



**Fix pack FP322T-03 README**  
**IBM SecureWay Directory 3.2.2**  
**Linux s390 operating system**





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## Fix pack FP322T-03

Fix pack: FP322T-03

Date: June 2003

IBM® SecureWay® Directory 3.2.2

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### General description

The fix pack for Linux s390 contains fixes for problems encountered in IBM SecureWay Directory 3.2.2. The APAR number for each problem is listed in "Problems fixed". Refer to the specific APAR for more detail.

For information about changes and fixes that occurred after the product documentation was translated, see the *SecureWay Directory 3.2.2 README Addendum*. The Addendum file is in English only and can be found at the following Web address:

[http://publib.boulder.ibm.com/tividd/td/IBMDS/addendum322/en\\_US/HTML/addendum322.htm](http://publib.boulder.ibm.com/tividd/td/IBMDS/addendum322/en_US/HTML/addendum322.htm)

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### Problems fixed

#### New fixes in FP322T-03

**APAR IR47566 (CMVC 72309)**

Escape character on Japanese code page fails when adding suffix.

**APAR IR48345 (CMVC 72209)**

Upon receiving bind request over a connection that is an already established session, evaluation of group membership for ACLs must occur for this newly bound entry.

**APAR IR48371 (CMVC 75622)**

Allow use of IBM-943 elements on Windows® Japanese systems.

**APAR IR48427 (CMVC 72548)**

slapd fails intermittently on 3.2.2 and 3.2.2 efix1 and efix2 when freeing many entries.

**APAR IR48529 (CMVC 72712)**

slapd fails intermittently on 3.2.2 and 3.2.2 efix1 and efix2 when freeing many entries.

**APAR IR48600 (CMVC 73020)**

ldapcfg changes for SP™ Node environment

**APAR IR48618 (CMVC 77572)**

db2ldif and bulkload need to handle output files larger than 2 GB.

**APAR IR48639 (CMVC 73019)**

db2idrop behavior changes in ldapucfg for DB2® Versions higher than 7.1.3.

**APAR IR48647 (CMVC 77387)**

Server stops when handling invalid DN's.

- APAR IR48847 (CMVC 73322)**  
HP-UX client stops when processing SHA encrypted value.
- APAR IR48958 (CMVC 74273)**  
Server stops when schema is modified when ldtrc is on.
- APAR IR49257 (CMVC 71552)**  
DB2 backup is not taking backup of V3.modifiedschema file.
- APAR IR49261 (CMVC 73075)**  
ACL Cache logic error; TrimAclCache does not work.
- APAR IR49272 (CMVC 74798)**  
SQL CLI0125E error in rdbm\_select\_entryblob().
- APAR IR49290 (CMVC 72573)**  
Memory leak when searching using ModifyTimeStamp.
- APAR IR49329 (CMVC 73905)**  
Security exposure in Directory impacts Access Manager.
- APAR IR49434 (CMVC 74910)**  
ldapucfg -d fails with "db2idrop: command not found" error
- APAR IR49644 (CMVC 75812)**  
Web Administration displays "Internal Server Error" when viewing Suffixes or Audit Log if SSL is enabled.
- APAR IR50066 (CMVC 77405)**  
Avoid linear searches in LRUMoveToEnd for ACL caches to improve performance.
- APAR IR50068 (CMVC 77479)**  
Modify replace with null value not removing attribute.
- APAR IR50309 (CMVC 75032)**  
Directory code is trying to free the same memory twice.
- APAR IR50343 (CMVC 77673)**  
Double ber\_free() in search.c traps windows client.
- APAR IR50724 (CMVC 77615)**  
DNs containing extended ASCII characters return protocol error.
- APAR IR50956 (CMVC 77585)**  
Members do not show up in groups after migration from 3.2.1 to 3.2.2.
- APAR IR50976 (CMVC 78004)**  
ldif2db utility does not turn off caches.
- APAR IR51100 (CMVC 78768)**  
Change logging class of Critical Accept Error.
- APAR IR51119 (CMVC 78254)**  
Memory leak in rdbm\_pwd.cpp for SHA ldap.rdbm.
- APAR IR51303 (CMVC 78770)**  
Cannot stop server from Web Administration.
- APAR IR51326 (CMVC 78813)**  
DMT exception in setCurrentObject - java.lang.String.

## **Fixes in 3.2.2-SWD-002**

- APAR IR47735 (CMVC 71113)**  
Support using { as first character in LDAP user passwords.



**APAR IR47802 (CMVC 70356)**

Doing an ldapsearch on the Root DSE or Monitor class using \* or attributes to be returned is not working with 3.2.2. This fix will allow the search "ldapsearch -s base objectclass=\* \*" to return all attributes in the root DSE.

