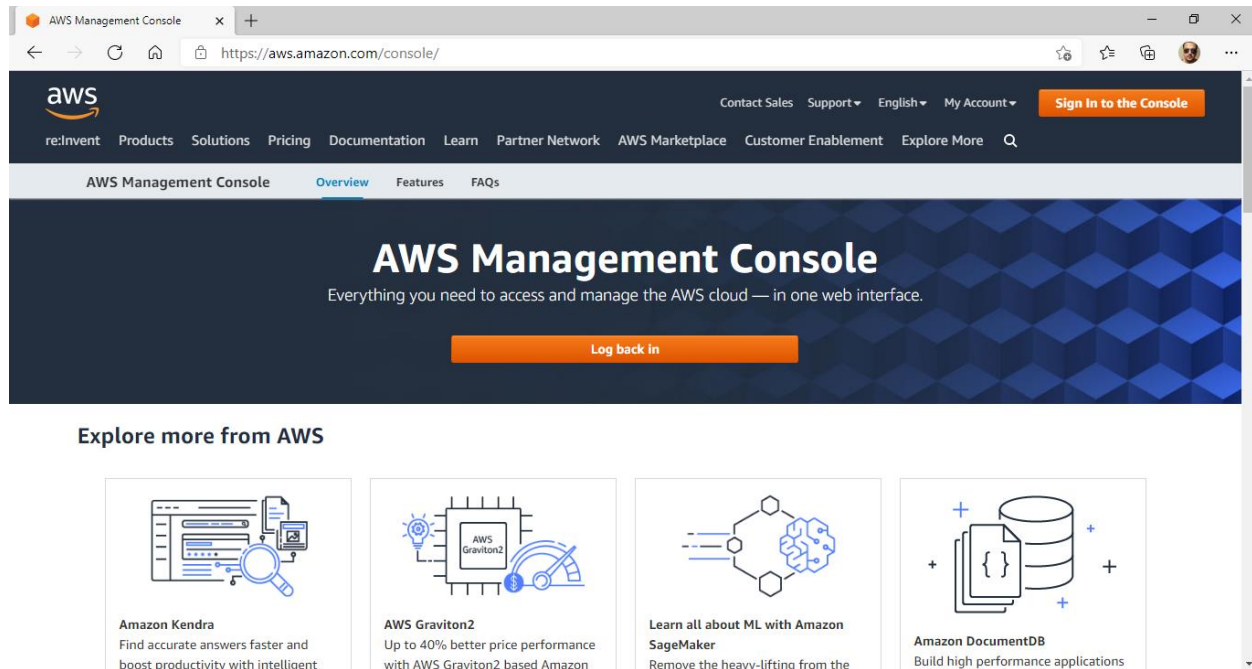


# Steps to Install MongoDB on Amazon Linux EC2

## Step 1: Go to AWS Management Console (amazon.com)



## Step 2: Provide credentials

Amazon Web Services Sign-In

https://signin.aws.amazon.com/signin?redirect\_uri=https%3A%2F%2Fconsole.aws.amazon.com%2Fconsole%2Fhome%3...

**aws**

### Sign in

☒ **Root user**  
Account owner that performs tasks requiring unrestricted access. [Learn more](#)

☐ **IAM user**  
User within an account that performs daily tasks. [Learn more](#)

Root user email address

sabbir.poonawala@hotmail.com

**Next**


[New to AWS?](#)

**Create a new AWS account**

## Build Mobile and Web Apps Fast

Add authentication and data syncing with AWS Amplify in just a few lines of code

**LEARN MORE**



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Amazon Web Services Sign-In

https://signin.aws.amazon.com/signin?redirect\_uri=https%3A%2F%2Fconsole.aws.amazon.com%2Fconsole%2Fhome%3...

**aws**

### Root user sign in ⓘ

Email: sabbir.poonawala@hotmail.com

Password [Forgot password?](#)

|

**Sign in**


[Sign in to a different account](#)

[Create a new AWS account](#)

