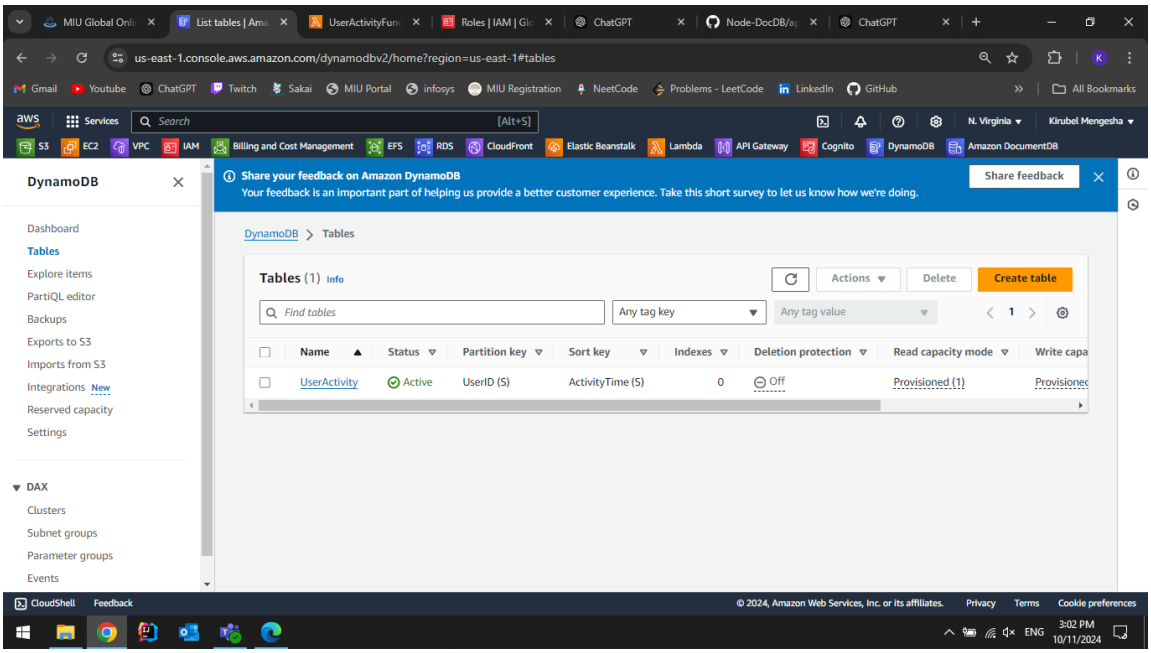
Task 1: Amazon DynamoDB - Setup and Data Manipulation

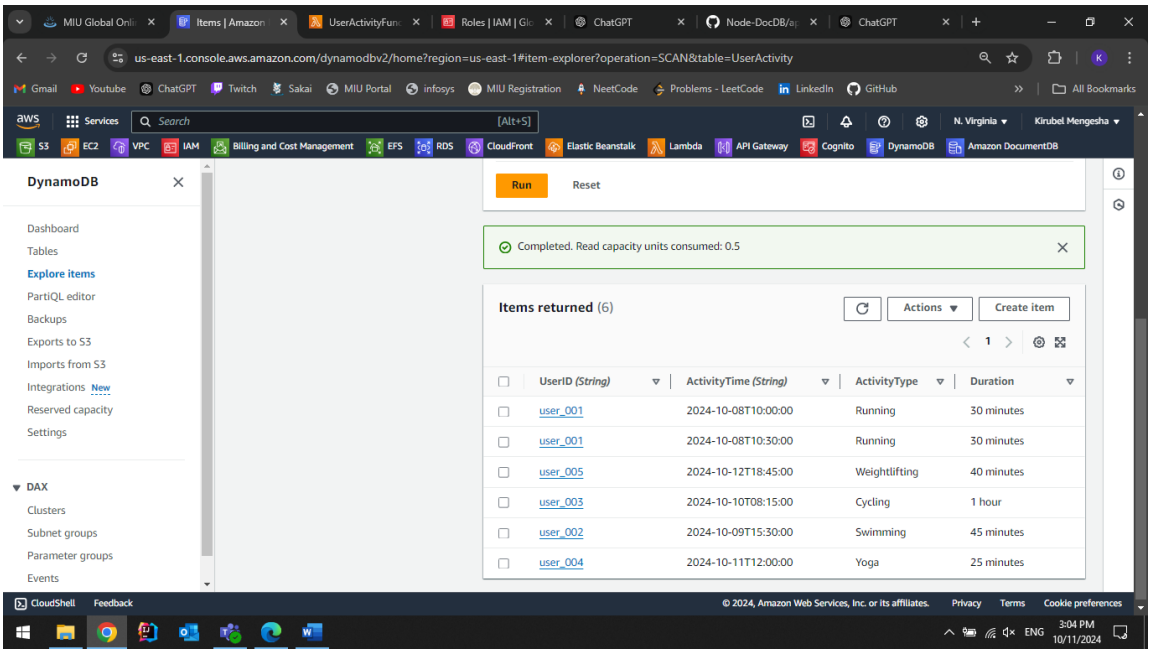
* Create a DynamoDB table named "UserActivity" with a primary key "UserID" (partition key) and "ActivityTime" (sort key).

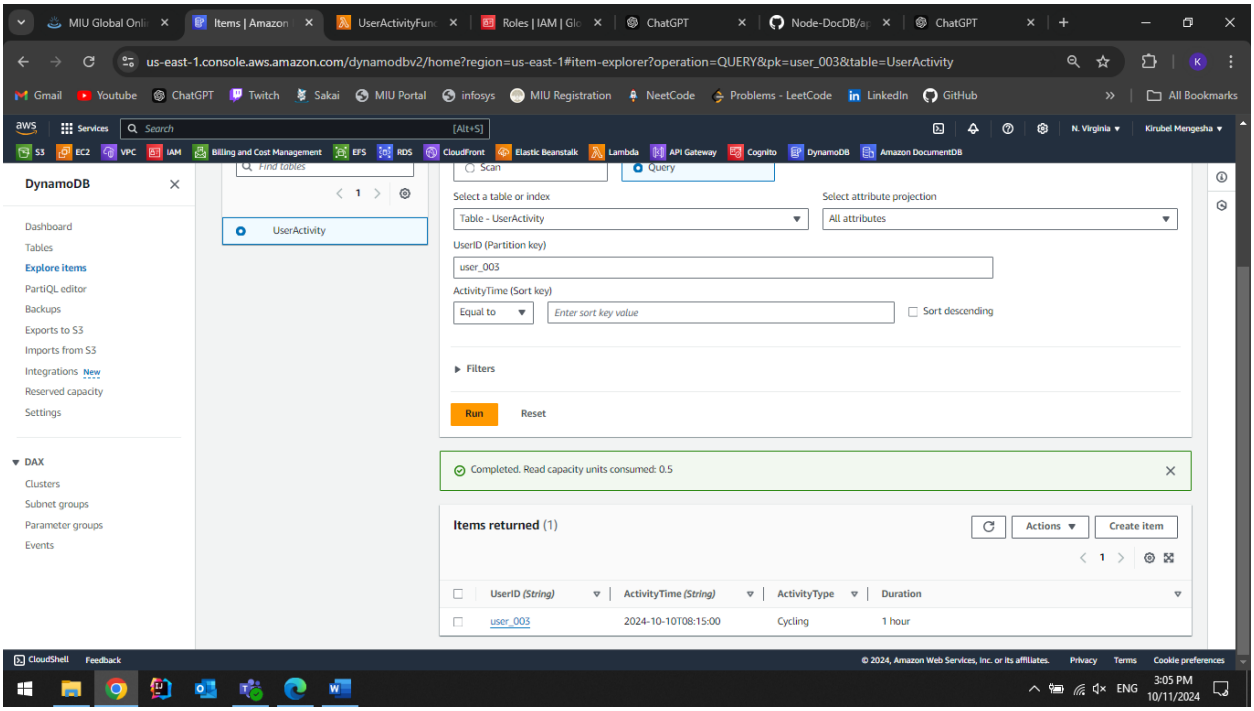
* Use the AWS Management Console to insert at least 5 items, representing user activities with attributes such as activity type and duration.