**APAR IR48028 (CMVC 70625)**

Adding an attribute and modifying ACLs to an objectclass causes the ACLs to not work correctly unless slapd is rebooted.

**APAR IR48052 (CMVC 71113)**

When you modify the attribute userpassword for an existing user with a hashed value the server cores.

**APAR IR48137 (CMVC 71629)**

Using 3.2.2 efix1, a memory leak might occur during an unbind operation (in some cases approximately 100 bytes per unbind).

**APAR IR48168 (CMVC 71121)**

When upgrading to 3.2.2 and running changelog with peer masters, replication will not be started until replica objects are added to both peer masters.

**APAR IR48126 (CMVC 71523)**

The LDAP server intermittently cores when interacting with the iPlanet proxy Client and Directory Access Router (iDAR).

**APAR IR48300 (CMVC 71282)**

Memory Leak in ACL cache.

**APAR IR48302 (CMVC 70876)**

Several errors were corrected for messages displayed when using the ldapcfg script. Before the fix, the wrong error message, or no error message, might have been displayed.

## **Fixes in 3.2.2-SWD-001**

**APAR IR47193 (CMVC 68302)**

An entry is added to the changelog when slapd restarts. This entry must not be added. It also is not passed from peer to peer.

**APAR IR47323 (CMVC 68444)**

Slapi\_Search\_Internal API takes a long time to return data when compared with the command line ldapsearch using the same search parameters.

**APAR IR47324 (CMVC 68572)**

Removing an attribute breaks access to aclEntries and exportability using db2ldif.

**APAR IR47602 (CMVC 69302)**

Replication failure when performing a modify replace with no value. The request is incorrectly written into the change table.

**APAR IR47623 (CMVC 68531)**

Attempting a modify replace on an attribute with syntax integer or timestamp with the same value and is part of the RDN fails. This operation has worked in previous releases.

**APAR IR47624 (CMVC 68542)**

Performing an ldapdelete operation incurs a deadlock in the DB2 backend, and the LDAP server hangs.

**APAR IR47625 (CMVC 68545)**

In a high performing environment such as BluePages, the LDAP server can appear to hang for several minutes at a time.

**APAR IR47627 (CMVC 68733)**

The LDAP server encounters function sequence errors when delete operations are performed.

**APAR IR47629 (CMVC 68805)**

The LDAP server experiences a memory leak in the client controls portion of the server's operation structure.

**APAR IR47630 (CMVC 68935)**

When creating a custom database for the server's backend use, and it is configured for UTF-8 storage, the code page information is not put in the slapd32.conf file.

**APAR IR47631 (CMVC 69012)**

The LDAP server incurs a segmentation fault when writing an audit record with unknown-auth.

**APAR IR47633 (CMVC 69032)**

The LDAP server preoperation plugin preoperation value array is not null terminated as required by specifications.

**APAR IR47635 (CMVC 69277)**

SASL bind reports success with SSL connections even if using a keyring database label that does not reference an actual certificate.

**APAR IR47692 (CMVC 70361)**

For the ldapssl.h include file, SSL return codes must reflect the same information present in the GSKIT 5 product. Equivalent items based on the GSKIT 3 product must be removed.

**APAR IR47874 (CMVC 70380)**

Bulkload utility fails if shell does not append inherited value to PATH environment variable.

**APAR IR47886 (CMVC 70068, 70493)**

Search operations fail, and dbsync process shows excessive resource utilization due to default ldap\_desc.deid index.

**APAR IR47928 (CMVC 69750, 69774)**

Memory leaks occur in the server process.

**APAR IR47930 (CMVC 70538)**

LDAP clients operating on Solaris can hang performing an add operation.

**APAR IR48029 (CMVC 70142, 70236)**

Modify ldif processing to allow for sending and receiving a value identified as having zero length.

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## Dependencies

IBM SecureWay Directory 3.2.2, with or without fix packs, must be installed.

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## Fix pack contents

The archive for this fix pack is named FP322T-03.tar.gz.

The client installation includes the following files:

File	bytes	sum -r
FP322T-03.filelist.client	383	12785
bin/FP322T-03Readme.pdf	-----	-----
bin/FP322T-03.txt	61	46637
bin/dmt.jar	1112348	27512
bin/ldapdelete	43545	42302
bin/ldapdeleted	43561	17052
bin/ldapmodify	106135	17802
bin/ldapmodifyd	106151	59003
bin/ldapmodrdn	45205	57974
bin/ldapmodrdnd	45221	05129
bin/ldapsearch	110087	24245
bin/ldapsearchd	110099	63827
examples/ldapsearch.c	27643	27861
include/ldaps1.h	15677	17411
lib/libibldap.so	1133772	14673
lib/libibldapd.so	1133964	12667
lib/libibldapn.so	1086395	41574
lib/libldap_plugin_ibm_gsskrb.so	82282	00135
lib/libldapstatic.a	3231290	54051
lib/libldapstaticd.a	3231386	05171
lib/libldapstaticn.a	3083522	02238
lib/libldif.a	100194	19559