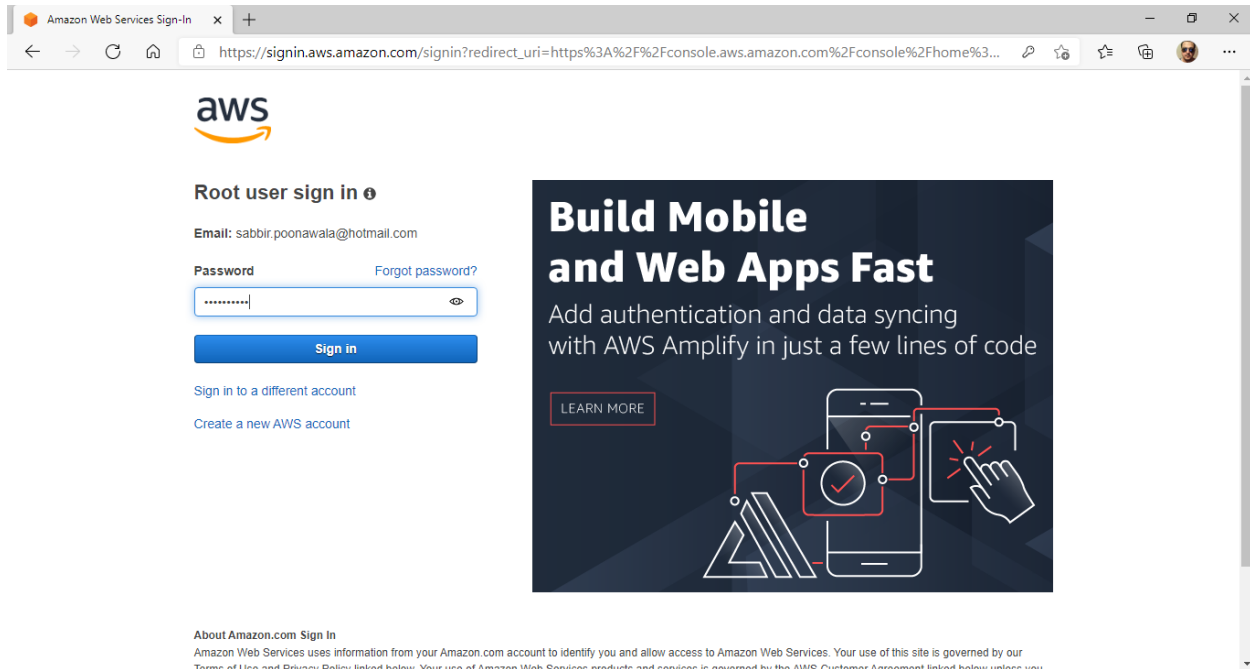
## Build Mobile and Web Apps Fast

Add authentication and data syncing with AWS Amplify in just a few lines of code

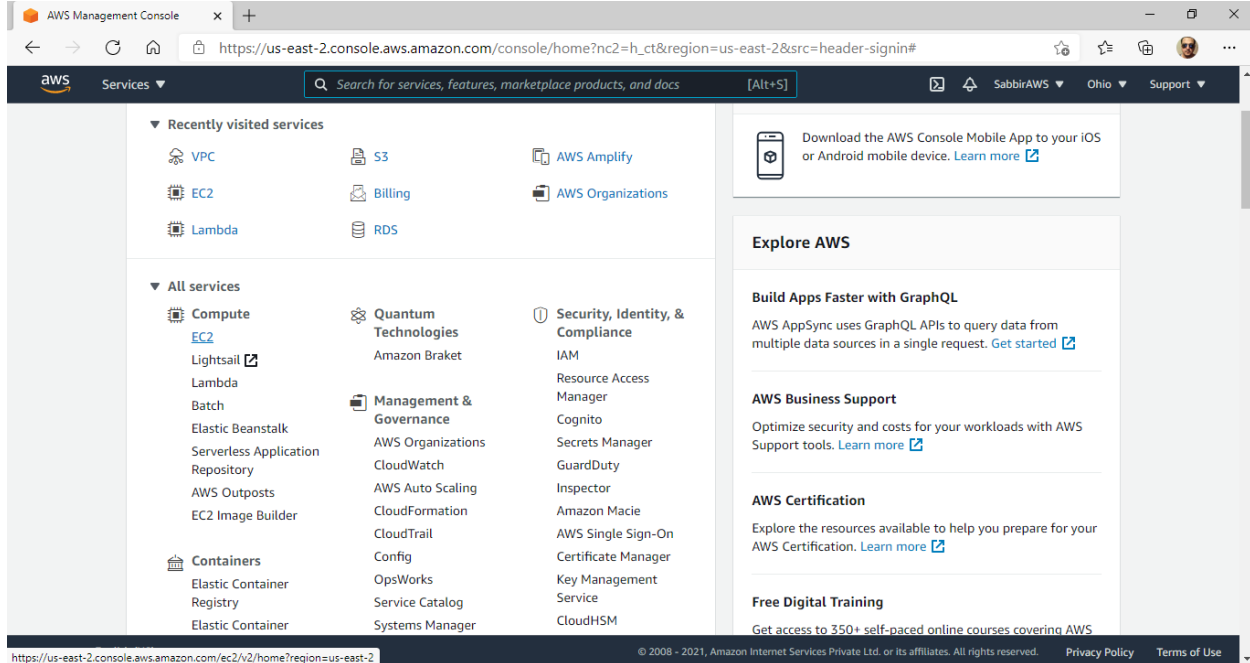
**LEARN MORE**



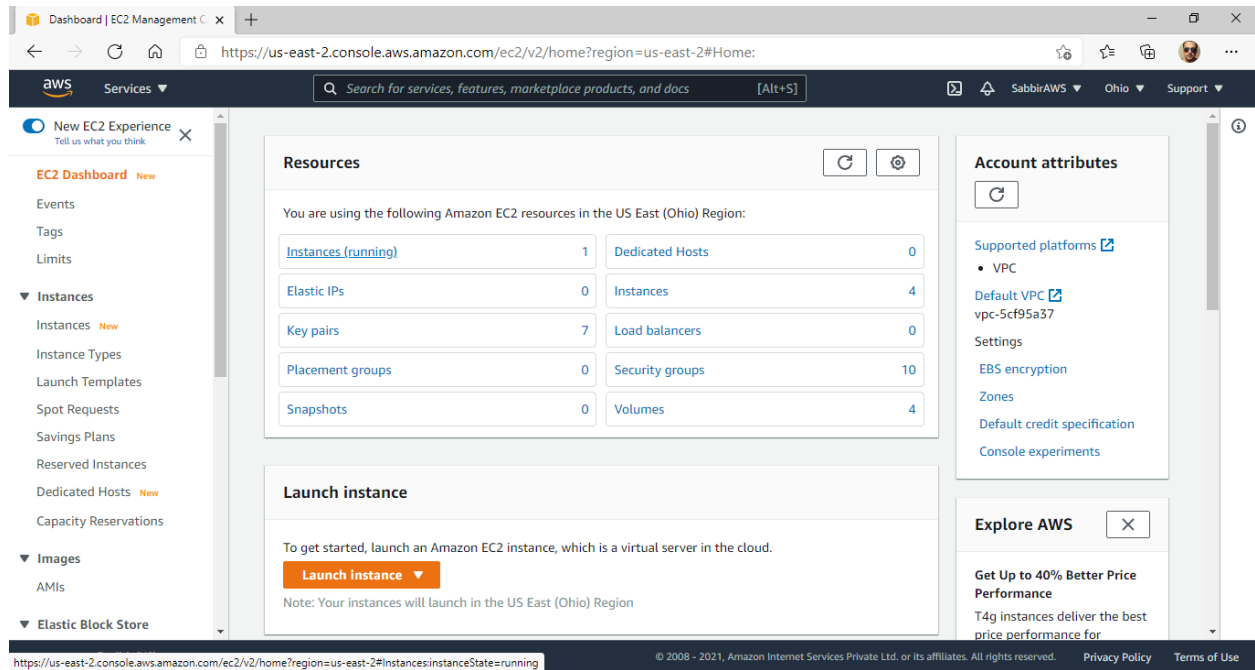
**About Amazon.com Sign In**  
Amazon Web Services uses information from your Amazon.com account to identify you and allow access to Amazon Web Services. Your use of this site is governed by our [Terms of Use](#) and [Privacy Policy](#) linked below. Your use of Amazon Web Services products and services is governed by the [AWS Customer Agreement](#) linked below unless you



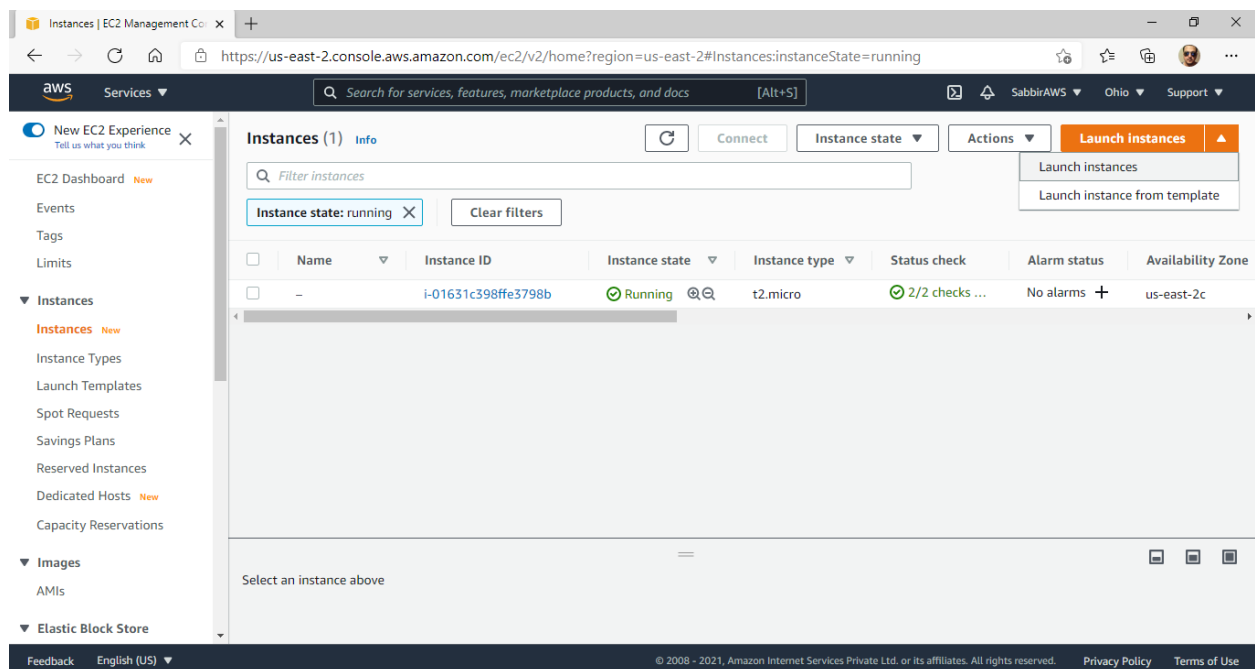
### Step 3: In all services click on EC2



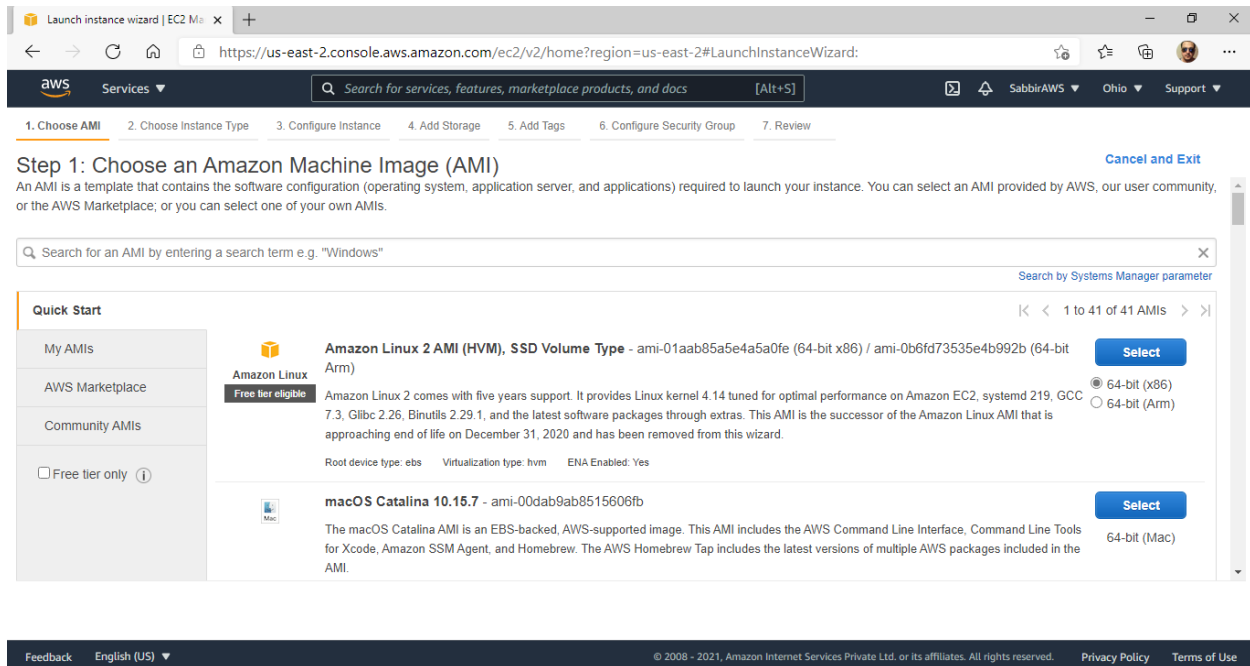
Step 4: In resources click on Instances(Running) or Launch Instance button



Step 5: On Launch instances button options select Launch Instances



## Step 6: Make sure to select Amazon Linux 2 AMI (Free tier eligible)



## Step 7: Choose instance type (Keep default selected), Click on Next Configure instance details

Launch instance wizard | EC2 M... x

https://us-east-2.console.aws.amazon.com/ec2/v2/home?region=us-east-2#LaunchInstanceWizard:

Services Search for services, features, marketplace products, and docs [Alt+S]

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Add Tags 6. Configure Security Group 7. Review

### Step 2: Choose an Instance Type

Amazon EC2 provides a wide selection of instance types optimized to fit different use cases. Instances are virtual servers that can run applications. They have varying combinations of CPU, memory, storage, and networking capacity, and give you the flexibility to choose the appropriate mix of resources for your applications. [Learn more](#) about instance types and how they can meet your computing needs.

Filter by: All instance families Current generation Show/Hide Columns

Currently selected: t2.micro (- ECUs, 1 vCPU, 2.5 GHz, -, 1 GiB memory, EBS only)

	Family	Type	vCPUs	Memory (GiB)	Instance Storage (GB)	EBS-Optimized Available	Network Performance	IPv6 Support
<input type="checkbox"/>	t2	t2.nano	1	0.5	EBS only	-	Low to Moderate	Yes
<input checked="" type="checkbox"/>	t2	t2.micro Free tier eligible	1	1	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	t2	t2.small	1	2	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	t2	t2.medium	2	4	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	t2	t2.large	2	8	EBS only	-	Low to Moderate	Yes

Cancel Previous Review and Launch Next: Configure Instance Details

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## Step 8: Click on Next Add Storage keeping all details as default

Launch instance wizard | EC2 M... x

https://us-east-2.console.aws.amazon.com/ec2/v2/home?region=us-east-2#LaunchInstanceWizard:

Services Search for services, features, marketplace products, and docs [Alt+S]

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Add Tags 6. Configure Security Group 7. Review

### Step 3: Configure Instance Details

Configure the instance to suit your requirements. You can launch multiple instances from the same AMI, request Spot instances to take advantage of the lower pricing, assign an access management role to the instance, and more.

Number of instances 1 Launch into Auto Scaling Group

Purchasing option ☐ Request Spot instances

Network vpc-5cf95a37 (default) Create new VPC

Subnet No preference (default subnet in any Availability Zone) Create new subnet

Auto-assign Public IP Use subnet setting (Enable)

Placement group ☐ Add instance to placement group

Capacity Reservation Open

Domain join directory No directory Create new directory

IAM role None Create new IAM role

Cancel Previous Review and Launch Next: Add Storage

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Step 8: Click on Next Add Tags keeping all details as default(unless required)

The screenshot shows the 'Add Storage' step of the AWS Launch Instance Wizard. The breadcrumb trail at the top indicates the steps: 1. Choose AMI, 2. Choose Instance Type, 3. Configure Instance, 4. Add Storage (current), 5. Add Tags, 6. Configure Security Group, and 7. Review. The main heading is 'Step 4: Add Storage'. Below it, a note states: 'Your instance will be launched with the following storage device settings. You can attach additional EBS volumes and instance store volumes to your instance, or edit the settings of the root volume. You can also attach additional EBS volumes after launching an instance, but not instance store volumes. [Learn more](#) about storage options in Amazon EC2.'

