



# FixPak FP510W-01 README for IBM Directory Server 5.1 Windows<sup>®</sup> OS





# FixPak FP510W-01 README for IBM Directory Server 5.1 Windows<sup>®</sup> OS



---

## Contents

<b>FixPak FP510W-01 . . . . .</b>	<b>1</b>	FixPak contents . . . . .	4
General description . . . . .	1	Applying the FixPak. . . . .	6
Problems fixed. . . . .	1	Uninstalling the FixPak. . . . .	8
Dependencies . . . . .	4	Confirming the FixPak has been applied successfully	8



---

## FixPak FP510W-01

FixPak: FP510W-01

Date: April, 2003

IBM® Directory Server Version 5.1

---

### 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*. This file is in English only. This file can also be found on the IBM Directory Server Library Web page:

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

---

### Problems fixed

New fixes in FP510W-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 FP510W-01.zip and contains the following files:

File	bytes	sum -r
=====	=====	=====
FP510W-01Readme.pdf	---	---
archive.jar	30236650	46689
media.inf	13	58904
setup.exe	17116211	02200
updateWebAdmin.bat	707	30150
FP510W-01.filelist.server	2191	54313
FP510W-01.filelist.client	822	62942
FP510W-01.filelist.webadmin	96	

The client install includes the following files:

File	bytes	sum -r
=====	=====	=====
bin\FP510W-01.txt	69	48711
bin\ibmdirctl.exe	32510	18797
bin\ldap.dll	398724	28955
bin\ldap_ph.dll	58635	27009
bin\ldap_plugin_ibm_gsskrb.dll	31868	20552
bin\ldap_plugin_sasl_cram-md5.dll	23045	11587
bin\ldapadd.exe	50250	60014
bin\ldapchangepwd.exe	29169	63488
bin\ldapdelete.exe	28834	45294
bin\ldapexop.exe	62103	61554
bin\ldapmodify.exe	50250	60014
bin\ldapmodrdn.exe	29022	30192
bin\ldapsearch.exe	58626	25003
bin\libldapiconv.dll	23757	33577
bin\libmsgs.dll	86016	45929
include\audit-plugin-list.h	2104	40247
include\audit-plugin.h	12294	54960
include\lber.h	1690	07655
include\ldap.h	49557	45732
include\ldaplocale.h	5343	14097
include\ldaps1.h	18249	51552
include\ldif.h	4470	09024
include\slapi-plugin.h	12207	41775
lib\ldap.lib	245254	05448
lib\ldapstatic.lib	1266246	23799
lib\libldapiconv.lib	6186	46140
lib\libldapiconvstatic.lib	7012	32409
lib\libldif.lib	43080	52631
lib\libmsg.lib	119908	53970
lib\libmsgs.lib	33478	22052
lib\libslapi.lib	73388	19589

The Web Administration install includes the files in the client install plus the following:

File	bytes	sum -r
=====	=====	=====
bin\FP510W-01.txt	69	48711
idstools\DSML.zip	711844	39323
dstools\IDSWebApp.war	11881351	30921
idstools\IDSWebApp.war	11695656	00768

The server install includes the files in the Web Administration install plus the following:

File	bytes	sum -r
=====	=====	=====
bin\FP510W-01.txt	69	48711
bin\bulkload.exe	308599	24020
bin\cfg32.dll	308878	11263
bin\cfgmodify.exe	39198	37659
bin\db2ldif.exe	192410	45777
bin\dbback.exe	34507	09315
bin\dbcheck.exe	20635	55768
bin\dbrestore.exe	34906	37002
bin\ibmdiradm.exe	167162	17813
bin\ibmslapd.exe	536232	29067
bin\IDSproxyD11.dll	24641	28218
bin\IDSproxyExe.exe	21005	21219
bin\ldacfg.dll	65921	51532
bin\ldamsg.exe	100352	30523
bin\ldapcfg.exe	21914	31040
bin\ldapdiff.exe	21915	25243
bin\ldapdiff.jar	125742	01272
bin\ldapjrt.dll	31423	39712
bin\ldapucfg.exe	21915	24689
bin\ldapxcfg.exe	21915	29156
bin\ldif.exe	26330	39900
bin\ldif2db.exe	184658	09841
bin\ldtrc.exe	67719	04037
bin\ldtrcd.exe	19736	03899
bin\libback-config.dll	55162	14834
bin\libback-rdbm.dll	1028162	46573
bin\libcl.dll	46975	30258
bin\libdbadmin.dll	161003	24909
bin\libDSP.dll	36218	45758
bin\libevent.dll	52522	64242
bin\libldapaudit.dll	43066	51238
bin\libldapkrb.dll	47698	43771
bin\libldapprep1.dll	323968	60023
bin\libloga.dll	32753	33358
bin\libmessage.dll	85073	55976
bin\libslapi.dll	96610	36222
bin\libtranext.dll	31239	10098
bin\libtransys.dll	170325	05101
bin\libtrc.dll	40516	13449
bin\libutils.dll	1125565	03235
bin\libutlsa.dll	45534	30038
bin\ltou.exe	19911	32243
bin\runstats.exe	163391	15056
bin\Schema.jar	2144051	08656
bin\SchemaMigrate.jar	42639	59843
bin\SHSMP.dll	115824	09883
bin\SHSMPd.dll	189440	36894
bin\utol.exe	19915	00653
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	210	26960
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\auii18n.jar	309063	29133
config\csa_runtime\auiswing.jar	472971	14393
config\csa_runtime\jhall.jar	402270	52882
config\csa_runtime\settings\data.properties	559	29841
config\csa_runtime\settings\framework.properties	811	47808
config\csa_runtime\settings\registry.properties	759	04113
config\csa_runtime\settings\trace.properties	440	64284
config\csa_runtime\swingl1spinner_Runtime.jar	161875	00481
config\csa_runtime\uil.jar	1117025	26287
config\csa_runtime\xerces.jar	1803877	33231
config\IDSConfig.jar	1873287	27241
ldapcfg.ico	7398	16974