The server installation includes the following files:

File	bytes	sum -r
FP322T-03.filelist.server	392	53088
bin/FP322T-03Readme.pdf	-----	-----
bin/FP322T-03.txt	61	46637
bin/slapd	2716983	31651
bin/slapdd	2717215	58529
lib/libDSP.so	159082	63837
lib/libadmin.so	672309	21320
lib/libback-rdbm.so	3055283	19801
lib/libcfg32.so	3127786	36242
lib/libcl.so	154650	59574
lib/libevent.so	313931	60487
lib/libldapaudit.so	199002	18364
lib/libldapjrt.so	150381	08392
lib/libldapkrb.so	170949	38957
lib/libmessage.so	225097	53953
lib/libslapi.so	439528	38620
lib/libtranext.so	308273	43539
lib/libtransys.so	1278909	24699
lib/libutils.so	6996729	05644
lib/libutlsa.so	140847	23663
sbin/bulkload	1347410	47967
sbin/db2ldif	994036	11656
sbin/ldif	65553	39166
sbin/ldif2db	1042394	24270
sbin/miglen	1029577	20138
sbin/runstats	983581	32570

## Applying the fix pack

1. For each computer targeted to receive the fix pack, be sure that the SecureWay Directory server and any client applications that make service requests to the SecureWay Directory server (which includes the DMT) are stopped. Programs and libraries cannot be replaced while they are in use.
2. Copy the fix pack archive (FP322T-03.tar.gz) 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 fix pack). You need at least 96 MB for a full server installation, less if patching a client only installation. Open a command prompt and type:

```
# su
# ksh
# cd {directory where FP322T-03.tar.gz is}
# export INSTALL_DIR=/usr/ldap {or alternate SecureWay 3.2.2 install directory}
# export PATCH_DIR=`pwd`
# rm FP322T-03.filelist.*
```

**Notes:**

- a. If you receive a File not found error, you can ignore it.
- b. Remember the value of \$PATCH\_DIR in case you need to uninstall the patch. (See step 4.)

All remaining steps use this command prompt.

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

```
# rpm -qa | grep ldap -
```

- If the result includes **ldap-server-3.2.2-1** or **ldap-serverd-3.2.2-1**, this is a server installation. Extract the FP322T-03.filelist.server file from the archive:

```
# zcat FP322T-03.tar.gz | tar xf - FP322T-03.filelist.server
```

- If the result includes **ldap-client-3.2.2-1** or **ldap-clientd-3.2.2-1**, this is a client install. Extract the FP322T-03.filelist.client file from the archive:

```
# zcat FP322T-03.tar.gz | tar xf - FP322T-03.filelist.client
```

4. Back up 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 fix pack at a later time.

```
# cd $INSTALL_DIR
# tar cvf $PATCH_DIR/FP322T-03.UNDO.tar `cat $PATCH_DIR/FP322T-03.filelist.*`
# gzip $PATCH_DIR/FP322T-03.UNDO.tar
```

**Note:** If you receive a small number of File not found errors during the backup, it can be because you do not have that file's component installed on this computer. These errors can be ignored.

5. Apply the fix pack.

```
# cd $PATCH_DIR
# mkdir tmp
# cd tmp
# for file in ../FP322T-03.filelist.*; do
  (zcat ../FP322T-03.tar.gz | tar xf - `cat $file`) done
# cp -r * $INSTALL_DIR
# cd ..
# rm -rf tmp
```

6. Restart any application you terminated before applying this fix pack.

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## Confirming that the fix pack has been applied successfully

After a successful installation, the file \$INSTALL\_DIR/bin/FP322T-03.txt contains the following:

```
SecureWay Directory      Release: aus322ldap  Build: 030611a
```

All the files listed in \$PATCH\_DIR/FP322T-03.filelist.\* match the files sizes and checksums listed in "Fix pack contents" on page 4.

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## Uninstalling the fix pack

This can only be done if you made a backup before installing the fix pack (see step 4 on page 6). If so, you can uninstall the fix pack by deleting the `$INSTALL_DIR/bin/FP322T-03*` files and extracting `$PATCH_DIR/FP322T-03.UNDO.tar.gz`:

```
# cd $INSTALL_DIR
# rm bin/FP322T-03*
# export PATCH_DIR={value assigned to $PATCH_DIR}
# zcat $PATCH_DIR/FP322T-03.UNDO.tar.gz | tar -xvf -
```

where the value of `$PATCH_DIR` is the value assigned in step 2 on page 5.







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