Volume Type	Device	Snapshot	Size (GiB)	Volume Type	IOPS	Throughput (MB/s)	Delete on Termination	Encryption
Root	/dev/xvda	snap-0426ac168e3818bc3	8	General Purpose SSD (gp2)	100 / 3000	N/A	<input checked="" type="checkbox"/>	Not Encrypt

Below the table is an 'Add New Volume' button. A light blue box contains a note: 'Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage. [Learn more](#) about free usage tier eligibility and usage restrictions.'

At the bottom right, there are four buttons: 'Cancel', 'Previous', 'Review and Launch' (highlighted in blue), and 'Next: Add Tags'.

The footer of the console shows 'Feedback', 'English (US)', and copyright information: '© 2008 - 2021, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved.' along with links to 'Privacy Policy' and 'Terms of Use'.

Step 8: Add key as “Name” and value as “MongoDBServer” and click on Next Configure Security group

Launch instance wizard | EC2 M... x

https://us-east-2.console.aws.amazon.com/ec2/v2/home?region=us-east-2#LaunchInstanceWizard:

Services Search for services, features, marketplace products, and docs [Alt+S]

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Add Tags 6. Configure Security Group 7. Review

### Step 5: Add Tags

A tag consists of a case-sensitive key-value pair. For example, you could define a tag with key = Name and value = Webserver.  
A copy of a tag can be applied to volumes, instances or both.  
Tags will be applied to all instances and volumes. [Learn more](#) about tagging your Amazon EC2 resources.

Key (128 characters maximum)	Value (256 characters maximum)	Instances ⓘ	Volumes ⓘ	Network Interfaces ⓘ
Name	MongoDBServer	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

[Add another tag](#) (Up to 50 tags maximum)

[Cancel](#) [Previous](#) [Review and Launch](#) [Next: Configure Security Group](#)

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## Step 9: Click on Add Rule

Launch instance wizard | EC2 M... x

https://us-east-2.console.aws.amazon.com/ec2/v2/home?region=us-east-2#LaunchInstanceWizard:

Services Search for services, features, marketplace products, and docs [Alt+S]

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Add Tags 6. Configure Security Group 7. Review

### Step 6: Configure Security Group

A security group is a set of firewall rules that control the traffic for your instance. On this page, you can add rules to allow specific traffic to reach your instance. For example, if you want to set up a web server and allow Internet traffic to reach your instance, add rules that allow unrestricted access to the HTTP and HTTPS ports. You can create a new security group or select from an existing one below. [Learn more](#) about Amazon EC2 security groups.

**Assign a security group:** ☒ Create a new security group  
☐ Select an existing security group

**Security group name:** launch-wizard-7  
**Description:** launch-wizard-7 created 2021-01-28T10:16:14.210+05:30

Type ⓘ	Protocol ⓘ	Port Range ⓘ	Source ⓘ	Description ⓘ
SSH	TCP	22	Custom 0.0.0.0/0	e.g. SSH for Admin Desktop

[Add Rule](#)

**Warning**  
 Rules with source of 0.0.0.0/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.

[Cancel](#) [Previous](#) [Review and Launch](#)

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Step 9: From Type drop down box select “Custom TCP”,Port Range as “27017”  
Source as “Anywhere” and description as “Access to MongoDB Port”

Launch instance wizard | EC2 M... x

https://us-east-2.console.aws.amazon.com/ec2/v2/home?region=us-east-2#LaunchInstanceWizard:

aws Services Search for services, features, marketplace products, and docs [Alt+S]

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Add Tags 6. Configure Security Group 7. Review

### Step 6: Configure Security Group

A security group is a set of firewall rules that control the traffic for your instance. On this page, you can add rules to allow specific traffic to reach your instance. For example, if you want to set up a web server and allow Internet traffic to reach your instance, add rules that allow unrestricted access to the HTTP and HTTPS ports. You can create a new security group or select from an existing one below. [Learn more](#) about Amazon EC2 security groups.

Assign a security group: ☒ Create a new security group  
☐ Select an existing security group

Security group name: launch-wizard-7

Description: launch-wizard-7 created 2021-01-28T10:16:14.210+05:30

Type	Protocol	Port Range	Source	Description
SSH	TCP	22	Custom 0.0.0.0/0	e.g. SSH for Admin Desktop
Custom TCP	TCP	27017	Anywhere 0.0.0.0/0	Access to MongoDB Port

Add Rule

**Warning**

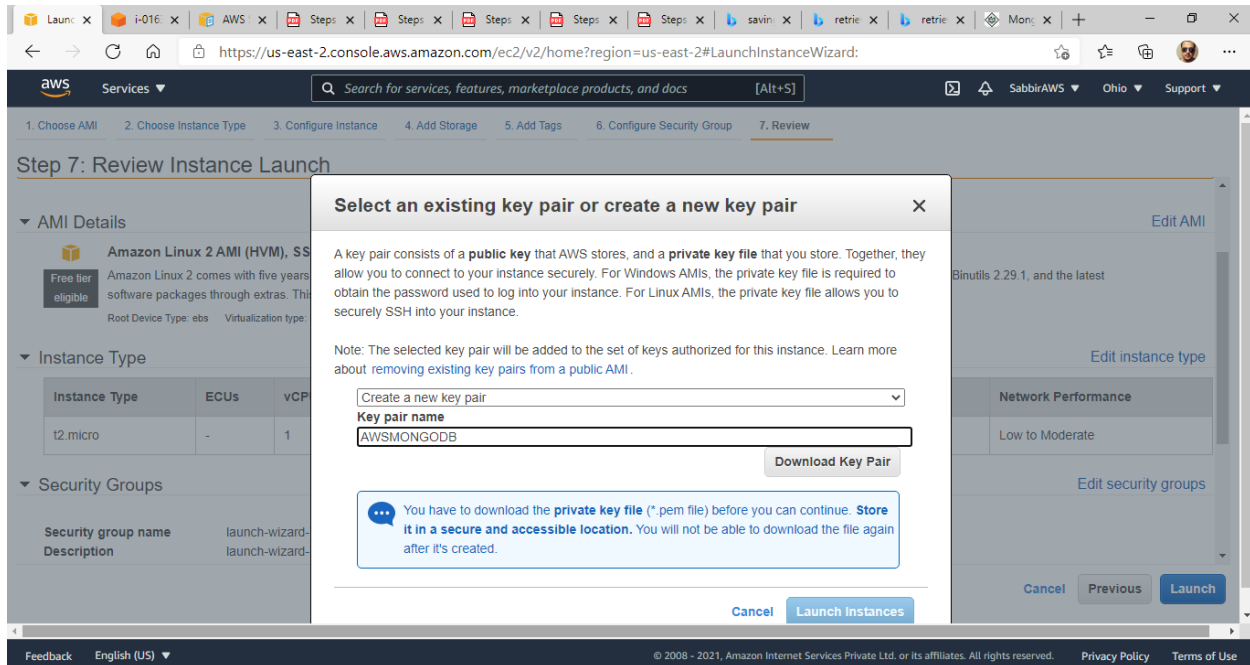
Rules with source of 0.0.0.0/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.

Cancel Previous **Review and Launch**

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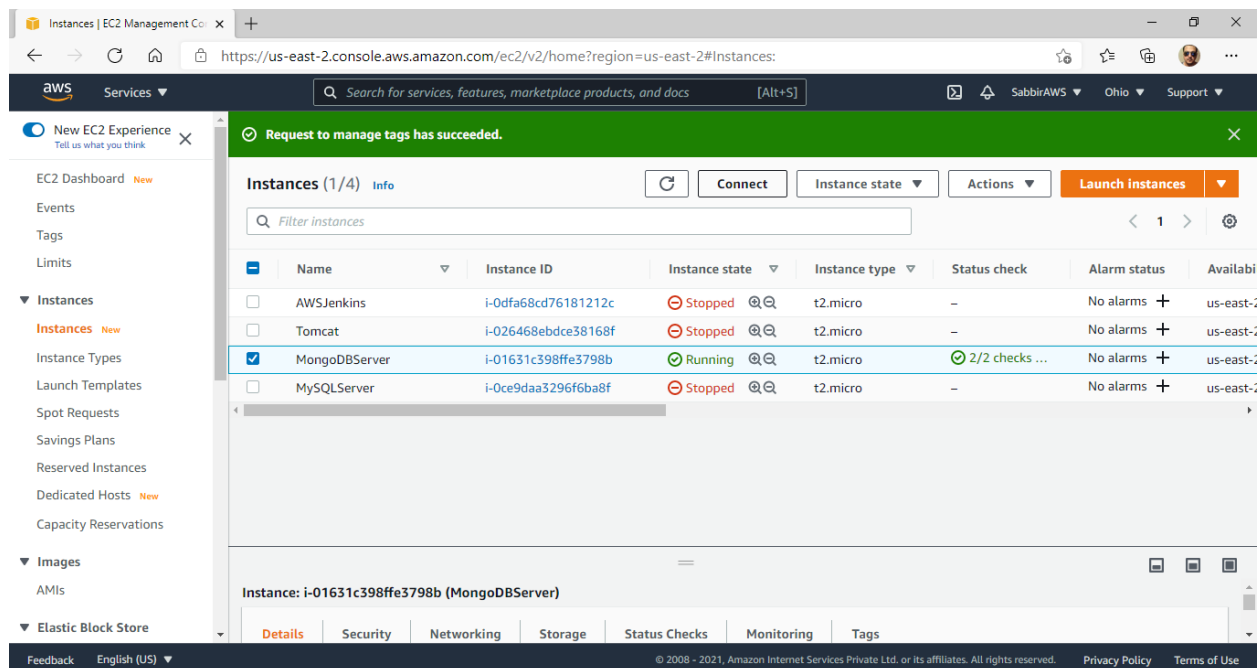
Step 10: Click on Review and Launch

Step 11: From drop down box select “Create a new key pair” and give key pair name as “AWSMONGODB” and click on download key pair on desktop(This file will be required later)

