

MongoDB Installation.

1. Create an EC2 instance in AWS.

Instances (1/2) Info

🔄

Connect

Instance state ▾

Actions ▾

Launch instances

▾

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<div>☐</div>	Name ▾	Instance ID	Instance state ▾	Instance type ▾	Status check	Alarm status	Availability Zone
<div>☐</div>	mongoinstallS...	i-0ac9aa716ffc05c9b	⏻ Terminated ⓘ🔍	t2.micro	-	No alarms +	ap-south-1a
<div>☑</div>	mongodb	i-08ce8463357180dd8	✅ Running ⓘ🔍	t2.micro	✅ 2/2 checks passed	No alarms +	ap-south-1a

2. Check for the connectivity through SSH of the instance is reachable.

command: `ssh -i sadiksha-mongo.pem ubuntu@15.206.171.205`

```
sadiksha@sadiksha-VirtualBox:~/Downloads/mongoinstall$ ssh -i sadiksha-mongo.pem ubuntu@15.206.171.205
Welcome to Ubuntu 20.04.3 LTS (GNU/Linux 5.11.0-1022-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

System information as of Tue Jan 11 02:52:43 UTC 2022

System load: 0.01          Processes:            104
Usage of /:  37.8% of 7.69GB Users logged in:          0
Memory usage: 28%          IPv4 address for eth0: 172.31.35.150
Swap usage:  0%

 * Ubuntu Pro delivers the most comprehensive open source security and
   compliance features.

   https://ubuntu.com/aws/pro

0 updates can be applied immediately.

*** System restart required ***
Last login: Tue Jan 11 02:49:49 2022 from 27.34.68.151
ubuntu@ip-172-31-35-150:~$ whoami
ubuntu
```

2. Now, write an ansible playbook to upgrade packages, add repository for mongodb key, packages and install mongodb. Then, start the mongod service.

```
---
- name: Download MongoDB repository and install MongoDB
  hosts: all
  become: true

  tasks:
    - name: Upgrade all packages
      apt:
        name: '*'
        state: latest

    - name: Add Mongo-key Repository
      apt_key:
        url: https://www.mongodb.org/static/pgp/server-5.0.asc
        state: present
      become: true

    - name: Add Mongo Repository
      apt_repository:
        repo: "deb [ arch=amd64,arm64 ] https://repo.mongodb.org/apt/ubuntu focal/mongodb-org/5.0 multiverse"
        state: present
      become: true

    - name: Install MongoDB
      apt:
        name: mongodb-org
        state: present

    - name: Enable MongoDB to run on boot
      service:
        name: mongod
        enabled: yes
        state: started
```

3. Add the remote IP in ansible host file at /etc/ansible/hosts.

command: `sudo nano /etc/ansible/hosts`

```
GNU nano 4.8 /etc/ansible/hosts
#green.example.com
#blue.example.com
#192.168.100.1
#192.168.100.10

# Ex 2: A collection of hosts belonging to the 'webservers' group

#[webservers]
#alpha.example.org
#beta.example.org
#192.168.1.100
#192.168.1.110

# If you have multiple hosts following a pattern you can specify
# them like this:

#www[001:006].example.com

# Ex 3: A collection of database servers in the 'dbservers' group

#[dbservers]
#
#db01.intranet.mydomain.net
#db02.intranet.mydomain.net
#10.25.1.56
#10.25.1.57

# Here's another example of host ranges, this time there are no
# leading 0s:

#db-[99:101]-node.example.com

[ansible-test]
15.206.171.205
```

4. Run the playbook to install mongod remotely.

command: `ansible-playbook -u ubuntu --private-key sadiksha-mongo.pem mongo.yml`

```
sadiksha@sadiksha-VirtualBox:~/Downloads/mongoinstall$ ansible-playbook -u ubuntu --private-key sadiksha-mongo.pem mongo.yml
[DEPRECATION WARNING]: The TRANSFORM_INVALID_GROUP_CHARS settings is set to allow bad characters in group names by default, this will change,
but still be user configurable on deprecation. This feature will be removed in version 2.10. Deprecation warnings can be disabled by setting
deprecation_warnings=False in ansible.cfg.
[WARNING]: Invalid characters were found in group names but not replaced, use -vvvv to see details

PLAY [Download MongoDB repository and install MongoDB] *****

TASK [Gathering Facts] *****
ok: [15.206.171.205]

TASK [Upgrade all packages] *****
ok: [15.206.171.205]

TASK [Add Mongo-key Repository] *****
ok: [15.206.171.205]

TASK [Add Mongo Repository] *****
ok: [15.206.171.205]

TASK [Install MongoDB] *****
ok: [15.206.171.205]

TASK [Enable MongoDB to run on boot] *****
changed: [15.206.171.205]

PLAY RECAP *****
15.206.171.205 : ok=6 changed=1 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0
```

5. Check if mongodb is installed or not.

command: `ssh -i sadiksha-mongo.pem ubuntu@15.206.171.205`

command: `mongod --version`

```
sadiksha@sadiksha-VirtualBox:~/Downloads/mongoinstall$ ssh -i sadiksha-mongo.pem ubuntu@15.206.171.205
Welcome to Ubuntu 20.04.3 LTS (GNU/Linux 5.11.0-1022-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

System information as of Tue Jan 11 03:02:33 UTC 2022

System load:  0.0               Processes:           102
Usage of /:   37.8% of 7.69GB   Users logged in:    0
Memory usage: 28%              IPv4 address for eth0: 172.31.35.150
Swap usage:   0%

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   compliance features.

   https://ubuntu.com/aws/pro

0 updates can be applied immediately.

*** System restart required ***
Last login: Tue Jan 11 02:52:44 2022 from 27.34.68.151
ubuntu@ip-172-31-35-150:~$ mongod --version
db version v5.0.5
Build Info: {
  "version": "5.0.5",
  "gitVersion": "d65fd89df3fc039b5c55933c0f71d647a54510ae",
  "opensslVersion": "OpenSSL 1.1.1f  31 Mar 2020",
  "modules": [],
  "allocator": "tcmalloc",
  "environment": {
    "distmod": "ubuntu2004",
    "distarch": "x86_64",
    "target_arch": "x86_64"
  }
}
```