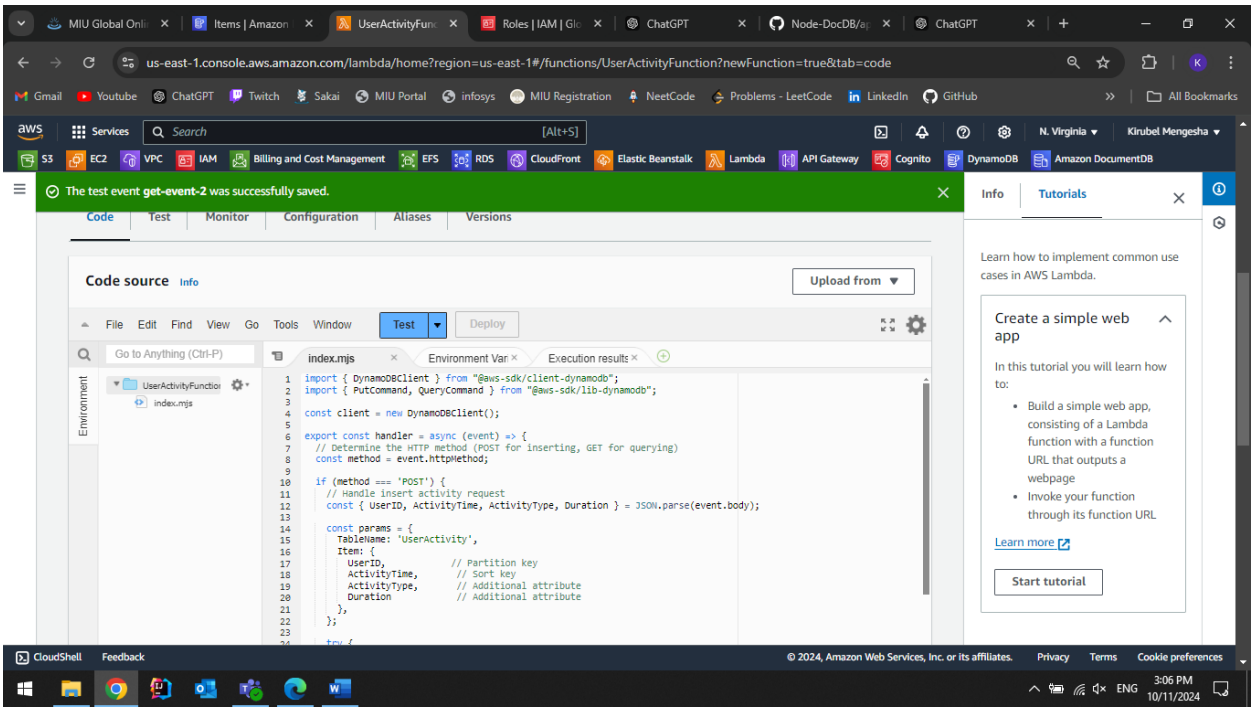
* Perform a query to retrieve all activities for a specific user

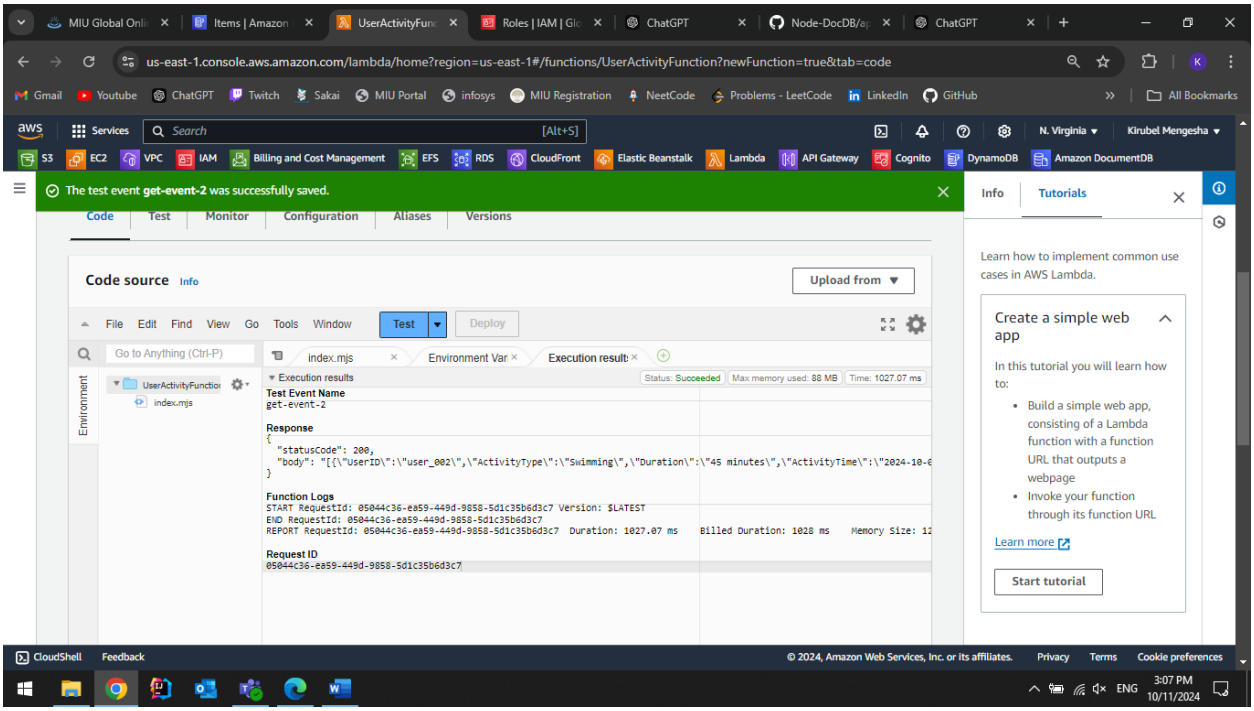
* Create Lambda function to insert and query data from this table.






us-east-1.console.aws.amazon.com/dynamodbv2/home?region=us-east-1#item-explorer?operation=QUERY&pk=user_003&table=UserActivity
DynamoDB
Dashboard
Tables
Explore items
PartiQL editor
Backups
Exports to S3
Imports from S3
Integrations New
Reserved capacity
Settings
DAX
Clusters
Subnet groups
Parameter groups
Events
UserActivity
Scan
Query
Select a table or index
Table - UserActivity
Select attribute projection
All attributes
UserID (Partition key)
user_003
ActivityTime (Sort key)
Equal to
Enter sort key value
Sort descending
Filters
Run
Reset
Completed. Read capacity units consumed: 0.5
Items returned (1)
Actions
Create item
UserID (String)
ActivityTime (String)
ActivityType
Duration
user_003
2024-10-10T08:15:00
Cycling
1 hour
CloudShell
Feedback
© 2024, Amazon Web Services, Inc. or its affiliates.
Privacy
Terms
Cookie preferences
3:05 PM
10/11/2024


us-east-1.console.aws.amazon.com/lambda/home?region=us-east-1#/functions/UserActivityFunction?newFunction=true&tab=code
The test event get-event-2 was successfully saved.
Code
Test
Monitor
Configuration
Aliases
Versions
Code source Info
Upload from
File
Edit
Find
View
Go
Tools
Window
Test
Deploy
Go to Anything (Ctrl-P)
Environment
UserActivityFunction
index.mjs
Environment Var
Execution results
import { DynamoDBClient } from "@aws-sdk/client-dynamodb";
import { PutCommand, QueryCommand } from "@aws-sdk/lib-dynamodb";
const client = new DynamoDBClient();
export const handler = async (event) => {
// Determine the HTTP method (POST for inserting, GET for querying)
const method = event.httpMethod;
if (method === 'POST') {
// Handle insert activity request
const { UserID, ActivityTime, ActivityType, Duration } = JSON.parse(event.body);
const params = {
TableName: 'UserActivity',
Item: {
UserID, // Partition key
ActivityTime, // Sort key
ActivityType, // Additional attribute
Duration // Additional attribute
},
};
Info
Tutorials
Learn how to implement common use cases in AWS Lambda.
Create a simple web app
In this tutorial you will learn how to:
Build a simple web app, consisting of a Lambda function with a function URL that outputs a webpage
Invoke your function through its function URL
Learn more
Start tutorial
CloudShell
Feedback
© 2024, Amazon Web Services, Inc. or its affiliates.
Privacy
Terms
Cookie preferences
3:06 PM
10/11/2024



Task 2: Amazon DocumentDB with EC2

* Create an EC2 that allows SSH

* Create a DocumentDB Cluster:

- In the same VPC with the above EC2

- Include the connection to the above EC2

* Connect to the above EC2

- Install Git: sudo yum install git -y

- Download NodeJS: curl -sL https://rpm.nodesource.com/setup_20.x | sudo bash -

- Install NodeJS: sudo yum install nodejs -y

- Clone the application: git clone https://github.com/Thao-V/Node-DocDB

- Download the CA for DocumentDB: curl -O https://truststore.pki.rds.amazonaws.com/global/global-bundle.pem

