

Setup VM and install MongoDB

Part A. Setup a VM

1. Go to google cloud platform
2. Go to compute engine, wait for initialization for a few minutes
3. Create VM instances <https://cloud.google.com/compute/docs/quickstart-linux>
 - a. Name: csis3300-instance1
 - b. Region: us-west1, zone: us-west1-a
 - c. 2vCPU with 7.5 GB memory, n1-standard-2. Customize if you know your requirements well
 - d. Ubuntu 18.04 LTS, use default settings for other options
 - e. Default access
 - f. Allow http traffic
4. Wait for boot up
5. Ubuntu common commands, <https://help.ubuntu.com/community/UsingTheTerminal>

sudo: The sudo command executes a command with administrative privileges

ls: show you ('list') the files in your current directory

cd: change directories

mkdir: create directories

cp: copy files

rm: delete files

mv: move files

more or cat: display content of files

apt-get: install

sudo apt-get update: check for updates

sudo apt-get upgrade: upgrade packages

Part B. Install MongoDB (<https://docs.mongodb.com/manual/tutorial/install-mongodb-on-ubuntu/>)

1. Import the public key used by the package management system
sudo apt-key adv --keyserver hkp://keyserver.ubuntu.com:80 --recv
9DA31620334BD75D9DCB49F368818C72E52529D4

2. Create a list file for MongoDB.
echo "deb [arch=amd64] https://repo.mongodb.org/apt/ubuntu bionic/mongodb-org/4.0 multiverse" | sudo tee /etc/apt/sources.list.d/mongodb-org-4.0.list
3. Reload local package database (and upgrade the packages)
sudo apt-get update
Optional: sudo apt-get upgrade
4. Install the MongoDB packages
sudo apt-get install -y mongodb-org

Part C. Run MongoDB Community Edition

1. Start MongoDB
sudo service mongod start
2. Verify that MongoDB has started successful
Type the following command
sudo cat /var/log/mongodb/mongod.log
to check the contents of the log file at /var/log/mongodb/mongod.log for a line reading
[initandlisten] waiting for connections on port 27017
3. Stop MongoDB
sudo service mongod stop
4. Restart MongoDB
sudo service mongod restart
5. Use MongoDB
mongo
Later, to stop MongoDB, press Ctrl+C or type exit and press enter in the terminal where the mongod instance is running.

At last, stop the VM