---

## Applying the FixPak

You need at least 100 MB for a full server install, less if patching a client only installation.

To apply the FixPak:

1. Set an environment variable to the fully qualified path of a scratch subdirectory and extract the FixPak contents into this subdirectory. Open a command prompt and type

```
> cmd /x
> set PATCH_DIR = c:\51fp1
> md %PATCH_DIR%
> cd /d %PATCH_DIR%
```

Note that this command prompt will be used for all following steps.

2. For each of the master and slave server installations targeted to receive the FixPak, make sure the servers are stopped prior to applying the FixPak.
3. On the computer where you are installing the FixPak, stop any programs that are running and close all windows. If you have open windows, the initial FixPak installation window might be hidden behind other windows.
4. Determine what components are installed on your computer and make a backup copy of the files that will be replaced.

- a. Determine what components are installed on your machine.

If this command returns **Server Installed!**, you have a server installed:

```
if exist "%LDAPHome%\bin\ibmslapd.exe" echo Server Installed!
```

If this command returns **Client Installed!**, you have the client installed:

```
if exist "%LDAPHome%\lib\ldap.lib" echo Client Installed!
```

If this command returns **Webadmin Installed!**, you have a Web Administration installed:

```
if exist "%LDAPHome%\idstools\IDSWebApp.war" echo Webadmin Installed!
```

- b. Make a backup copy of the files that will be replaced. 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, it might mean that you do not have that file's component installed on this machine. These error(s) can be ignored.

```
xcopy "%LDAPHome%" %PATCH_DIR% /t
```

For Server installs:

```
for /F %i in (FP510W-01.filelist.server) do copy "%LDAPHome%\%i" %i
```

For Client installs:

```
for /F %i in (FP510W-01.filelist.client) do copy "%LDAPHome%\%i" %i
```

For Webadmin installs:

```
for /F %i in (FP510W-01.filelist.webadmin) do copy "%LDAPHome%\%i" %i
```

5. Run setup.exe from the command prompt. The Welcome window displays.  
setup
6. To begin installation, click **Next**.
7. If your machine needs to be restarted, you will receive a panel stating you must restart your computer. Select to restart your computer now or later and click **Finish**.
8. After your machine has been restarted (if necessary) you may now restart your servers. You can also restart any application previously terminated to apply this FixPak.
9. If you are installing Web Administration, you must complete the following steps in order for the Webadmin FixPak files to take effect.

**Note:** Default command paths are used in these examples. You may have to change them if your install is different.

- a. Make sure the application server is running:

```
"c:\Program Files\IBM\LDAP\appsrv\bin\startServer.bat" server1
```

- b. Run the webserver admin tool:

```
"c:\Program Files\IBM\LDAP\appsrv\bin\wsadmin.bat"
```

- c. At the the **wsadmin>** command prompt, type:

```
$AdminApp uninstall IDSWebApp.war  
$AdminConfig save  
quit
```

- d. Stop the application server:

```
"c:\Program Files\IBM\LDAP\appsrv\bin\stopServer.bat" server1
```

- e. Update the web server:

```
Set BOBCAT_HOME=c:\Program Files\IBM\LDAP\appsrv  
Set INSTALL_DIR=c:\Program Files\IBM\LDAP
```

```
"%PATCH_DIR%\updateWebAdmin.bat"
```

- f. Restart the application server:

```
"c:\Program Files\IBM\LDAP\appsrv\bin\startServer.bat" server1
```

- g. Test the new WebAdmin by opening a browser and entering this URL:

```
http://hostname:9080/IDSWebApp/IDSjsp/Login.jsp
```

where *hostname* is the host name of your computer.

---

## Uninstalling the FixPak

To uninstall the FixPak, run the appropriate command from the command prompt. In order to install you must have already created a backup. See 4b on page 6.

For Server installs:

```
for /F %i in (FP510W-01.filelist.server) do xcopy /y/u %i "%LDAPHome%\%i"
```

For Client installs:

```
for /F %i in (FP510W-01.filelist.client) do xcopy /y/u %i "%LDAPHome%\%i"
```

For Web Administration installs:

```
for /F %i in (FP510W-01.filelist.webadmin) do xcopy /y/u %i "%LDAPHome%\%i"
```

---

## Confirming the FixPak has been applied successfully

The contents of the bin/FP510W-01.txt file are:

```
IBM Directory Release: aus51pldap Build: 030416a  
Wed 04/16/2003
```





Printed in U.S.A.