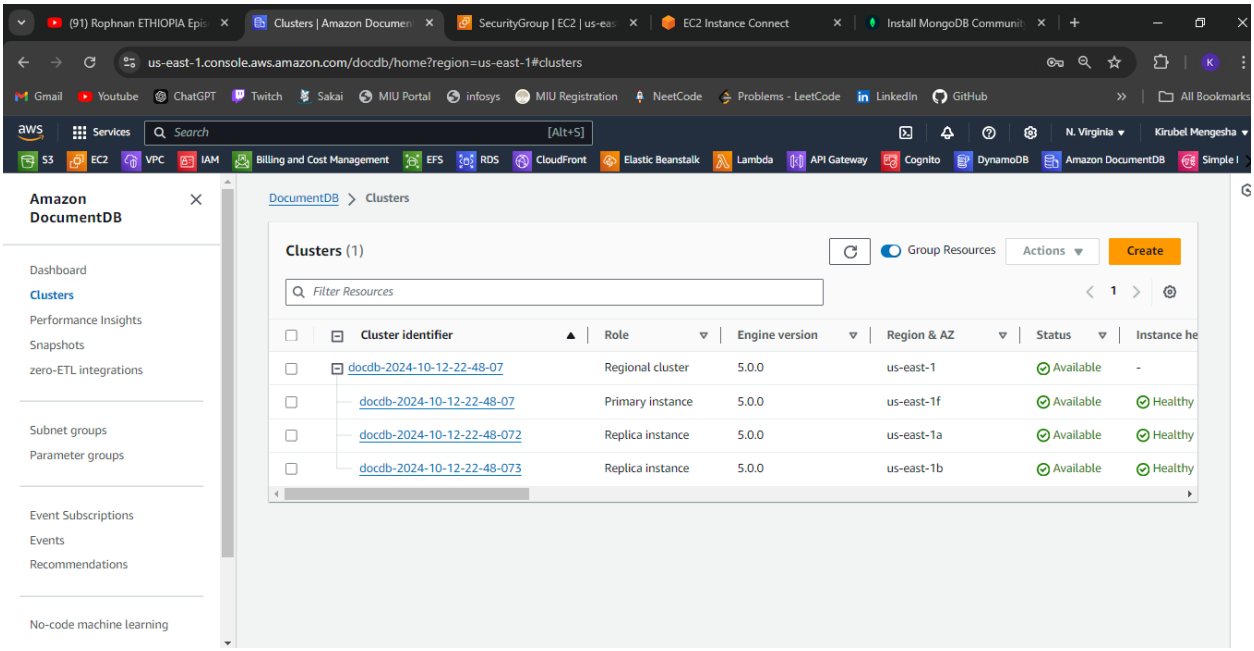
- Copy the above file to the Node-DocDB: cp global-bundle.pem Node-DocDB

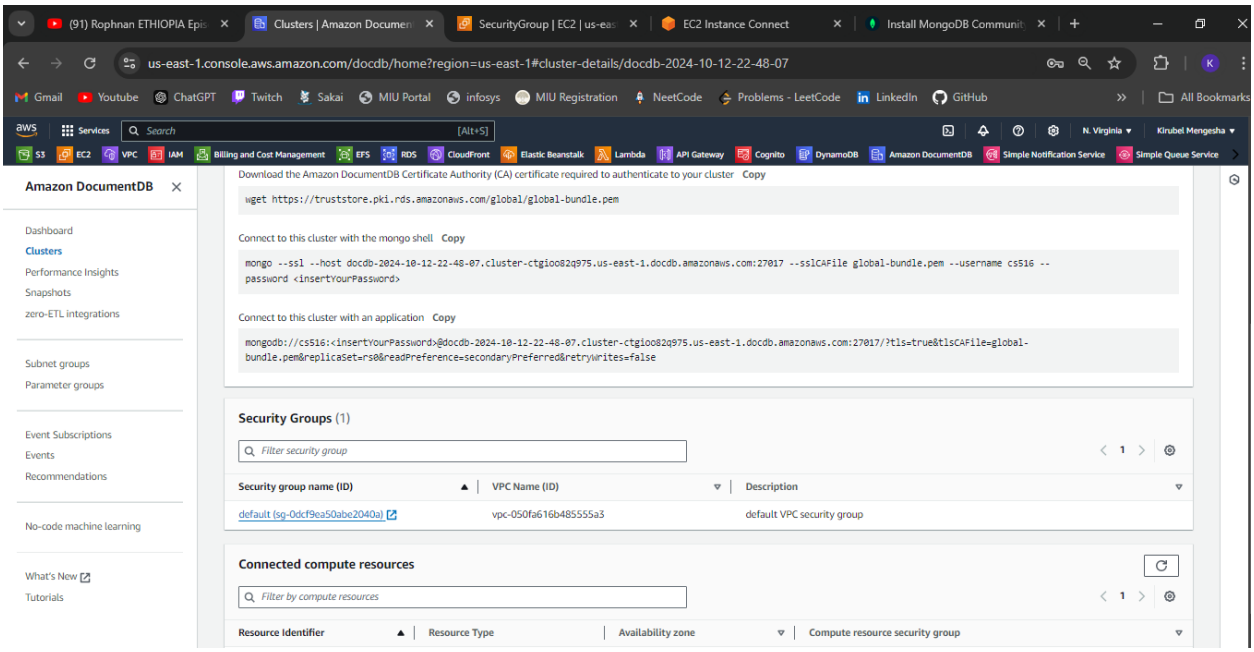
- Change the directory to Node-DocDB

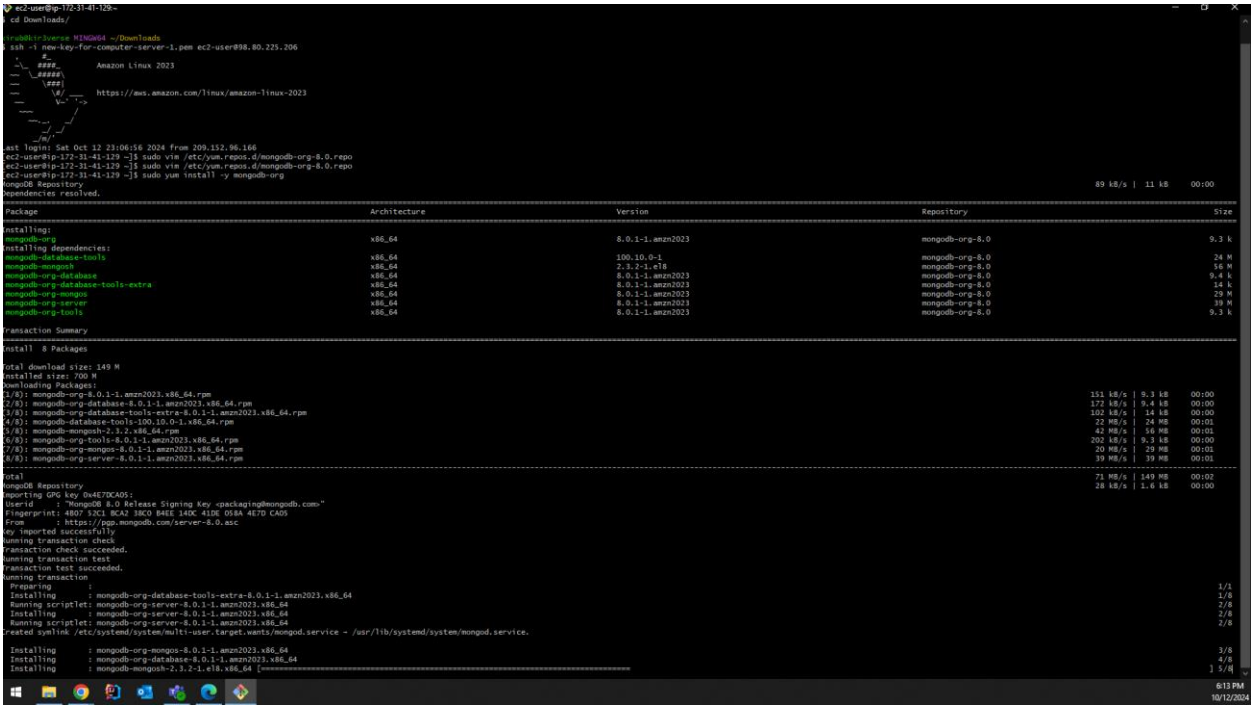
- Install dependencies: npm i

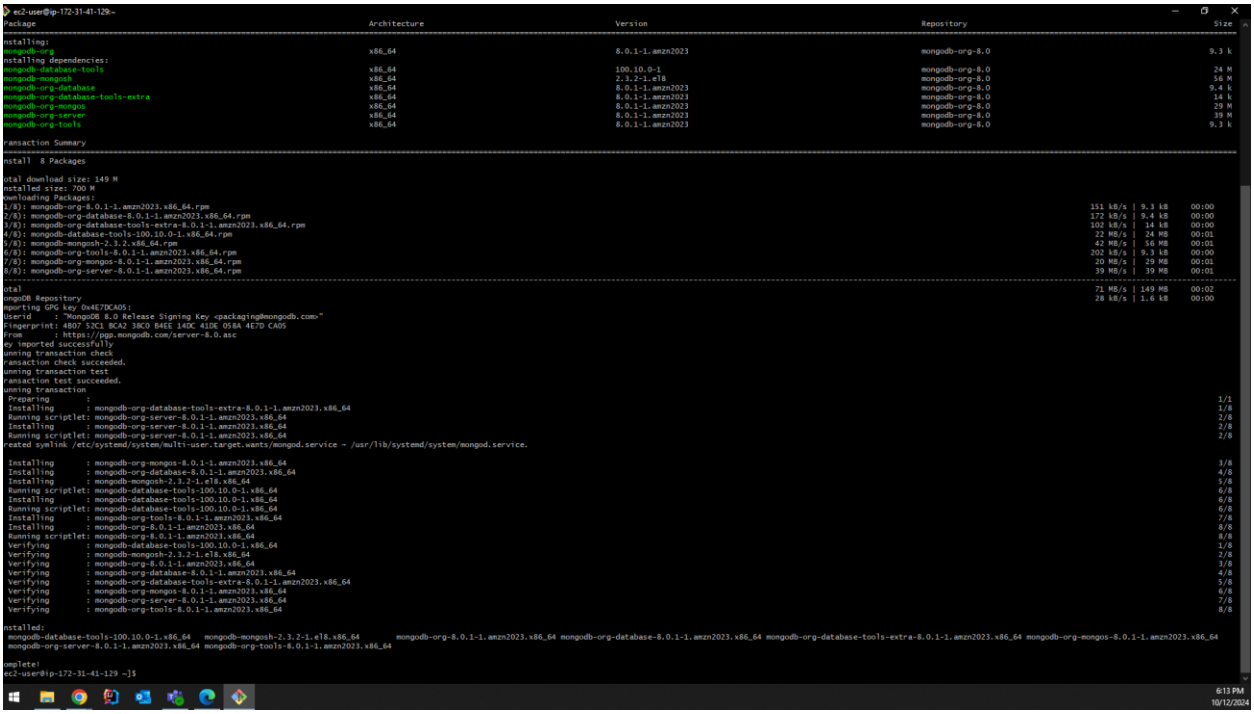
- Config .env: URI=<your-connection-string>

