Install MongoDB

# Introduction

Target: Debian 11

Home directory: /var/lib/mongodb

OS user: mongodb

Service name: mongodb

# Creating username

useradd --create-home --home-dir /var/lib/mongodb mongodb

# Creating file structure

* Config
* Database
* Logs

cd /var/lib/mongodb && mkdir database config logs

# Download files

* MongoDB
* MongoDB Shell
* MongoDB Tools

wget https://fastdl.mongodb.org/linux/mongodb-linux-x86\_64-debian11-7.0.4.tgz

wget https://downloads.mongodb.com/compass/mongosh-2.1.0-linux-x64.tgz

wget https://fastdl.mongodb.org/tools/db/mongodb-database-tools-debian11-x86\_64-100.9.3.tgz

# Extract files into home directory

tar xvf mongodb-linux-x86\_64-debian11-7.0.4.tgz –directory /var/lib/mongodb

tar xvf mongosh-2.1.0-linux-x64.tgz --directory /var/lib/mongodb

tar xvf mongodb-database-tools-debian11-x86\_64-100.9.3.tgz --directory /var/lib/mongodb

# Remove TGZ files

rm -r \*.tgz

# Create symlinks in home directory

* mongod
* mongosh
* mongodump
* mongorestore

ln -s /var/lib/mongodb/mongodb-linux-x86\_64-debian11-7.0.4/bin/mongod /var/lib/mongodb

ln -s /var/lib/mongodb/mongosh-2.1.0-linux-x64/bin/mongosh /var/lib/mongodb/

ln -s mongodb-database-tools-debian11-x86\_64-100.9.3/bin/mongodump

ln -s mongodb-database-tools-debian11-x86\_64-100.9.3/bin/mongorestore

# Setup service files into config directory

* MongoDB cold service file: /var/lib/mongodb/config/mongodb-cold.service
* MongoDB production service file: /var/lib/mongodb/config/mongodb-production.service

chmod 400 /var/lib/mongodb/config/mongodb-cold.service

chmod 400 /var/lib/mongodb/config/mongodb-production.service

# Change ownership recursively

chown -R mongodb:mongodb /var/lib/mongodb/\*

chmod g-rwx -R /var/lib/mongodb/\*

chmod o-rwx -R /var/lib/mongodb/\*

# Start service in Cold mode

cp config/mongodb-cold.service mongodb.service

systemctl enable /var/lib/mongodb/mongodb.service

systemctl start mongodb

# Create database user admin

* Create database admin user file: /var/lib/mongodb/config/create-database-admin-user.js
* Execute script and provide password:

/var/lib/mongodb/mongosh --nodb /var/lib/mongodb/config/create-database-admin-user.js

# Setup config file (TLS mode)

* Config file (TLS mode): /var/lib/mongodb/config/mongod-tls.config

# Setup keyCert file

cat /etc/letsencrypt/live/xxx/fullchain.pem > /var/lib/mongodb/config/mongodbCertAndKey.pem

cat /etc/letsencrypt/live/xxx/privkey.pem >> /var/lib/mongodb/config/mongodbCertAndKey.pem

chown mongodb:mongodb /var/lib/mongodb/config/mongodbCertAndKey.pem

chmod 400 /var/lib/mongodb/config/mongodbCertAndKey.pem

# Restart service in Production mode

systemctl stop mongodb

systemctl disable mongodb

rm mongodb.service

cp config/mongodb-production.service mongodb.service

systemctl daemon-reload

systemctl enable /var/lib/mongodb/mongodb.service

systemctl start mongodb.service

# Extra

* Port 27017 must be open.
* A valid certificate for our domain must be available