Day-to-day Administration: My LDAP server won't start because the database is corrupt. How do I fix it?

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Possible cause

OpenLDAP uses a storage format (BerkeleyDB) which is known to get corrupted if you don't do a clean shutdown of your machine. So always try to reboot cleanly rather than power-cycling.

Check ownerships

Whatever you do, always make sure that the /var/lib/ldap/* files are owned by ldap:ldap. If this is not the case, the LDAP server will not be able to work. Doing any of the below will most likely set ownership of some files to root:root, so this must be corrected.

Fixing options

The first thing you can try to recover the database is using db_recover. Try:
db_recover -h /var/lib/ldap

If this does not work because the database is too corrupt, you can always restore from a backup. Bright by default makes a backup of your LDAP server database every 24 hours for the last week, and also every month. You will find the backups in /var/lib/ldap/backup.

To restore a backup:
Create a backup of the entire tree, just in case
cp -a /var/lib/ldap{,.backup}

#Shut down OpenLDAP
cmsh -c "device services master; stop ldap"
(Note: just stopping the service in Linux will cause cmd to restart it fairly soon)

#Shut down OpenLDAP for RHEL7-like or SLES12 base distributions:

cmsh -c "device services master; stop slapd"

Clear out the current database
cd /var/lib/ldap
rm -f __db.* *.bdb alock log.*

#Restore an old backup
module load openldap
zcat /var/lib/ldap/backup/backup-daily-Fri.ldif.gz | slapadd
chown ldap:ldap /var/lib/ldap/*

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chown -R root:root /var/lib/ldap/backup

#Start OpenLDAP
cmsh -c "device services master; start ldap"
```

```
#Start OpenLDAP for RHEL7-like or SLES12 base distributions:

cmsh -c "device services master; start slapd"
```

Recovery using the failover head

Another option to consider, for head nodes that are in a failover configuration. For example, head1 and head2. If ldap is correct on head2 and corrupt on head1, you can scp /var/lib/ldap/ to head1. Make a backup of the directory of head1 first.

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