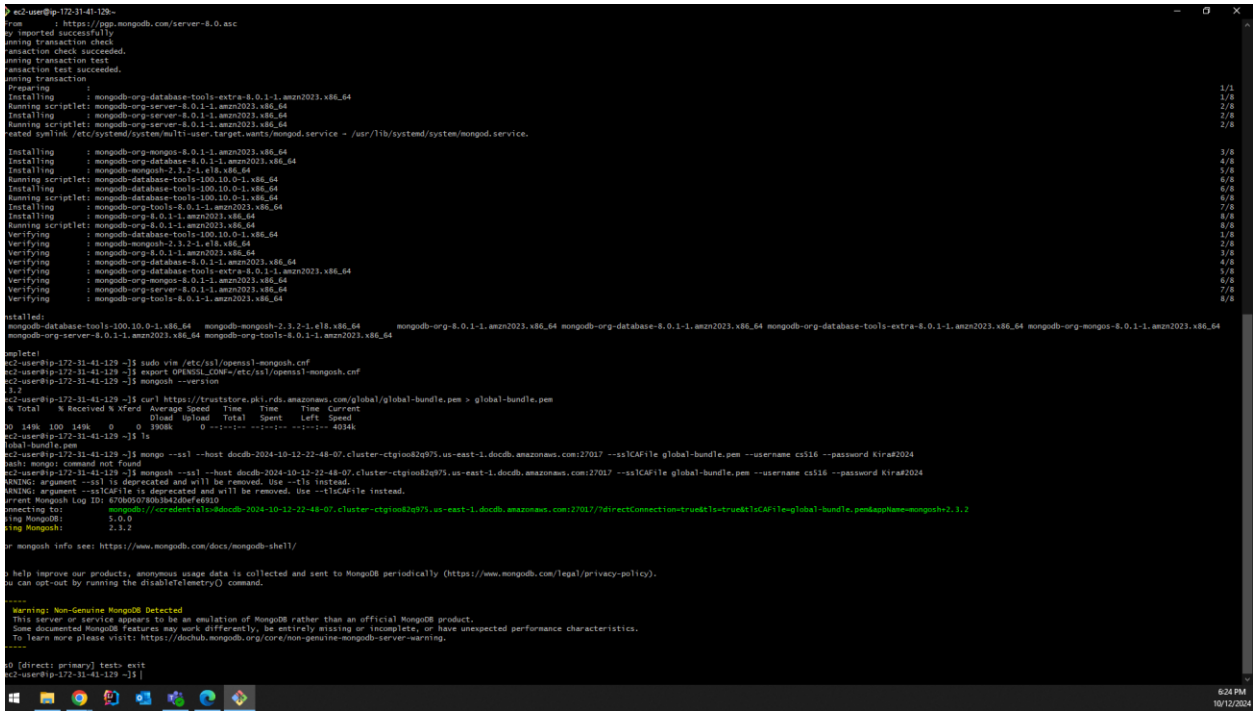
- Run the app: node app.js

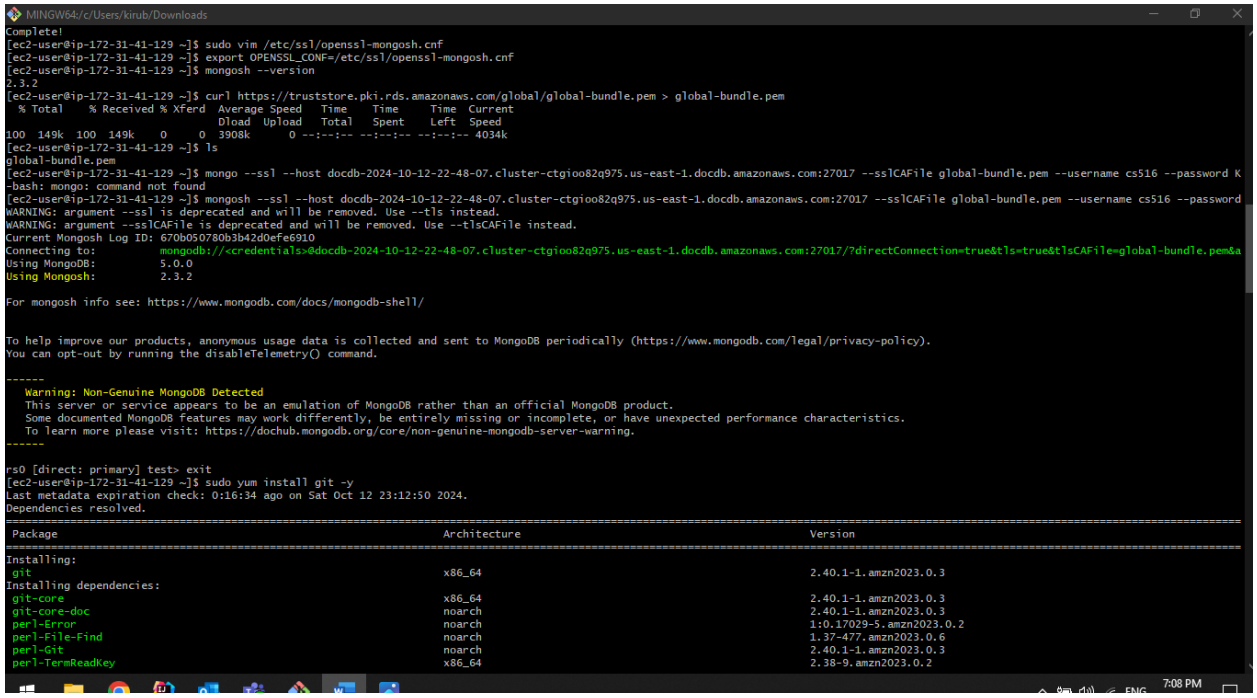

us-east-1.console.aws.amazon.com/docdb/home?region=us-east-1#clusters
Amazon DocumentDB
Dashboard
Clusters
Performance Insights
Snapshots
zero-ETL integrations
Subnet groups
Parameter groups
Event Subscriptions
Events
Recommendations
No-code machine learning
DocumentDB > Clusters
Clusters (1)
Group Resources
Actions
Create
Filter Resources
Cluster identifier
Role
Engine version
Region & AZ
Status
docdb-2024-10-12-22-48-07 Regional cluster 5.0.0 us-east-1 Available
docdb-2024-10-12-22-48-07 Primary instance 5.0.0 us-east-1f Available Healthy
docdb-2024-10-12-22-48-072 Replica instance 5.0.0 us-east-1a Available Healthy
docdb-2024-10-12-22-48-073 Replica instance 5.0.0 us-east-1b Available Healthy


us-east-1.console.aws.amazon.com/docdb/home?region=us-east-1#cluster-details/docdb-2024-10-12-22-48-07
Amazon DocumentDB
Download the Amazon DocumentDB Certificate Authority (CA) certificate required to authenticate to your cluster Copy
wget https://truststore.pki.rds.amazonaws.com/global/global-bundle.pem
Connect to this cluster with the mongo shell Copy
mongo --ssl --host docdb-2024-10-12-22-48-07.cluster-ctgioo82q975.us-east-1.docdb.amazonaws.com:27017 --sslCAFile global-bundle.pem --username cs516 --password <insertYourPassword>
Connect to this cluster with an application Copy
mongodb://cs516:<insertYourPassword>@docdb-2024-10-12-22-48-07.cluster-ctgioo82q975.us-east-1.docdb.amazonaws.com:27017/?tls=true&tlsCAFile=global-bundle.pem&replicaSet=rs0&readPreference=secondaryPreferred&retryWrites=false
Security Groups (1)
Filter security group
Security group name (ID)
VPC Name (ID)
Description
default (sg-0dcf9ea50abe2040a) vpc-050fa616b485555a3 default VPC security group
Connected compute resources
Filter by compute resources
Resource Identifier
Resource Type
Availability zone
Compute resource security group