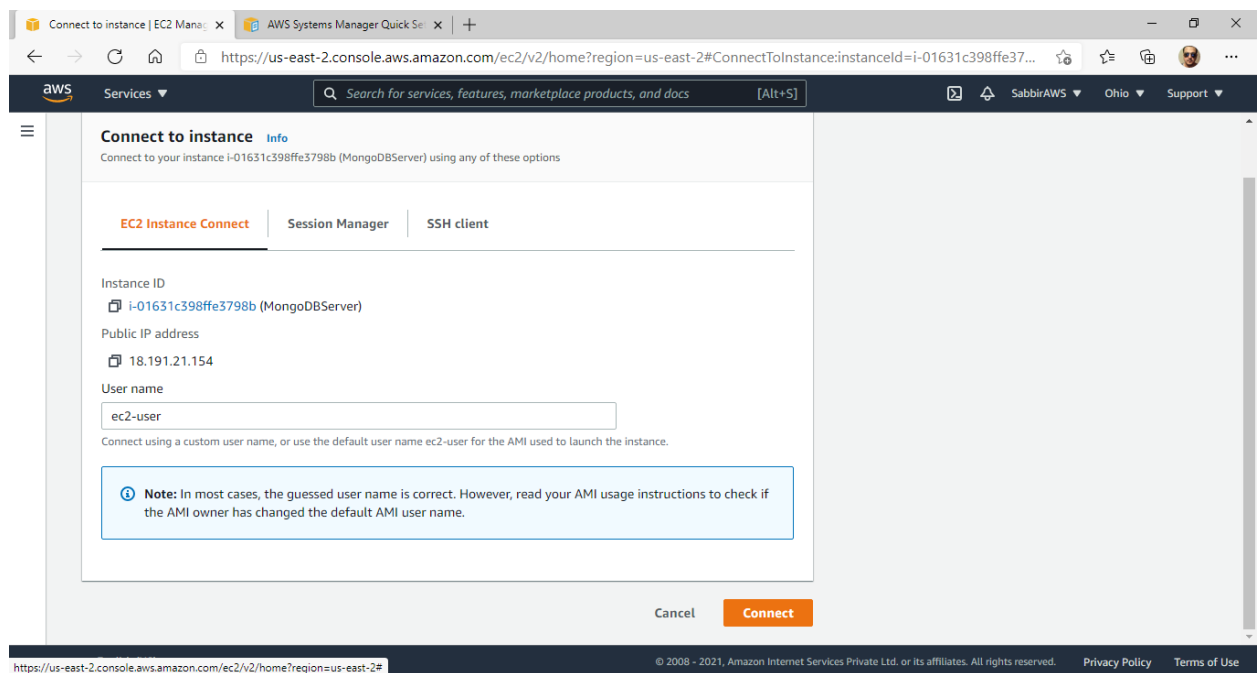


And Click on Launch Instance

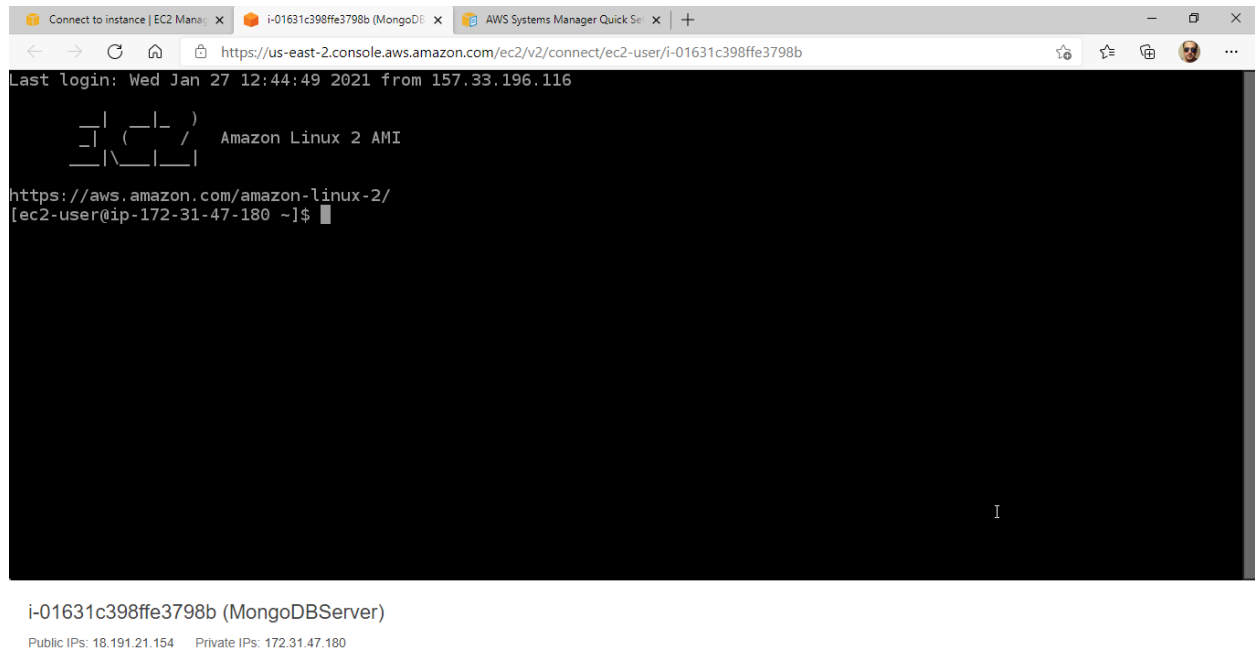
Step 12: We will use AWS CLI (Another option is to connect using putty refer to appendix) Select checkbox for instance MongoDBServer and click on connect



## Step 13: Click on connect



Step 14: Ensure you are successfully connected to Amazon Linux 2 AMI



The screenshot shows the AWS Management Console interface. The top navigation bar includes tabs for 'Connect to instance | EC2 Manag...', 'i-01631c398ffe3798b (MongoDBS...', and 'AWS Systems Manager Quick Se...'. The main content area displays a terminal window for the instance 'i-01631c398ffe3798b'. The terminal output shows the last login time as 'Wed Jan 27 12:44:49 2021 from 157.33.196.116', followed by the Amazon Linux 2 AMI logo and the URL 'https://aws.amazon.com/amazon-linux-2/'. The prompt is '[ec2-user@ip-172-31-47-180 ~]\$'.

i-01631c398ffe3798b (MongoDBServer)

Public IPs: 18.191.21.154 Private IPs: 172.31.47.180

Step 15: Create YUM repository for installing MongoDB

Type -> **sudo vi /etc/yum.repos.d/mongodb-org-4.2.repo**



The screenshot shows a terminal window with the command 'sudo vi /etc/yum.repos.d/mongodb-org-4.2.repo' entered at the prompt. The terminal output is currently blank, indicating the command has been executed but the file has not yet been opened in the editor.

Step 16: In vi editor,

Type->

**[mongodb-org-4.2]**

**name=MongoDB Repository**

**baseurl=https://repo.mongodb.org/yum/amazon/2/mongodb-org/4.2/x86\_64/**

**gpgcheck=1**

**enabled=1**

**gpgkey=https://www.mongodb.org/static/pgp/server-4.2.asc**

```
[mongodb-org-4.2]
name=MongoDB Repository
baseurl=https://repo.mongodb.org/yum/amazon/2/mongodb-org/4.2/x86_64/
gpgcheck=1
enabled=1
gpgkey=https://www.mongodb.org/static/pgp/server-4.2.asc
```

Step 17: In vi editor press “ESC” and type :x to save and exit

```
gpgcheck=1
enabled=1
gpgkey=https://www.mongodb.org/static/pgp/server-4.2.asc
```

```
:x
```

```
"/etc/yum.repos.d/mongodb-org-4.2.repo" 12L, 196C written  
[ec2-user@ip-172-31-47-180 ~]$
```

Step 18: YUM Command to install MongoDB for Amazon Linux

Type-> **sudo yum install -y mongodb-org**

```
[ec2-user@ip-172-31-47-180 ~]$ sudo yum install -y mongodb-org
```

Step 19: To start MongoDB service,

Type-> **sudo systemctl start mongod.service**

```
[ec2-user@ip-172-31-47-180 ~]$ sudo systemctl start mongod.service  
[ec2-user@ip-172-31-47-180 ~]$
```

Step 20: To use MongoDB CLI,

Type-> **mongo**

```
[ec2-user@ip-172-31-47-180 ~]$ sudo systemctl start mongod.service
[ec2-user@ip-172-31-47-180 ~]$ mongo
```

Step 21: To create an database ,

Type-> use OrderDB

```
The monitoring data will be available on a MongoDB website
and anyone you share the URL with. MongoDB may use this in
improvements and to suggest MongoDB products and deployment

To enable free monitoring, run the following command: db.e
To permanently disable this reminder, run the following co
---

> use OrderDB
```

```
> use OrderDB
switched to db OrderDB
>
```

Step 23: To confirm database is created

Type-> show dbs

```
> show dbs
OrderDB  0.000GB
admin    0.000GB
config   0.000GB
local    0.000GB
> █
```

Step 24: To insert a document

Type-> **db.Orders.insert({orderId:"ODR1001",orderDesc:"NON Electronic Order",orderAmount:20000,custId:"1001"})**

```
> db.Orders.insert({orderId:"ODR1001",orderDesc:"NON Electronic Order",orderAmount:20000,custId:"1001"}) █
```

