	1809168	35371
lib/liblber.sl	151000	59979
lib/libldbm.sl	20328	42388
lib/libldtr.sl	92216	41609
lib/liblthread.sl	17144	22379
lib/libmessage.sl	121736	10360
lib/libsha_md5.sl	50392	56777
lib/libtrc.sl	81704	14844
lib/libutlsa.sl	113520	57129
lib/libDSP.sl	84528	30376
lib/libIDSProxyDll.sl	35336	55297
lib/libback-config.sl	202504	48087
lib/libback-rdbm.sl	3853224	43935
lib/libcsgl.sl	696352	09856
lib/libcstr.sl	29128	39069
lib/libdbadmin.sl	232248	10140
lib/libevent.sl	234456	36809
lib/libibmldapcl.sl	136416	06203
lib/libldacfg.sl	240984	55353
lib/libldapaudit.sl	111784	00768
lib/libldaprep1.sl	1519368	36027
lib/libloga.sl	83464	43183
lib/libslapi.sl	245120	06891
lib/libtranext.sl	238136	16355
lib/libtransys.sl	486960	61523
lib/libutils.sl	5132856	20267
config/IDSConfig.jar	1705796	42005
config/config/OpNav.Java.Application.ser	635	29664
config/console_runtime/jhall.jar	376756	34639
config/console_runtime/jopnav.jar	520307	64847
config/console_runtime/jopnavfw.jar	299931	14825
config/console_runtime/jt400.jar	3429383	57128
config/console_runtime/jui400.jar	571584	02860
config/console_runtime/op.jar	978445	64559
config/console_runtime/settings/idsconsoleapp.jreg	205	10381
config/console_runtime/uitools.jar	1005270	12143
config/console_runtime/util400.jar	290012	40038
config/console_runtime/x4j400.jar	1803877	33231
config/csa_runtime/auibase.jar	285493	28704
config/csa_runtime/auifw.jar	318679	58459
config/csa_runtime/auil18n.jar	309063	29133
config/csa_runtime/auswing.jar	472971	14393
config/csa_runtime/jhall.jar	402270	52882
config/csa_runtime/settings/data.properties	535	26517
config/csa_runtime/settings/framework.properties	785	63995
config/csa_runtime/settings/registry.properties	732	09846
config/csa_runtime/settings/trace.properties	425	51192
config/csa_runtime/swing11spinner_Runtime.jar	161875	00481
config/csa_runtime/ui1.jar	1117025	26287
config/csa_runtime/xerces.jar	1803877	33231
sbin/Schema.jar	2141337	05268
sbin/SchemaMigrate.jar	42653	32625
sbin/bulkload	868408	26158
sbin/cfgmodify	81352	23592
sbin/db2ldif	587808	36048
sbin/ldif	32376	40862
sbin/ldif2db	583120	46306

sbin/ldtrc	210640	59260
sbin/ltou	34304	02537
sbin/migrate51	34037	38236
sbin/rc.ibmdir	1304	49489
sbin/runscript	53872	31556
sbin/runstats	550216	41141
sbin/utol	34304	43294

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## Applying the FixPak

1. For each machine targeted to receive the FixPak, make sure any servers are stopped, and any client applications linked to the shared libraries (including DMT) are stopped. Programs and libraries cannot be replaced while they are in use.
2. Copy the FixPak archive (FP510H-01.tar.Z) to a directory with sufficient free space to hold both the archive and a backup of the patched files (in case you want to uninstall the FixPak). You need at least 130 MB for a full server install, less if patching a client only installation. Open a command prompt and type:

```
# su
# cd {directory where FP510H-01.tar.Z is}
# export INSTALL_DIR=/usr/IBMIldap {or alternate IDS 5.1 install directory}
# export PATCH_DIR=~pwd~
# rm FP510H-01.filelist.*
```

All remaining steps use this command prompt.

3. Determine which packages are currently installed and extract the corresponding filelist from the FixPak archive. At the command prompt type the following to determine which packages are installed:

```
# swlist | grep -i ldap
```

- a. If the result includes any **LDAPServer**, this is a server install. Extract FP510H-01.filelist.server from the archive:

```
# zcat FP510H-01.tar.Z | tar -xf - FP510H-01.filelist.server
```

- b. If the result includes **LDAPClient**, this is a client install. Extract FP510H-01.filelist.client from the archive:

```
# zcat FP510H-01.tar.Z | tar -xf - FP510H-01.filelist.client
```

- c. To determine whether Web Administration is installed, run the following command:

```
swlist | grep -i ids
```

If the result includes **LDAPWebadmin**, this is a Web Administration install. Extract FP510H-01.filelist.webadmin from the archive:

```
# zcat FP510H-01.tar.Z | tar xf - FP510H-01.filelist.webadmin
```

4. Backup the existing files before applying the patch in case you need to uninstall the patch. This step is optional, but must be performed if you want to uninstall the FixPak at a later time.

**Note:** If you get file not found errors during the backup, that could simply mean you don't have that file's component installed on this machine. These error(s) can be ignored.

```
# cd $INSTALL_DIR
# tar -cvf $PATCH_DIR/FP510H-01.UNDO.tar `cat $PATCH_DIR/FP510H-01.filelist.*`
# compress $PATCH_DIR/FP510H-01.UNDO.tar
```

5. Apply the FixPak:

```
# cd $PATCH_DIR
# mkdir tmp
# cd tmp
# for file in ../FP510H-01.filelist.*; do
  (zcat ../FP510H-01.tar.Z | tar xf - `cat $file`) done
# cp -r * $INSTALL_DIR
# cd ..
# rm -rf tmp
# chmod 6550 $INSTALL_DIR/sbin/runscript
```

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## Uninstalling the FixPak

This can only be done if you made a backup before installing the FixPak (see step 4 on page 6, above). If so, then you can uninstall the FixPak by deleting `$INSTALL_DIR/bin/FP510H-01*` and extracting `$PATCH_DIR/FP510H-01.UNDO.tar.Z`:

```
# cd $INSTALL_DIR
# rm bin/FP510H-01*
# zcat $PATCH_DIR/FP510H-01.UNDO.tar.Z | tar -xvf -
```

---

## Confirming the FixPak has been applied successfully

After installation, the file `$INSTALL_DIR/bin/FP510H-01.txt` contains the following:

```
IBM Directory      Release: aus51pldap  Build: 030416a
```

All the files listed in `$PATCH_DIR/FP510H-01.filelist.*` match the files sizes and checksums listed in “FixPak contents” on page 4.







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