ec2-user@ip-172-31-41-129:~
cd Downloads/
ssh -i new-key-for-computer-server-1.pem ec2-user@98.80.225.206
Amazon Linux 2023
https://aws.amazon.com/linux/amazon-linux-2023
Last login: Sat Oct 12 23:06:56 2024 from 209.152.96.166
[ec2-user@ip-172-31-41-129 ~]$ sudo vim /etc/yum.repos.d/mongodb-org-8.0.repo
[ec2-user@ip-172-31-41-129 ~]$ sudo vim /etc/yum.repos.d/mongodb-org-8.0.repo
[ec2-user@ip-172-31-41-129 ~]$ sudo yum install -y mongodb-org
MongoDB Repository
Dependencies resolved.
Package
Architecture
Version
Repository
Size
Installing:
mongodb-org
x86_64
8.0.1-1.amzn2023
mongodb-org-8.0
9.3 k
Installing dependencies:
mongodb-database-tools
x86_64
100.10.0-1
mongodb-org-8.0
24 M
mongodb-mongosh
x86_64
2.3.2-1.el8
mongodb-org-8.0
56 M
mongodb-org-database
x86_64
8.0.1-1.amzn2023
mongodb-org-8.0
9.4 k
mongodb-org-database-tools-extra
x86_64
8.0.1-1.amzn2023
mongodb-org-8.0
14 k
mongodb-org-mongos
x86_64
8.0.1-1.amzn2023
mongodb-org-8.0
29 M
mongodb-org-server
x86_64
8.0.1-1.amzn2023
mongodb-org-8.0
39 M
mongodb-org-tools
x86_64
8.0.1-1.amzn2023
mongodb-org-8.0
9.3 k
Transaction Summary
Install 8 Packages
Total download size: 149 M
Installed size: 700 M
Downloading Packages:
(1/8): mongodb-org-8.0.1-1.amzn2023.x86_64.rpm
(2/8): mongodb-org-database-8.0.1-1.amzn2023.x86_64.rpm
(3/8): mongodb-org-database-tools-extra-8.0.1-1.amzn2023.x86_64.rpm
(4/8): mongodb-database-tools-100.10.0-1.x86_64.rpm
(5/8): mongodb-mongosh-2.3.2.x86_64.rpm
(6/8): mongodb-org-tools-8.0.1-1.amzn2023.x86_64.rpm
(7/8): mongodb-org-mongos-8.0.1-1.amzn2023.x86_64.rpm
(8/8): mongodb-org-server-8.0.1-1.amzn2023.x86_64.rpm
Total
MongoDB Repository
Importing GPG key 0x4E7DCA05:
Userid : "MongoDB 8.0 Release Signing Key <packaging@mongodb.com>"
Fingerprint: 4B07 52C1 BCA2 38C0 B4EE 140C 410E 058A 4E7D CA05
From : https://pgp.mongodb.com/server-8.0.asc
Key imported successfully
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
Preparing :
Installing : mongodb-org-database-tools-extra-8.0.1-1.amzn2023.x86_64
Running scriptlet: mongodb-org-server-8.0.1-1.amzn2023.x86_64
Installing : mongodb-org-server-8.0.1-1.amzn2023.x86_64
Running scriptlet: mongodb-org-server-8.0.1-1.amzn2023.x86_64
Created symlink /etc/systemd/system/multi-user.target.wants/mongod.service → /usr/lib/systemd/system/mongod.service.
Installing : mongodb-org-mongos-8.0.1-1.amzn2023.x86_64
Installing : mongodb-org-database-8.0.1-1.amzn2023.x86_64
Installing : mongodb-mongosh-2.3.2-1.el8.x86_64
6:13 PM
10/12/2024


ec2-user@ip-172-31-41-129:~
Package
Architecture
Version
Repository
Size
Installing:
mongodb-org
x86_64
8.0.1-1.amzn2023
mongodb-org-8.0
9.3 k
Installing dependencies:
mongodb-database-tools
x86_64
100.10.0-1
mongodb-org-8.0
24 M
mongodb-mongosh
x86_64
2.3.2-1.el8
mongodb-org-8.0
56 M
mongodb-org-database
x86_64
8.0.1-1.amzn2023
mongodb-org-8.0
9.4 k
mongodb-org-database-tools-extra
x86_64
8.0.1-1.amzn2023
mongodb-org-8.0
14 k
mongodb-org-mongos
x86_64
8.0.1-1.amzn2023
mongodb-org-8.0
29 M
mongodb-org-server
x86_64
8.0.1-1.amzn2023
mongodb-org-8.0
39 M
mongodb-org-tools
x86_64
8.0.1-1.amzn2023
mongodb-org-8.0
9.3 k
Transaction Summary
Install 8 Packages
Total download size: 149 M
Installed size: 700 M
Downloading Packages:
(1/8): mongodb-org-8.0.1-1.amzn2023.x86_64.rpm
(2/8): mongodb-org-database-8.0.1-1.amzn2023.x86_64.rpm
(3/8): mongodb-org-database-tools-extra-8.0.1-1.amzn2023.x86_64.rpm
(4/8): mongodb-database-tools-100.10.0-1.x86_64.rpm
(5/8): mongodb-mongosh-2.3.2.x86_64.rpm
(6/8): mongodb-org-tools-8.0.1-1.amzn2023.x86_64.rpm
(7/8): mongodb-org-mongos-8.0.1-1.amzn2023.x86_64.rpm
(8/8): mongodb-org-server-8.0.1-1.amzn2023.x86_64.rpm
Total
MongoDB Repository
Importing GPG key 0x4E7DCA05:
Userid : "MongoDB 8.0 Release Signing Key <packaging@mongodb.com>"
Fingerprint: 4B07 52C1 BCA2 38C0 B4EE 140C 410E 058A 4E7D CA05
From : https://pgp.mongodb.com/server-8.0.asc
Key imported successfully
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
Preparing :
Installing : mongodb-org-database-tools-extra-8.0.1-1.amzn2023.x86_64
Running scriptlet: mongodb-org-server-8.0.1-1.amzn2023.x86_64
Installing : mongodb-org-server-8.0.1-1.amzn2023.x86_64
Running scriptlet: mongodb-org-server-8.0.1-1.amzn2023.x86_64
Created symlink /etc/systemd/system/multi-user.target.wants/mongod.service → /usr/lib/systemd/system/mongod.service.
Installing : mongodb-org-mongos-8.0.1-1.amzn2023.x86_64
Installing : mongodb-org-database-8.0.1-1.amzn2023.x86_64
Installing : mongodb-mongosh-2.3.2-1.el8.x86_64
Running scriptlet: mongodb-database-tools-100.10.0-1.x86_64
Installing : mongodb-database-tools-100.10.0-1.x86_64
Running scriptlet: mongodb-database-tools-100.10.0-1.x86_64
Installing : mongodb-org-tools-8.0.1-1.amzn2023.x86_64
Installing : mongodb-org-8.0.1-1.amzn2023.x86_64
Running scriptlet: mongodb-org-8.0.1-1.amzn2023.x86_64
Verifying : mongodb-database-tools-100.10.0-1.x86_64
Verifying : mongodb-mongosh-2.3.2-1.el8.x86_64
Verifying : mongodb-org-8.0.1-1.amzn2023.x86_64
Verifying : mongodb-org-database-8.0.1-1.amzn2023.x86_64
Verifying : mongodb-org-database-tools-extra-8.0.1-1.amzn2023.x86_64
Verifying : mongodb-org-mongos-8.0.1-1.amzn2023.x86_64
Verifying : mongodb-org-server-8.0.1-1.amzn2023.x86_64
Verifying : mongodb-org-tools-8.0.1-1.amzn2023.x86_64
Installed:
mongodb-database-tools-100.10.0-1.x86_64 mongodb-mongosh-2.3.2-1.el8.x86_64 mongodb-org-8.0.1-1.amzn2023.x86_64 mongodb-org-database-8.0.1-1.amzn2023.x86_64 mongodb-org-database-tools-extra-8.0.1-1.amzn2023.x86_64 mongodb-org-mongos-8.0.1-1.amzn2023.x86_64
mongodb-org-server-8.0.1-1.amzn2023.x86_64 mongodb-org-tools-8.0.1-1.amzn2023.x86_64
Complete!
[ec2-user@ip-172-31-41-129 ~]$
6:13 PM
10/12/2024