Step 25: To confirm if record is inserted in document,

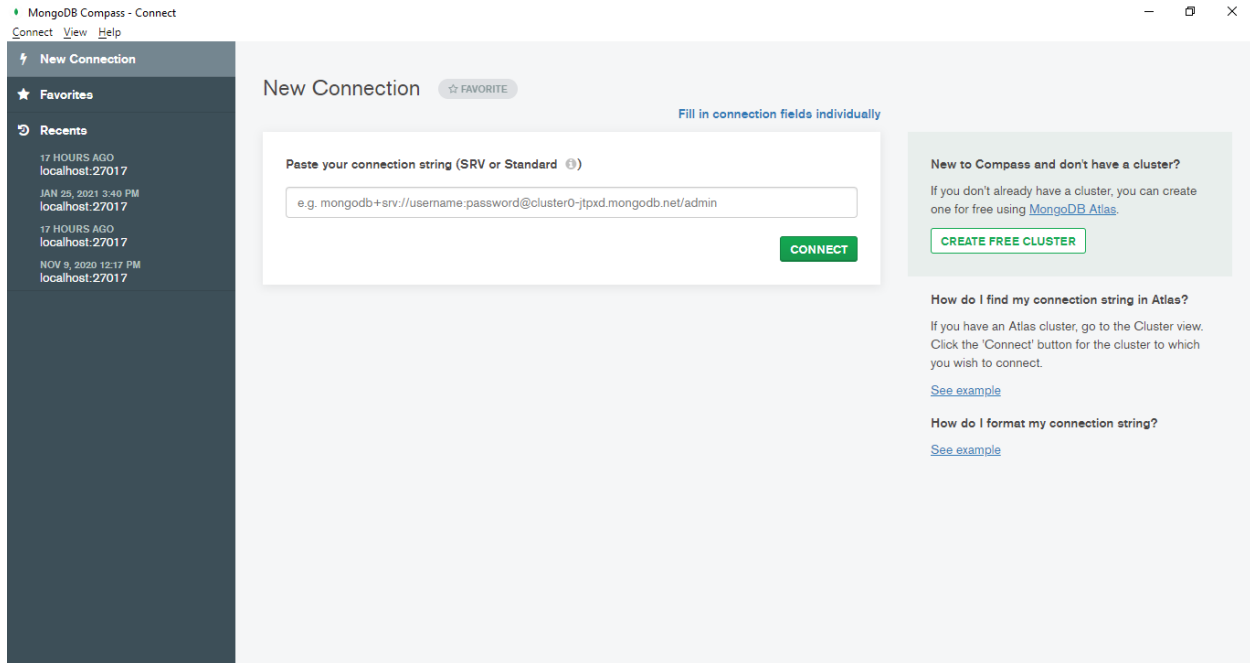
Type-> **db.Orders.find()**

```
> db.Orders.find()
{ "_id" : ObjectId("601154375020c0f53522422d"), "orderId" : "ODR1001", "orderDesc" : "Non Electronic order", "orderAmount" : 25000, "custId" : "1001" }
> █
```

Step 26: To connect to mongodb on Amazon Linux from MongoDB compass community from windows desktop,

Start MongoDB Compass community,

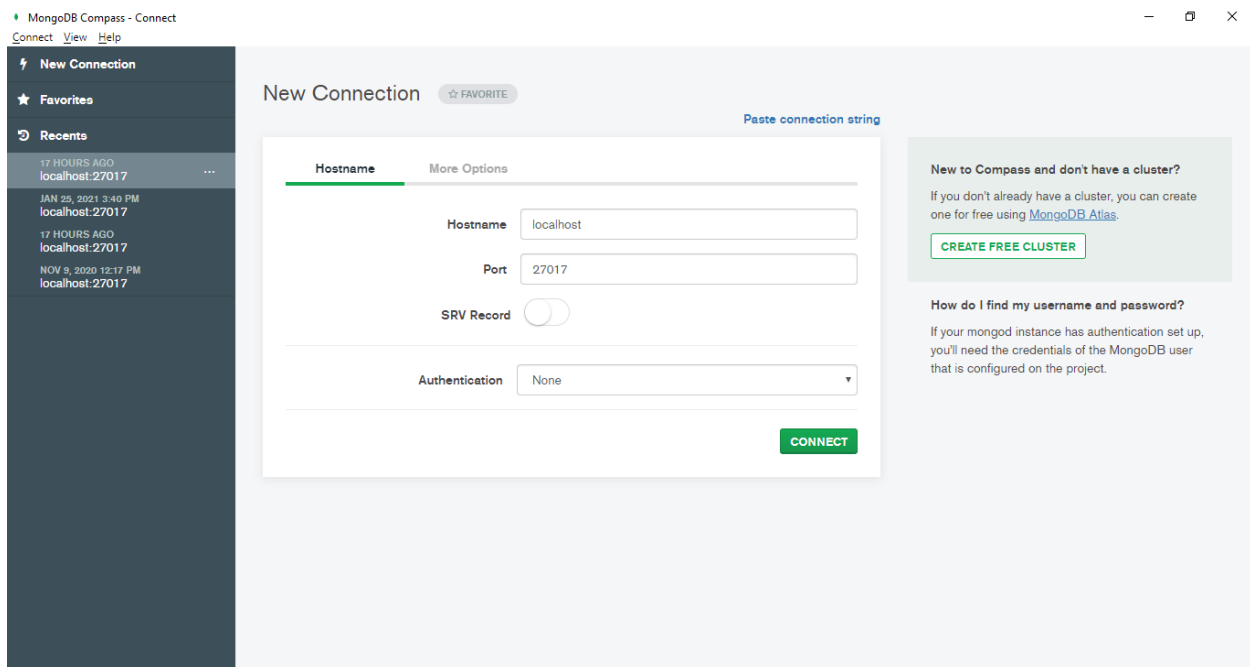




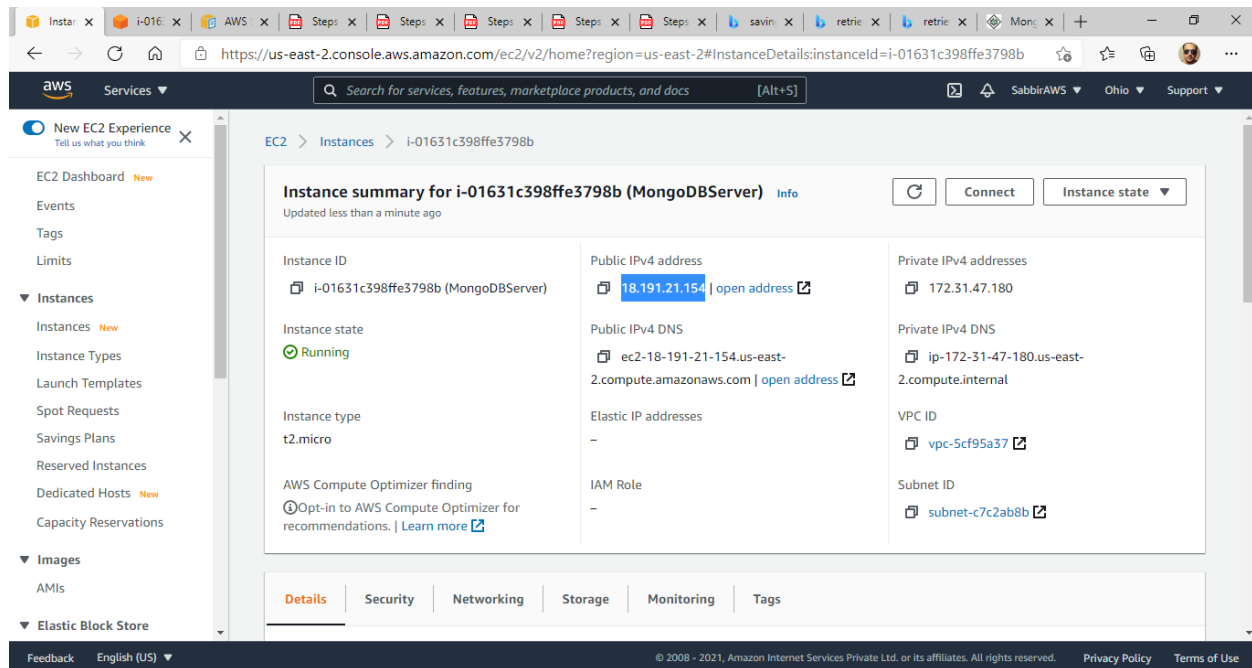
Step 27: Click on menu Connect -> Connect to,

In hostname field type "localhost"

In port field type "27017"



Step 28: To get public IP address of instance go to AWS Console , click on instances and MongoDBServer instance,



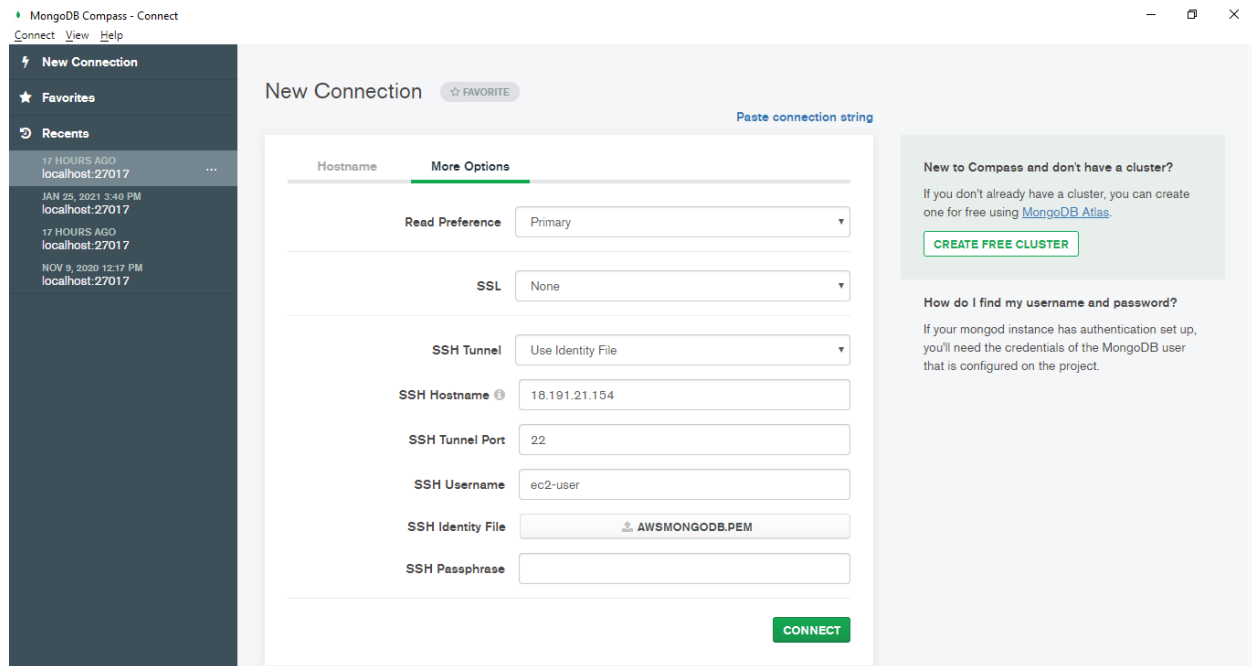
Step 29: In more options,

In SSH Tunnel select “Using Identity File”

