MongoDB Ops Manager Installation on Ubuntu – Step-by-Step Guide

This document provides a detailed, step-by-step guide to install MongoDB Ops Manager on an Ubuntu server. Ops Manager is available only for MongoDB Enterprise Edition and requires valid licensing.

# Step 1: System Requirements

- OS: Ubuntu 20.04+ (64-bit)  
- RAM: Minimum 8 GB  
- CPU: Minimum 2 vCPUs  
- Disk: 50 GB+ (for Ops Manager & backup data)  
- Network: Proper hostname/DNS resolution, internet access if not air-gapped

# Step 2: Install MongoDB Enterprise Edition

Ops Manager requires MongoDB to store its own application data. Install MongoDB Enterprise:

1. Import MongoDB public GPG key:  
 sudo apt-key adv --keyserver hkp://keyserver.ubuntu.com:80 --recv 20691EEC35216C63CAF66CE1656408E390CFB1F5  
  
2. Create the list file for MongoDB:  
 echo "deb [ arch=amd64 ] https://repo.mongodb.com/apt/ubuntu focal/mongodb-enterprise/6.0 multiverse" | sudo tee /etc/apt/sources.list.d/mongodb-enterprise.list  
  
3. Update repositories and install:  
 sudo apt-get update  
 sudo apt-get install -y mongodb-enterprise

# Step 3: Download and Configure Ops Manager

1. Download the latest Ops Manager tarball from the MongoDB customer portal.  
2. Extract and move to /opt/mongodb/mms:  
 sudo mkdir -p /opt/mongodb/mms  
 sudo tar -xvzf mongodb-mms-<version>.tar.gz -C /opt/mongodb/mms --strip-components=1  
3. Create a configuration file (mms.conf) or use command-line flags for setup.

# Step 4: Create MongoDB Databases for Ops Manager

Start your local MongoDB instance and create Ops Manager databases:  
  
use mms  
db.createUser({user: "mmsuser", pwd: "strongpassword", roles: ["readWrite", "dbAdmin"]})

# Step 5: Start Ops Manager Application

Run the Ops Manager using the following command:  
cd /opt/mongodb/mms  
./bin/mms start  
  
Access the UI via: http://<hostname>:8080

# Step 6: Install Automation, Monitoring, and Backup Agents

From the UI, download the agents for your OS and register them with the deployment using API keys or by joining the project.  
Ensure agents are running and reachable from Ops Manager.

# Step 7: Create Projects and Deploy MongoDB

- Use the Ops Manager UI to create a project.  
- Add hosts and deploy MongoDB replica sets or sharded clusters using the Automation Agent.

# Step 8: Configure Backup Daemon and Blockstore

1. Install the backup daemon (mongodb-mms-backup-daemon).  
2. Configure `blockstore` (filesystem or S3-compatible store).  
3. Enable backup in project settings.

# Step 9: Secure Ops Manager and MongoDB

- Enable TLS/SSL for MongoDB and Ops Manager UI.  
- Integrate with LDAP or Active Directory.  
- Enable audit logs and IP whitelisting.

# Conclusion

Ops Manager provides complete lifecycle management of MongoDB clusters in on-prem and hybrid environments. This setup enables automation, backup, and enterprise-grade monitoring. For production use, high availability and disaster recovery should be planned.