ec2-user@ip-172-31-41-129:~
Complete!
[ec2-user@ip-172-31-41-129 ~]$ sudo vim /etc/ssl/openssl-mongosh.cnf
[ec2-user@ip-172-31-41-129 ~]$ export OPENSSL_CONF=/etc/ssl/openssl-mongosh.cnf
[ec2-user@ip-172-31-41-129 ~]$ mongosh --version
2.3.2
[ec2-user@ip-172-31-41-129 ~]$ curl https://truststore.pki.rds.amazonaws.com/global/global-bundle.pem > global-bundle.pem
[ec2-user@ip-172-31-41-129 ~]$ ls
global-bundle.pem
[ec2-user@ip-172-31-41-129 ~]$ mongo --ssl --host docdb-2024-10-12-22-48-07.cluster-ctgioo82q975.us-east-1.docdb.amazonaws.com:27017 --sslCAFile global-bundle.pem --username cs516 --password Kira#2024
-bash: mongo: command not found
[ec2-user@ip-172-31-41-129 ~]$ mongosh --ssl --host docdb-2024-10-12-22-48-07.cluster-ctgioo82q975.us-east-1.docdb.amazonaws.com:27017 --sslCAFile global-bundle.pem --username cs516 --password Kira#2024
WARNING: argument --ssl is deprecated and will be removed. Use --tls instead.
WARNING: argument --sslCAFile is deprecated and will be removed. Use --tlsCAFile instead.
Current Mongosh Log ID: 670b050780b3b42d0efe6910
Connecting to: mongodb://<credentials>@docdb-2024-10-12-22-48-07.cluster-ctgioo82q975.us-east-1.docdb.amazonaws.com:27017/?directConnection=true&tls=true&tlsCAFile=global-bundle.pem&appName=mongosh+2.3.2
Using MongoDB: 5.0.0
Using Mongosh: 2.3.2
For mongosh info see: https://www.mongodb.com/docs/mongodb-shell/
To help improve our products, anonymous usage data is collected and sent to MongoDB periodically (https://www.mongodb.com/legal/privacy-policy).
You can opt-out by running the disableTelemetry() command.
Warning: Non-Genuine MongoDB Detected
This server or service appears to be an emulation of MongoDB rather than an official MongoDB product.
Some documented MongoDB features may work differently, be entirely missing or incomplete, or have unexpected performance characteristics.
To learn more please visit: https://dochub.mongodb.org/core/non-genuine-mongodb-server-warning.
rs0 [direct: primary] test> exit
[ec2-user@ip-172-31-41-129 ~]$
6:24 PM
10/12/2024


MINGW64:/c/Users/kirub/Downloads
Complete!
[ec2-user@ip-172-31-41-129 ~]$ sudo vim /etc/ssl/openssl-mongosh.cnf
[ec2-user@ip-172-31-41-129 ~]$ export OPENSSL_CONF=/etc/ssl/openssl-mongosh.cnf
[ec2-user@ip-172-31-41-129 ~]$ mongosh --version
2.3.2
[ec2-user@ip-172-31-41-129 ~]$ curl https://truststore.pki.rds.amazonaws.com/global/global-bundle.pem > global-bundle.pem
% Total % Received % Xferd Average Speed Time Time Time Current
Dload Upload Total Spent Left Speed
100 149k 100 149k 0 0 3908k 0 --:--:-- --:--:-- --:--:-- 4034k
[ec2-user@ip-172-31-41-129 ~]$ ls
global-bundle.pem
[ec2-user@ip-172-31-41-129 ~]$ mongo --ssl --host docdb-2024-10-12-22-48-07.cluster-ctgioo82q975.us-east-1.docdb.amazonaws.com:27017 --sslCAFile global-bundle.pem --username cs516 --password K
-bash: mongo: command not found
[ec2-user@ip-172-31-41-129 ~]$ mongosh --ssl --host docdb-2024-10-12-22-48-07.cluster-ctgioo82q975.us-east-1.docdb.amazonaws.com:27017 --sslCAFile global-bundle.pem --username cs516 --password
WARNING: argument --ssl is deprecated and will be removed. Use --tls instead.
WARNING: argument --sslCAFile is deprecated and will be removed. Use --tlsCAFile instead.
Current Mongosh Log ID: 670b050780b3b42d0efe6910
Connecting to: mongodb://<credentials>@docdb-2024-10-12-22-48-07.cluster-ctgioo82q975.us-east-1.docdb.amazonaws.com:27017/?directConnection=true&tls=true&tlsCAFile=global-bundle.pem&a
Using MongoDB: 5.0.0
Using Mongosh: 2.3.2
For mongosh info see: https://www.mongodb.com/docs/mongodb-shell/
To help improve our products, anonymous usage data is collected and sent to MongoDB periodically (https://www.mongodb.com/legal/privacy-policy).
You can opt-out by running the disableTelemetry() command.
Warning: Non-Genuine MongoDB Detected
This server or service appears to be an emulation of MongoDB rather than an official MongoDB product.
Some documented MongoDB features may work differently, be entirely missing or incomplete, or have unexpected performance characteristics.
To learn more please visit: https://dochub.mongodb.org/core/non-genuine-mongodb-server-warning.
rs0 [direct: primary] test> exit
[ec2-user@ip-172-31-41-129 ~]$ sudo yum install git -y
Last metadata expiration check: 0:16:34 ago on Sat Oct 12 23:12:50 2024.
Dependencies resolved.
Package Architecture Version
Installing:
git x86_64 2.40.1-1.amzn2023.0.3
Installing dependencies:
git-core x86_64 2.40.1-1.amzn2023.0.3
git-core-doc noarch 2.40.1-1.amzn2023.0.3
perl-Error noarch 1:0.17029-5.amzn2023.0.2
perl-File-Find noarch 1.37-477.amzn2023.0.6
perl-Git noarch 2.40.1-1.amzn2023.0.3
perl-TermReadKey x86_64 2.38-9.amzn2023.0.2
7:08 PM

```
MINGW64:/c/Users/kirub/Downloads

Complete!
[ec2-user@ip-172-31-41-129 ~]$ curl -sL https://rpm.nodesource.com/setup_20.x | sudo bash -
2024-10-12 23:29:39 - Cleaning up old repositories...
2024-10-12 23:29:39 - Old repositories removed
2024-10-12 23:29:39 - Supported architecture: x86_64
2024-10-12 23:29:39 - Added N|Solid repository for LTS version: 20.x
2024-10-12 23:29:39 - dnf available, updating...
Node.js Packages for Linux RPM based distros - x86_64
N|Solid Packages for Linux RPM based distros - x86_64
Metadata cache created.
2024-10-12 23:29:40 - Repository is configured and updated.
2024-10-12 23:29:40 - Run 'dnf install nodejs -y' to complete the installation.
2024-10-12 23:29:40 - You can use N|solid Runtime as a node.js alternative
2024-10-12 23:29:40 - To install N|solid Runtime, run: dnf install nsolid -y

[ec2-user@ip-172-31-41-129 ~]$ sudo yum install nodejs -y
Last metadata expiration check: 0:00:14 ago on Sat Oct 12 23:29:40 2024.
Dependencies resolved.
================================================================================================================================================================
 Package                                                Architecture                                                Version
================================================================================================================================================================
Installing:
 nodejs                                                 x86_64                                                      2:20.18.0-1nodesource

Transaction Summary
================================================================================================================================================================
Install  1 Package

Total download size: 36 M
Installed size: 105 M
Downloading Packages:
nodejs-20.18.0-1nodesource.x86_64.rpm
----------------------------------------------------------------------------------------------------------------------------------------------------------------
Total
Node.js Packages for Linux RPM based distros - x86_64
Importing GPG key 0x3AF28A14:
 Userid     : "Nodesource Operations <operations@nodesource.com>"
 Fingerprint: 242B 8138 31AF 0956 2B6C 46F7 6B88 DA4E 3AF2 8A14
 From       : https://rpm.nodesource.com/gpgkey/ns-operations-public.key
Key imported successfully
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
  Preparing        :
  Running scriptlet: nodejs-2:20.18.0-1nodesource.x86_64
  Installing       : nodejs-2:20.18.0-1nodesource.x86_64
  Running scriptlet: nodejs-2:20.18.0-1nodesource.x86_64
```

```
MINGW64:/c/Users/kirub/Downloads

Complete!
[ec2-user@ip-172-31-41-129 ~]$ git clone https://github.com/Thao-V/Node-DocDB
Cloning into 'Node-DocDB'...
remote: Enumerating objects: 10, done.
remote: Counting objects: 100% (10/10), done.
remote: Compressing objects: 100% (8/8), done.
remote: Total 10 (delta 1), reused 3 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (10/10), done.
Resolving deltas: 100% (1/1), done.
[ec2-user@ip-172-31-41-129 ~]$ curl -O https://truststore.pki.rds.amazonaws.com/global/global-bundle.pem
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100  149k  100  149k    0     0  3501k      0 --:--:-- --:--:-- --:--:-- 3554k
[ec2-user@ip-172-31-41-129 ~]$ cp global-bundle.pem Node-DocDB
[ec2-user@ip-172-31-41-129 ~]$ cd Node-DocDB/
[ec2-user@ip-172-31-41-129 Node-DocDB]$ npm i

added 13 packages, and audited 14 packages in 2s

1 package is looking for funding
  run `npm fund` for details

found 0 vulnerabilities
npm notice
npm notice New minor version of npm available! 10.8.2 -> 10.9.0
npm notice Changelog: https://github.com/npm/cli/releases/tag/v10.9.0
npm notice To update run: npm install -g npm@10.9.0
npm notice
```

```
[ec2-user@ip-172-31-41-129 Node-DocDB]$ nano .env
[ec2-user@ip-172-31-41-129 Node-DocDB]$ node app.js
DB connected
1 {
  acknowledged: true,
  insertedId: new ObjectId('670b0b9886465f10701c0f9ca')
}
2 { _id: new ObjectId('670b0b9886465f10701c0f9ca'), name: 'Thao' }
```

Task 2: Amazon ElastiCache - Redis Cache Implementation

* Set up an ElastiCache Redis cluster in the default VPC.