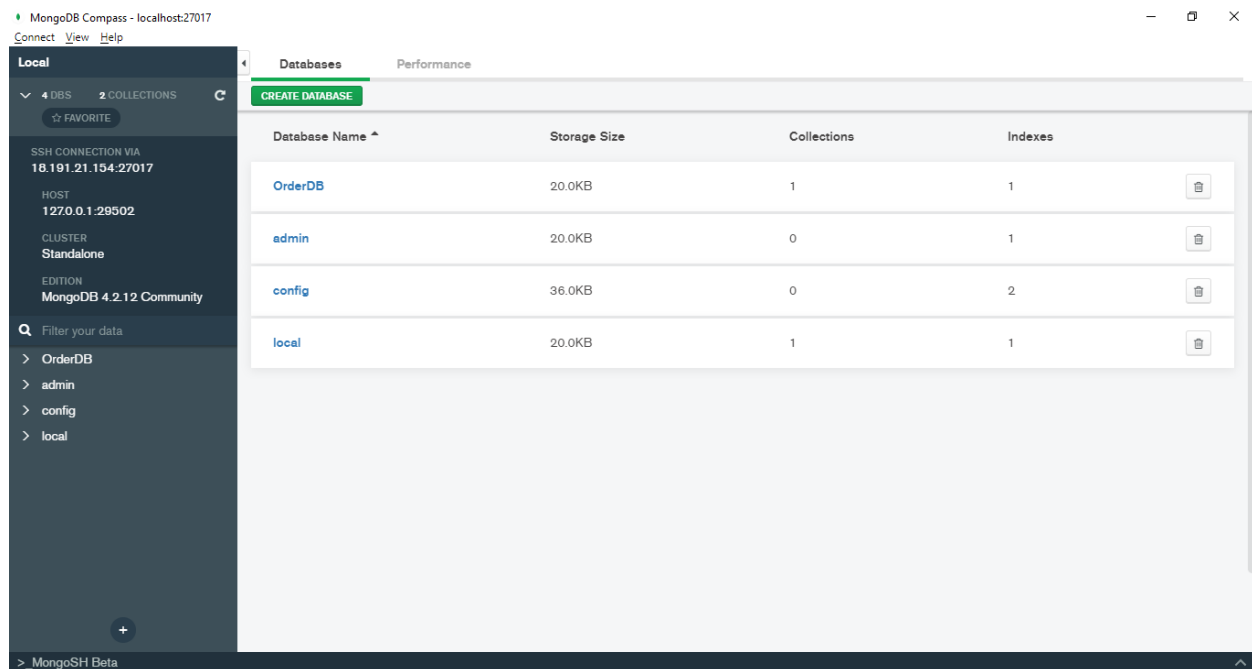
SSH Tunnel Port: 22

SSH Identity File: Browse key-pair file downloaded in step 11

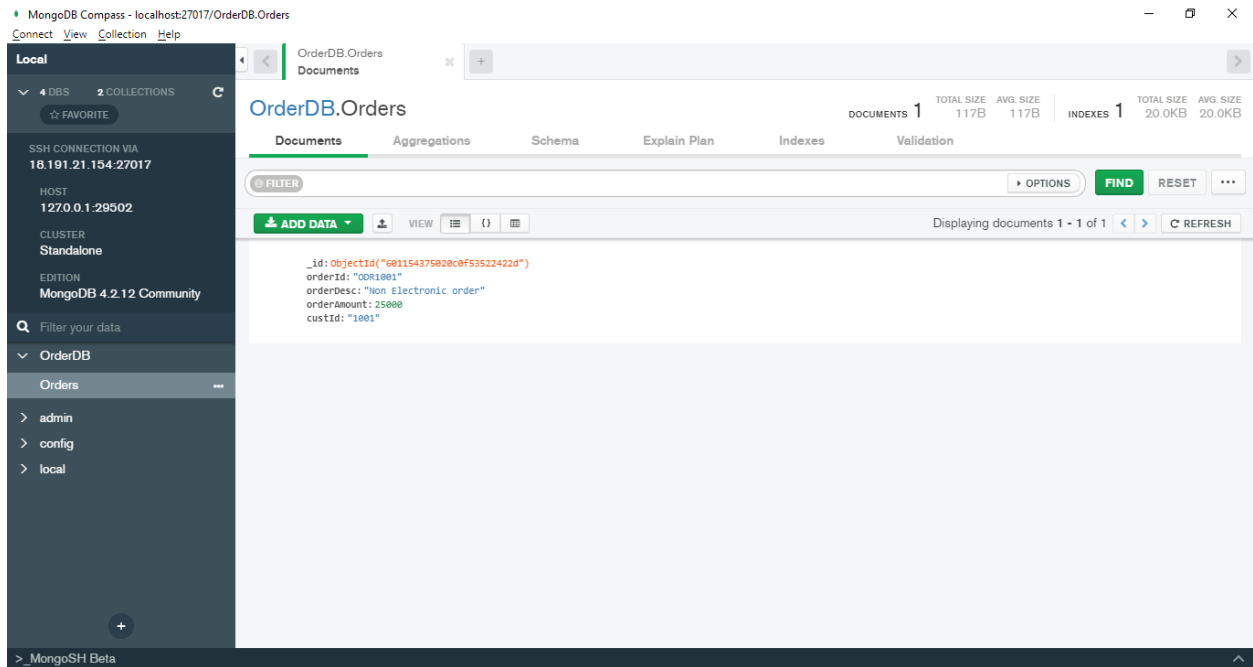
Click on connect,



Step 30: Click on OrderDB,



Step 31: Click on Orders and test if you are able to view record.

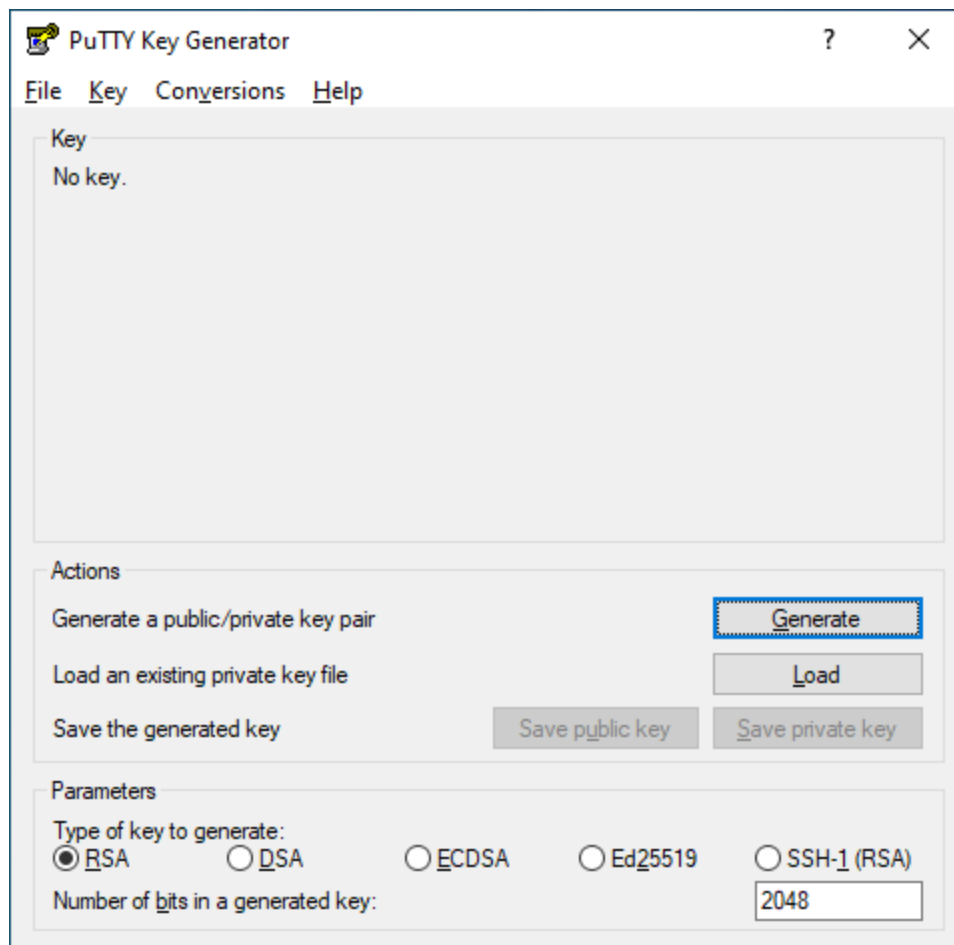


## Appendix

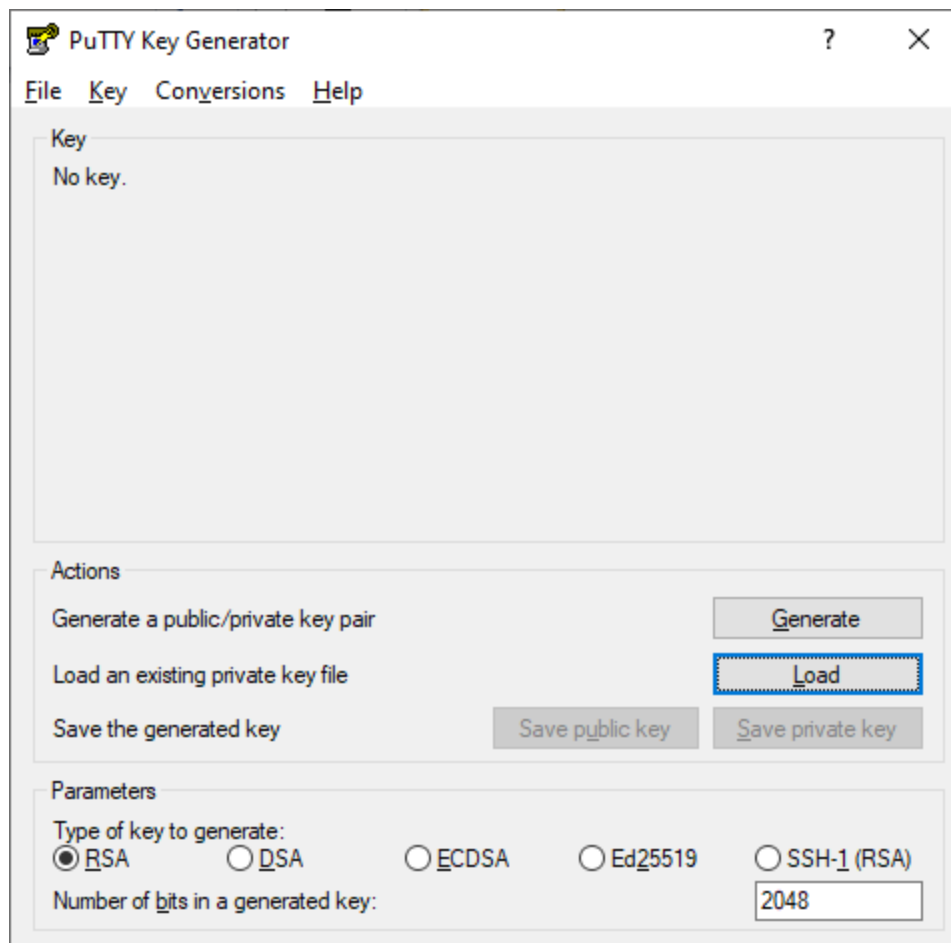
To install mongodb on amazon linux instance after it is create , putty can alternatively be used instead of Amazon CLI

