**MongoDB 3.4 Installation SOP**

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# Preparation

1. Get git files

get the config files form github or S3 or shared folder

for example, from github:

$sudo yum install -y git

$git clone <https://github.com/aikenyang/Mongo3.x.git>

(for AWS diff parts

$git clone <https://github.com/aikenyang/AWS_Mongo3.4.git> )

1. Format & mount disk (AWS)

>sudo su -

>mkdir /mongodb;mkfs -t ext4 /dev/xvdb;mount -t ext4 /dev/xvdb /mongodb;

>echo "/dev/xvdb /mongodb ext4 defaults,auto,noatime 0 0" >> /etc/fstab

1. change hostname, manually

>sudo vi /etc/sysconfig/network;

# OS Lever Configuration

## Change OS ulimit

the configuration file is /etc/security/limits.conf

#verify command, ulimit -a

$sudo \cp -f limits.conf /etc/security/limits.conf

## Change OS 90 nproc

the configuration file is /etc/security/limits.d/90-nproc.conf

$sudo \cp -f 90-nproc.conf /etc/security/limits.d/90-nproc.conf

## Change OS 85 rule

the configuration file is /etc/udev/rules.d/85-ebs.rules

#verifycommand, sudo blockdev --report, sudo blockdev --getra /dev/sdb

#change the rule to meet current setting

$sudo \cp -f 85-ebs.rules /etc/udev/rules.d/85-ebs.rules

## Disable Transparent\_Huge\_Pages (THP)

4.1 Create the init.d script.

$sudo \cp -f disable-transparent-hugepages /etc/init.d/disable-transparent-hugepages

4.2 Make it executable.

$sudo chmod 755 /etc/init.d/disable-transparent-hugepages

4.3 Configure your operating system to run it on boot.

$sudo chkconfig --add disable-transparent-hugepages

## Change OS repository – community

The configuration file is /etc/yum.repos.d/mongodb-org-3.0.repo

$sudo \cp -f mongodb-org-3.0.repo /etc/yum.repos.d/mongodb-org-3.0.repo

## Change OS repository – enterprise

The configuration file is /etc/yum.repos.d/mongodb-enterprise.repo

$sudo \cp -f mongodb-enterprise.repo /etc/yum.repos.d/ mongodb-enterprise.repo

# MongoDB Download & Installation

## Download & Install Mongo3.0 RPM – community

$wget http://repo.mongodb.org/yum/redhat/6Server/mongodb-org/3.0/x86\_64/RPMS/mongodb-org-3.0.11-1.el6.x86\_64.rpm

$wget http://repo.mongodb.org/yum/redhat/6Server/mongodb-org/3.0/x86\_64/RPMS/mongodb-org-mongos-3.0.11-1.el6.x86\_64.rpm

$wget 11http://repo.mongodb.org/yum/redhat/6Server/mongodb-org/3.0/x86\_64/RPMS/mongodb-org-server-3.0.11-1.el6.x86\_64.rpm

$wget http://repo.mongodb.org/yum/redhat/6Server/mongodb-org/3.0/x86\_64/RPMS/mongodb-org-shell-3.0.11-1.el6.x86\_64.rpm

$wget http://repo.mongodb.org/yum/redhat/6Server/mongodb-org/3.0/x86\_64/RPMS/mongodb-org-tools-3.0.11-1.el6.x86\_64.rpm

$sudo su

$rpm -ivh mongodb-org-server-3.0.11-1.el6.x86\_64.rpm

$rpm -ivh mongodb-org-mongos-3.0.11-1.el6.x86\_64.rpm

$rpm -ivh mongodb-org-shell-3.0.11-1.el6.x86\_64.rpm

$rpm -ivh mongodb-org-tools-3.0.11-1.el6.x86\_64.rpm

$rpm -ivh mongodb-org-3.0.11-1.el6.x86\_64.rpm

## Download & Install Mongo3.0 RPM – enterprise

$wget http://repo.mongodb.com/yum/redhat/6Server/mongodb-enterprise/3.0/x86\_64/RPMS/mongodb-enterprise-3.0.11-1.el6.x86\_64.rpm

$wget http://repo.mongodb.com/yum/redhat/6Server/mongodb-enterprise/3.0/x86\_64/RPMS/mongodb-enterprise-mongos-3.0.11-1.el6.x86\_64.rpm

$wget http://repo.mongodb.com/yum/redhat/6Server/mongodb-enterprise/3.0/x86\_64/RPMS/mongodb-enterprise-server-3.0.11-1.el6.x86\_64.rpm

$wget http://repo.mongodb.com/yum/redhat/6Server/mongodb-enterprise/3.0/x86\_64/RPMS/mongodb-enterprise-shell-3.0.11-1.el6.x86\_64.rpm

$wget http://repo.mongodb.com/yum/redhat/6Server/mongodb-enterprise/3.0/x86\_64/RPMS/mongodb-enterprise-tools-3.0.11-1.el6.x86\_64.rpm

$sudo su

$rpm -ivh mongodb-enterprise-3.0.11-1.el6.x86\_64.rpm

$rpm -ivh mongodb-enterprise-mongos-3.0.11-1.el6.x86\_64.rpm

$rpm -ivh mongodb-enterprise-server-3.0.11-1.el6.x86\_64.rpm

$rpm -ivh mongodb-enterprise-shell-3.0.11-1.el6.x86\_64.rpm

$rpm -ivh mongodb-enterprise-tools-3.0.11-1.el6.x86\_64.rpm

## Replace or modify mongod config file

The mongodb configuration file is /etc/mongod.conf

\cp -f mongod.conf /etc/mongod.conf

## Generate key file

The step is straight forward, please reference <http://docs.mongodb.org/v3.0/tutorial/generate-key-file/>

## Change folder owner

$sudo chown -R mongod:mongod /data

## Start mongod service

$ sudo service mongod start

#or

$sudo mongod /usr/bin/mongod -f /etc/mongod.conf

# Accounts & Authentication

## create user admin account

>use admin #in primary MongoDB node

>db.createUser( { user: "userAdmin", pwd: "?????", roles: [ "userAdminAnyDatabase" ] } )

## create root privilege account

>use admin #in master MongoDB instance

>db.createUser( { user: "dbadmin", pwd: "?????", roles: [ "root" ] })

## create OpsManger backup & monitor account

>use admin

>db.createUser({user: 'ZenMon', pwd: '?????', roles: [ 'clusterMonitor'] } );

# Reference:

<http://docs.mongodb.org/v3.0/administration/install-on-linux/>

<http://docs.opsmanager.mongodb.com/current/reference/required-access-monitoring-agent/>

# Appendix:

1. limits.conf



1. 90-nproc.conf



1. 85-ebs.rules



1. disable-transparent-hugepages



1. sysctl.conf



1. mongodb-org-3.0.repo



1. mongod.conf



# Document Revision History

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| --- | --- | --- | --- |
| Author | Date | Revision | Description |
| Kenneth Yang | 2015/09/11 | 1.0 | Create |
| Kenneth Yang | 2016/04/19 | 1.1 | Add ‘IV. Accounts & Authentication’  Add ‘Enterprise’ install option |
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