* Create an EC instance and connect to it:

- Install gcc: sudo yum install gcc

- Download redis-cli: curl -O http://download.redis.io/redis-stable.tar.gz

- Unzip the file: tar xvzf redis-stable.tar.gz

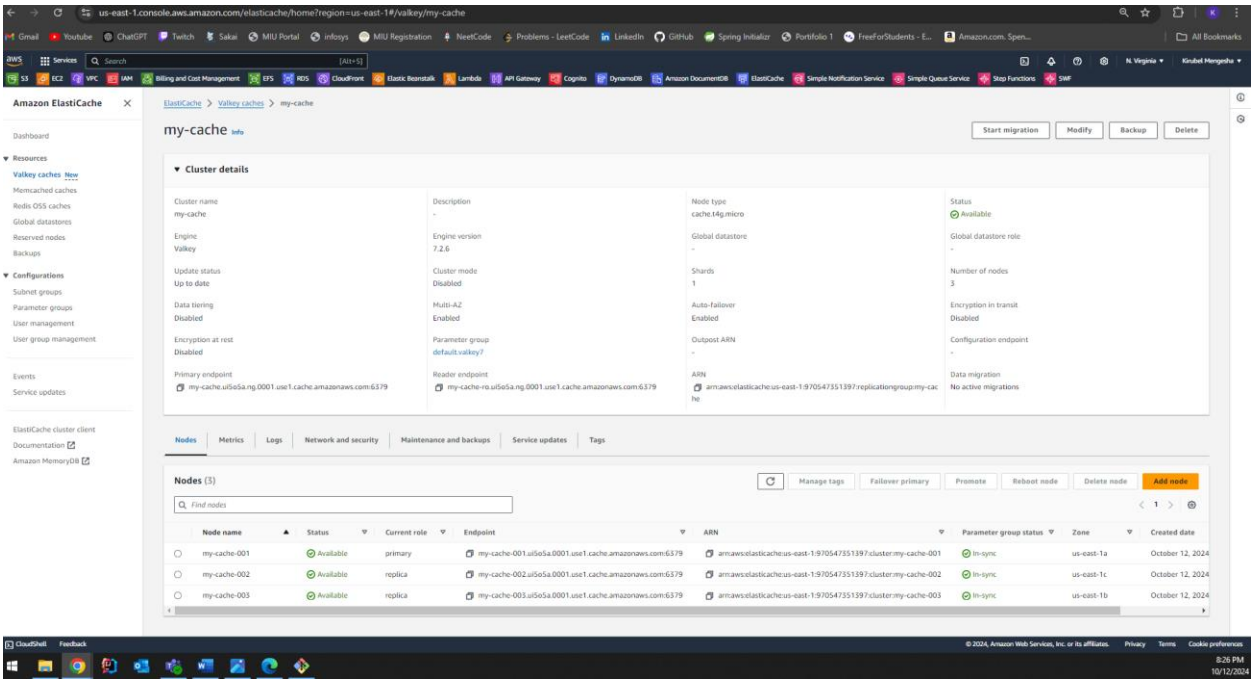
- Change the directory: cd redis-stable

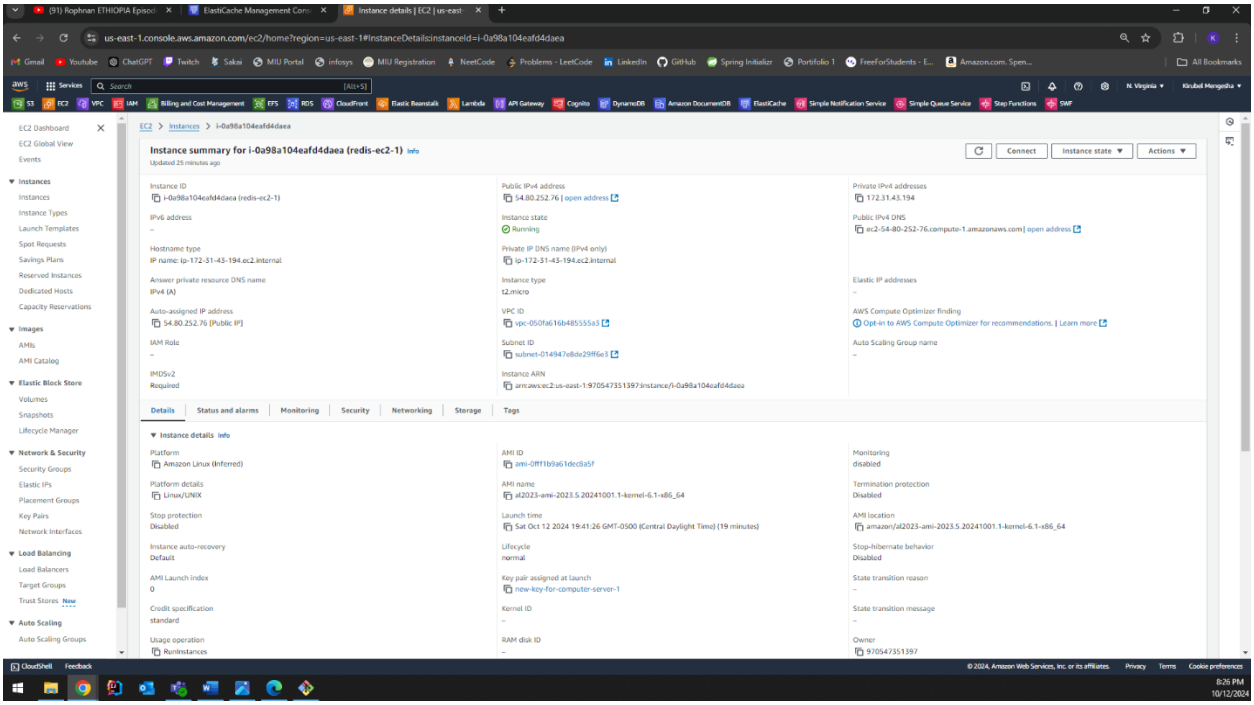
- Install redis-cli: make

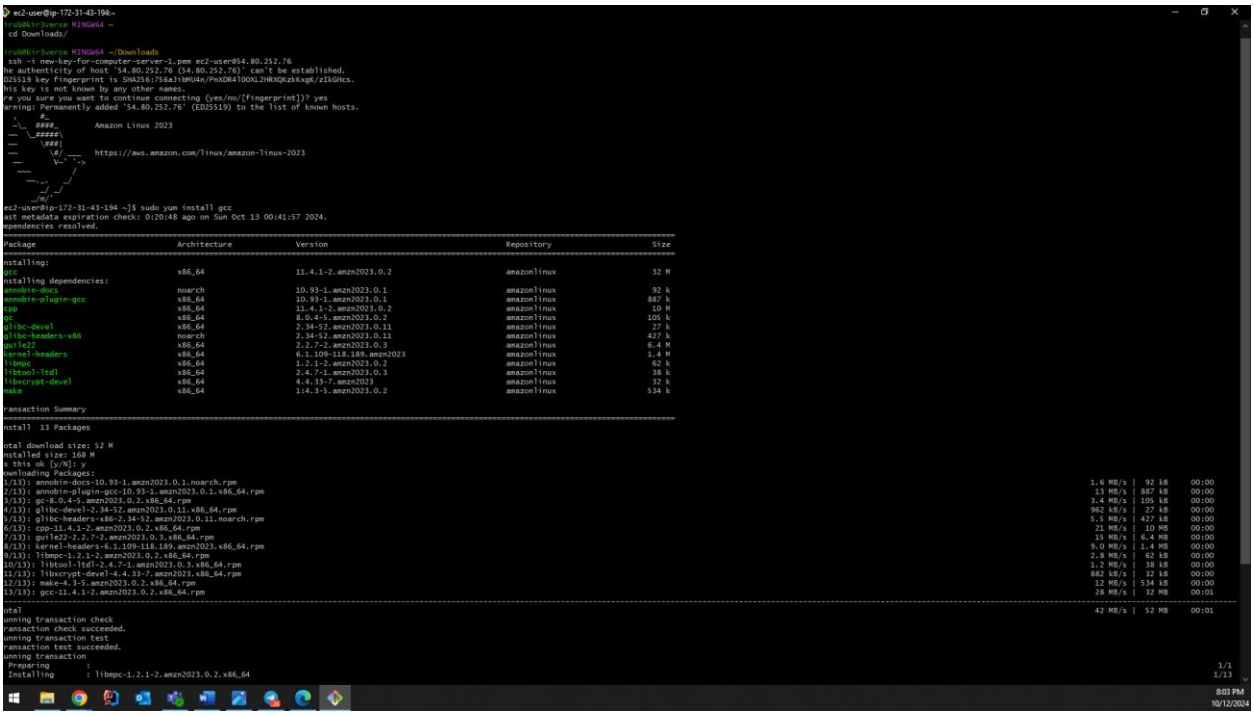
- Connect to Redis-server: redis-cli -h <private-endpoint> -p 6379