Step 1: To create ppk file,

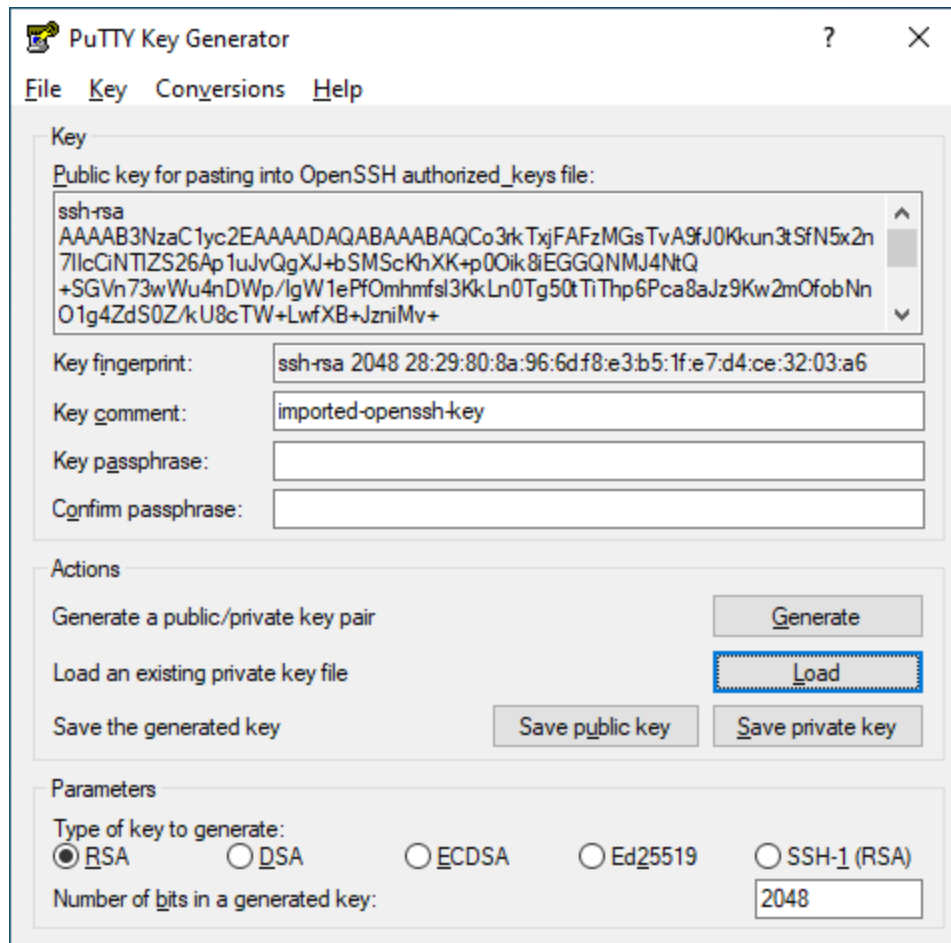
Go to puttygen ,



Step 2: Click on Load,

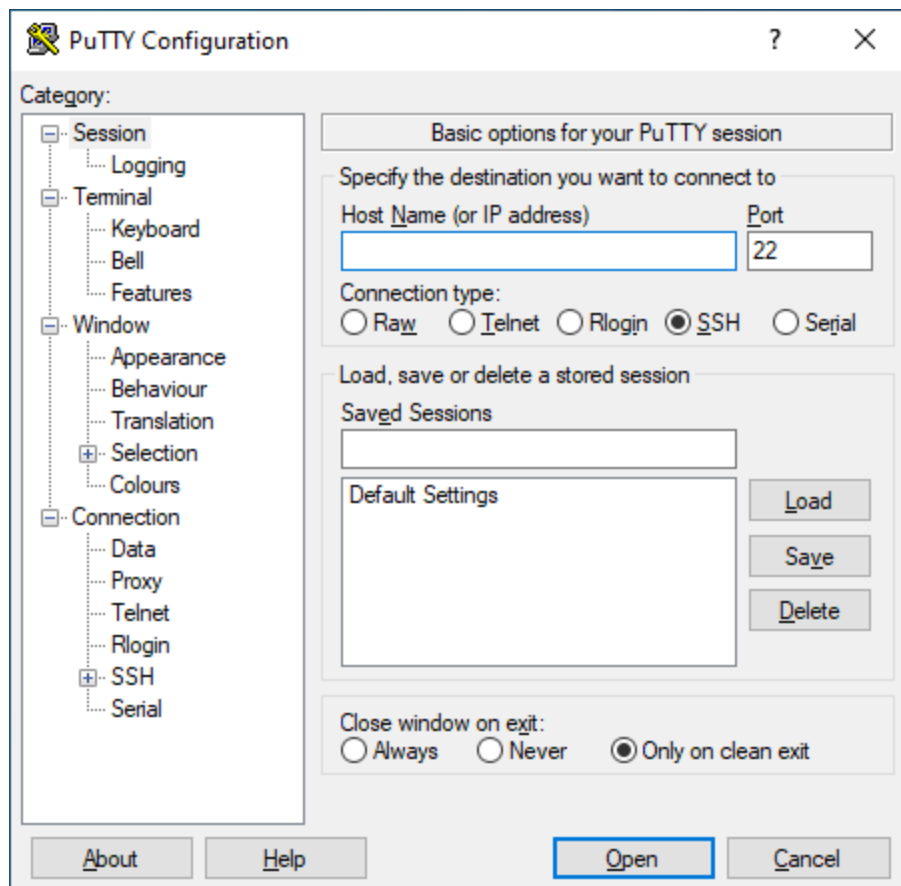


Step 3: Browse AWSMONGODB.pem file downloaded in Step 11 of Main section,



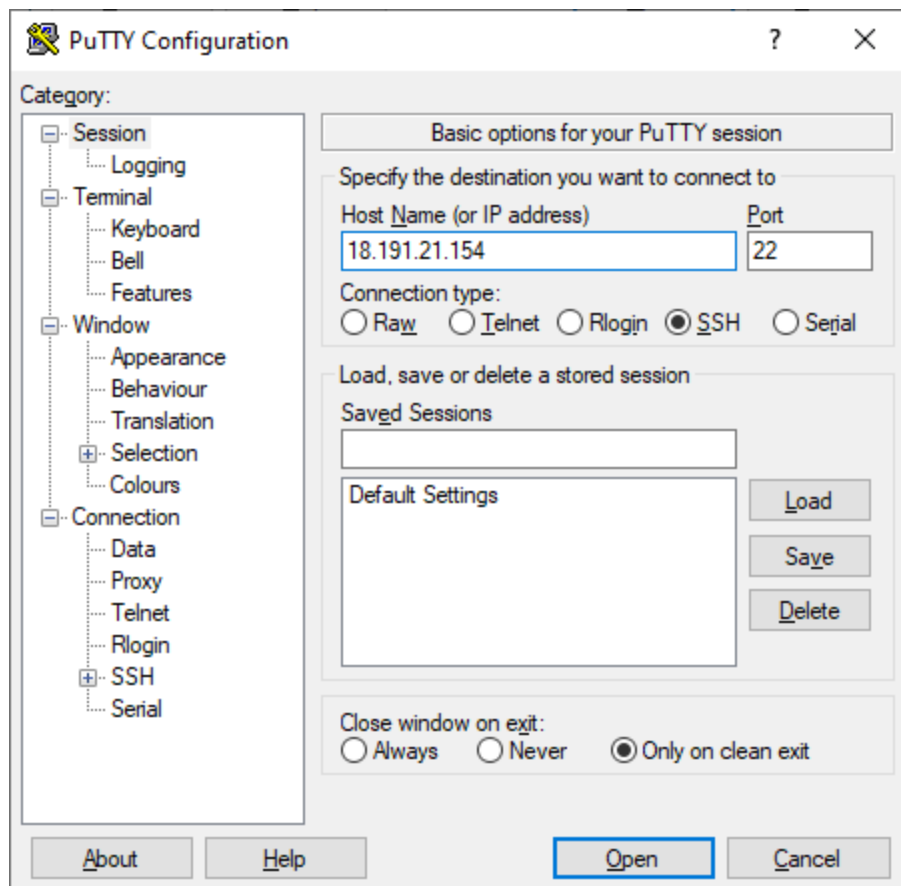
Step 4: Click on Save private key and save file on desktop as AWSMONGODB.ppk

Step 5: Open putty,

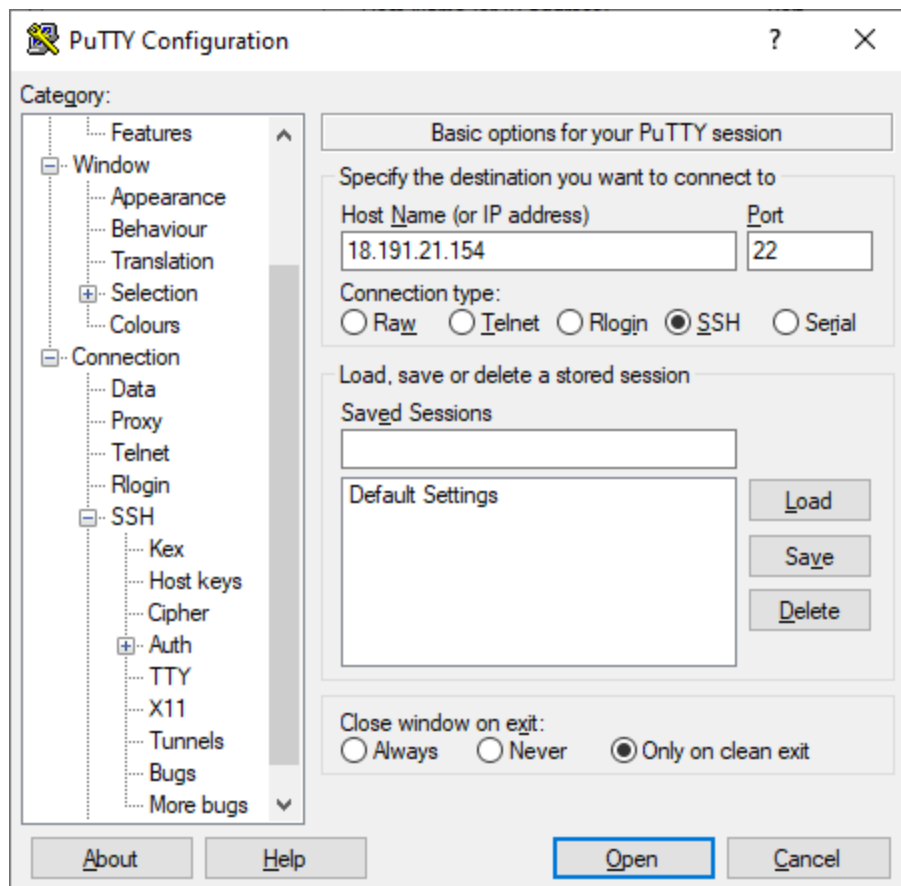


Step 6: Specify Host Name as ip address of AWS Linux instance , refer to step 28 in main section,

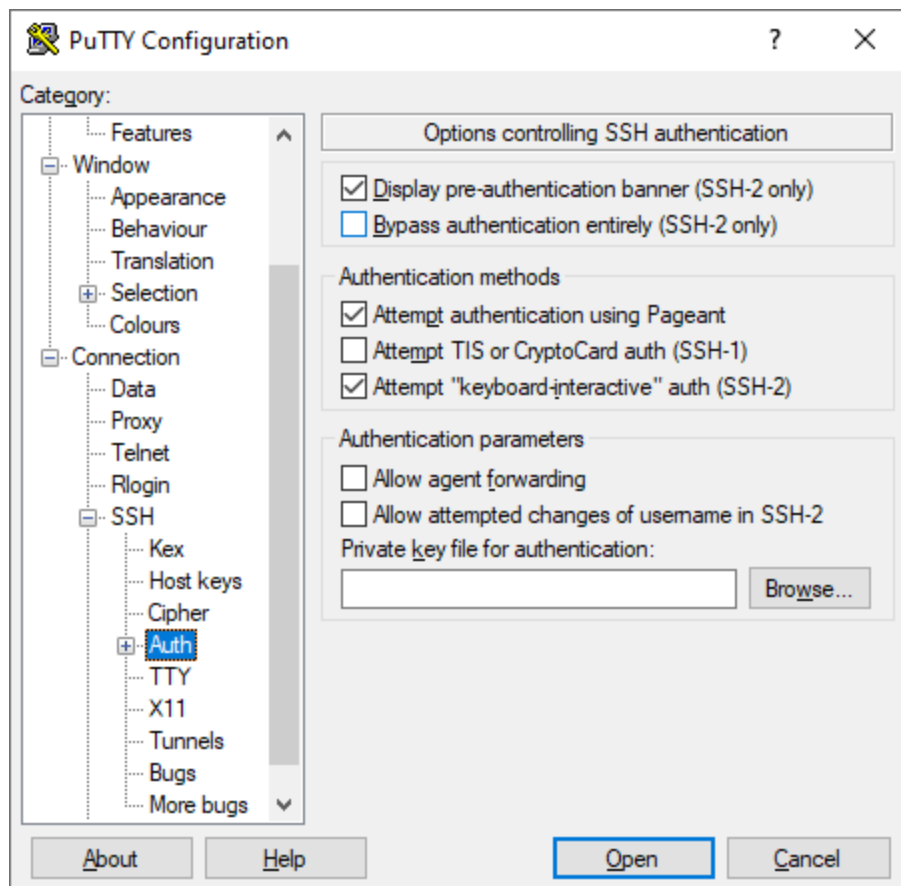




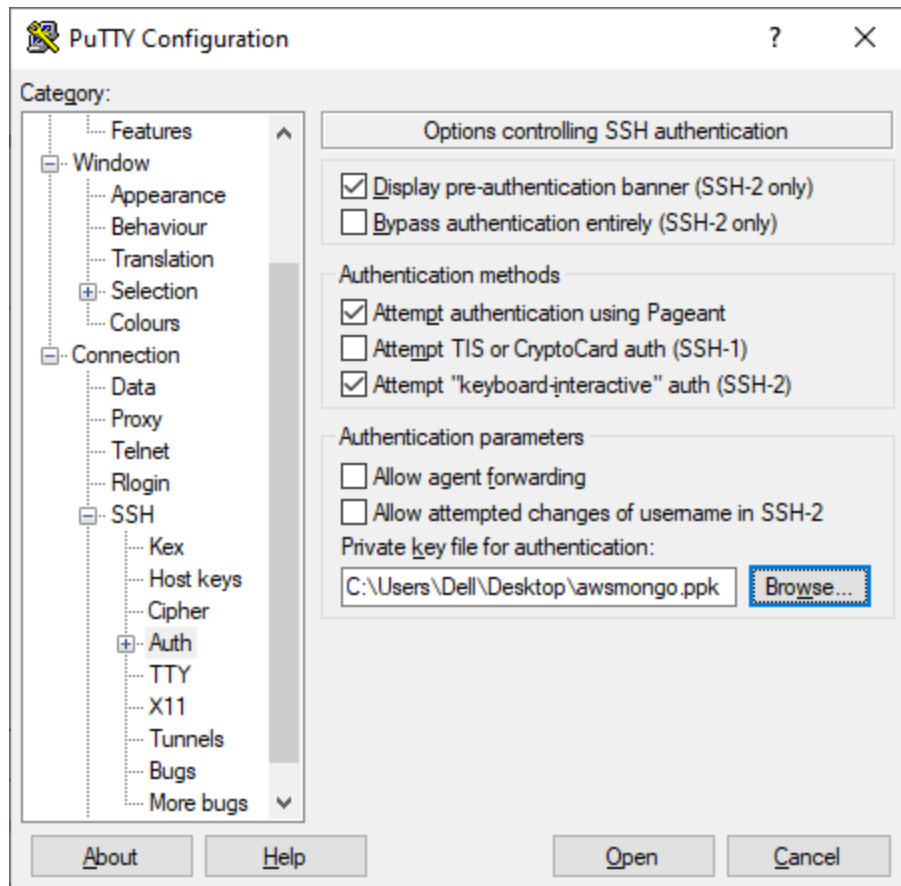
Step 7: Click on SSH,



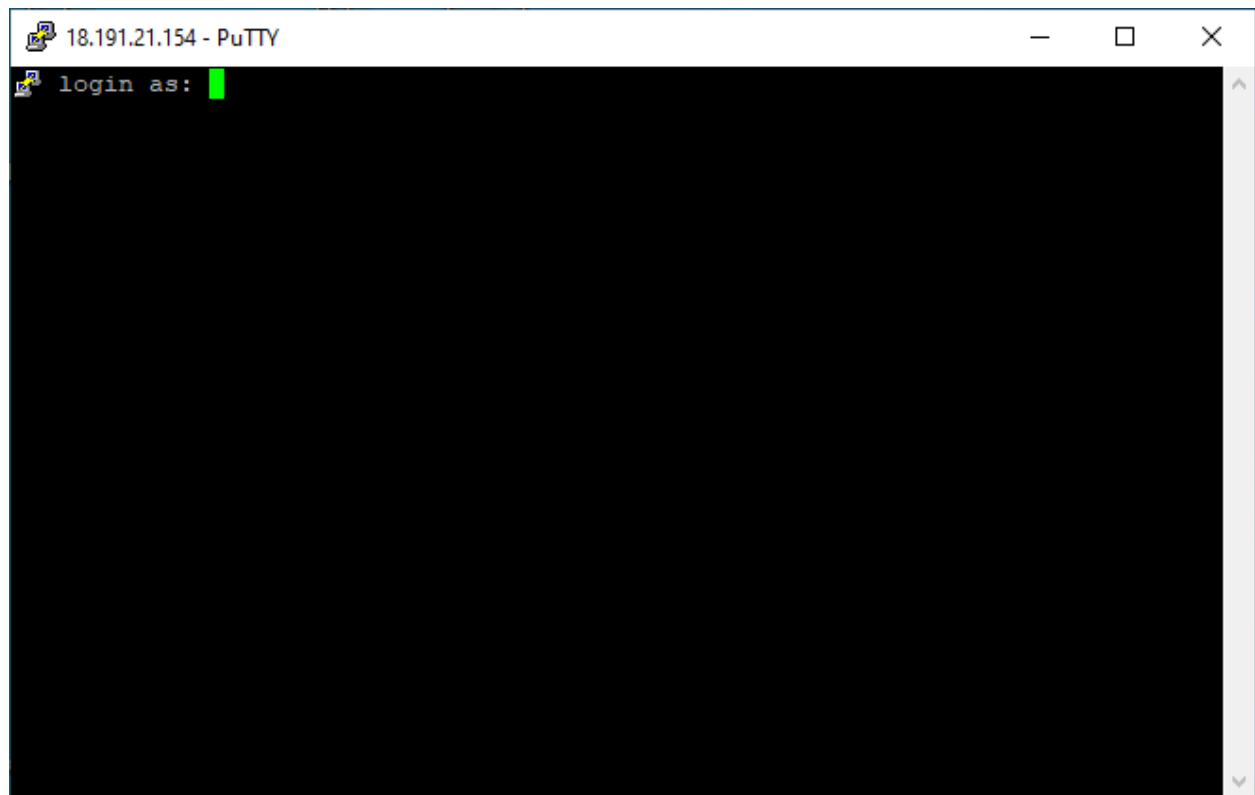
Step 8: Click on Auth,



Step 9: Click on browse, and browse AWSMONGODB.ppk file created in earlier step



Step 10: Login as ec2-user,



```
ec2-user@ip-172-31-47-180:~  
login as: ec2-user  
Authenticating with public key "imported-openssh-key"  
Last login: Thu Jan 28 04:52:11 2021 from ec2-3-16-146-1.us-east-2.compute.amaz  
naws.com  
  
  _|  _|  _|  _|  _|  _|  _|  _|  _|  _|  _|  _|  _|  _|  _|  _|  _|  _|  
  _|  (  _|  _|  _|  _|  _|  _|  _|  _|  _|  _|  _|  _|  _|  _|  _|  _|  
  _|  \  _|  _|  _|  _|  _|  _|  _|  _|  _|  _|  _|  _|  _|  _|  _|  _|  
Amazon Linux 2 AMI  
  
https://aws.amazon.com/amazon-linux-2/  
[ec2-user@ip-172-31-47-180 ~]$
```