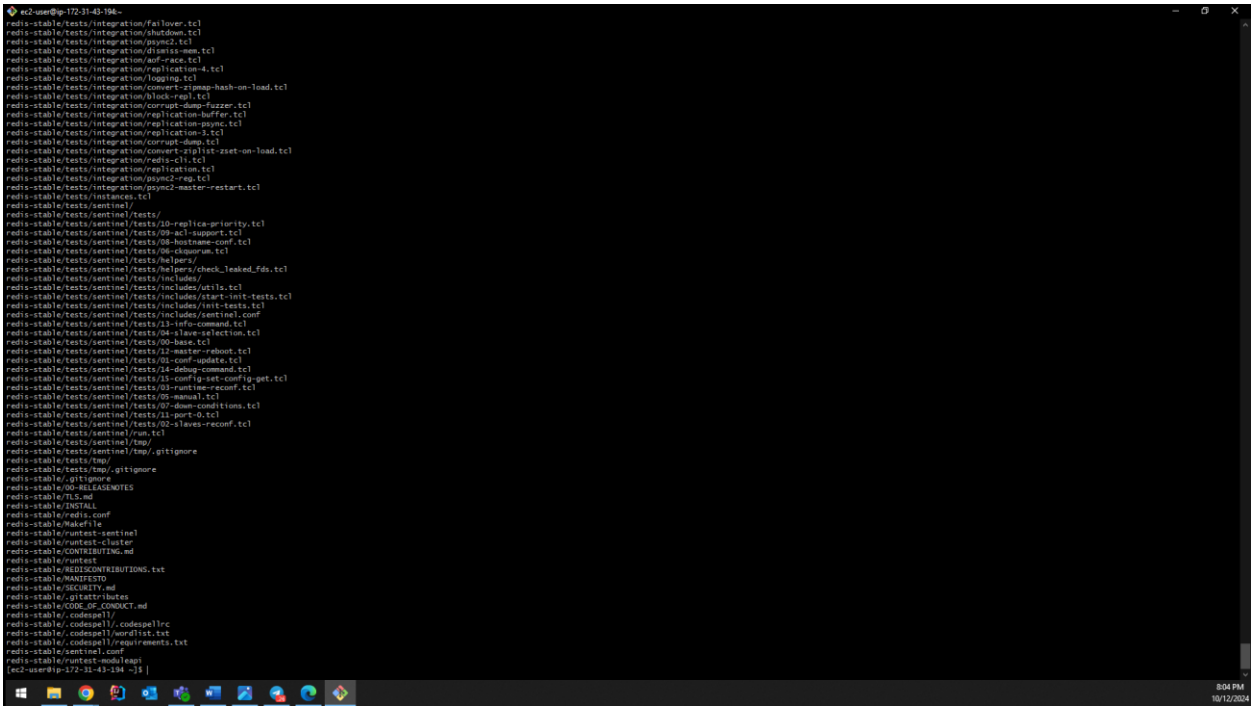
- Simple SET command: set <key> <value>

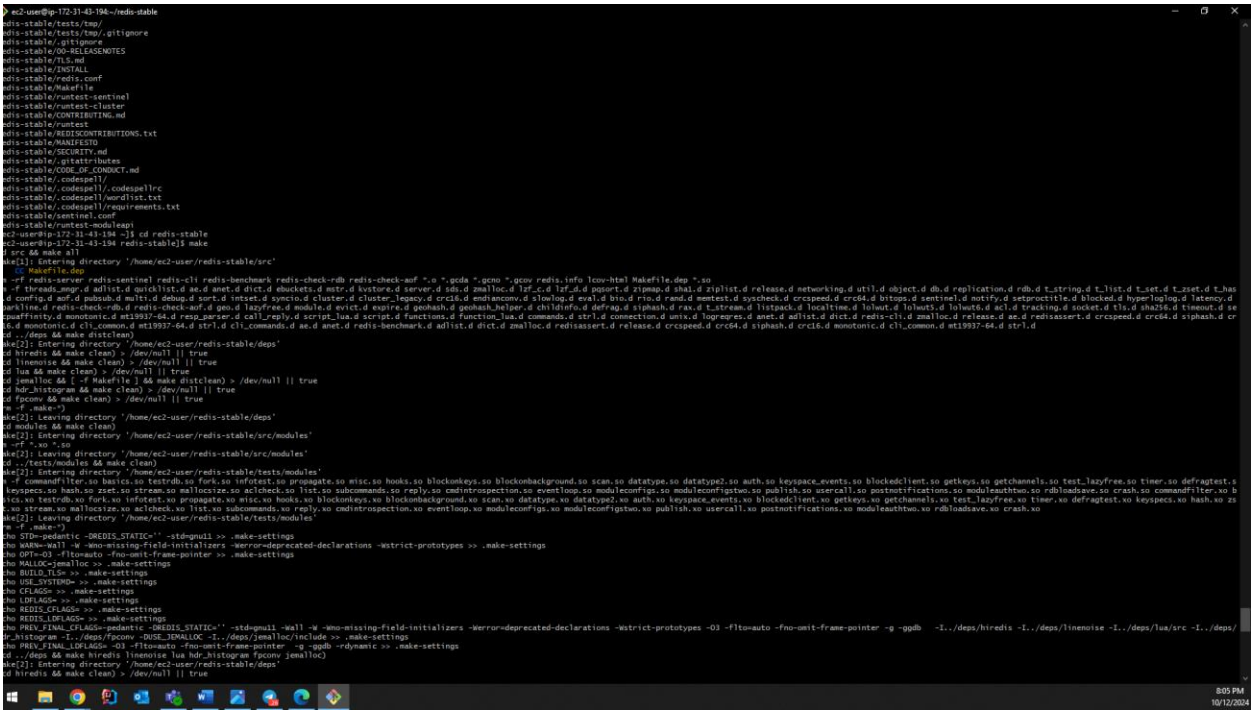
- Simple GET command: get <key>

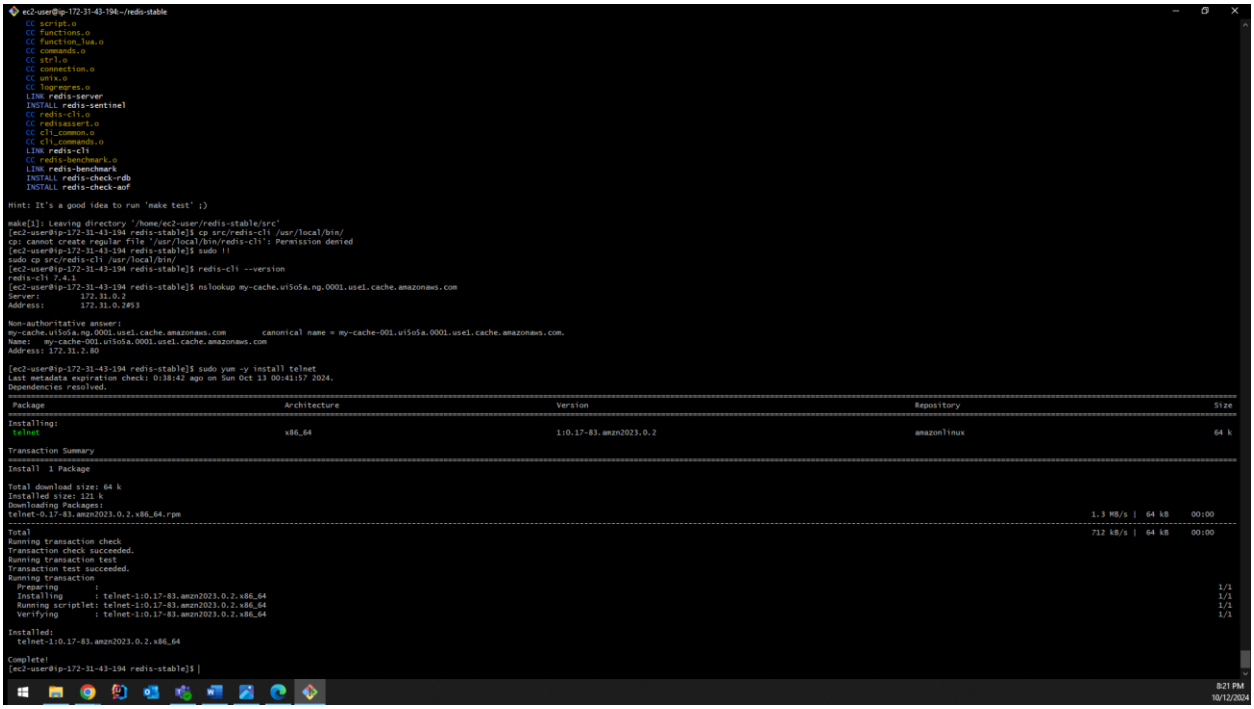


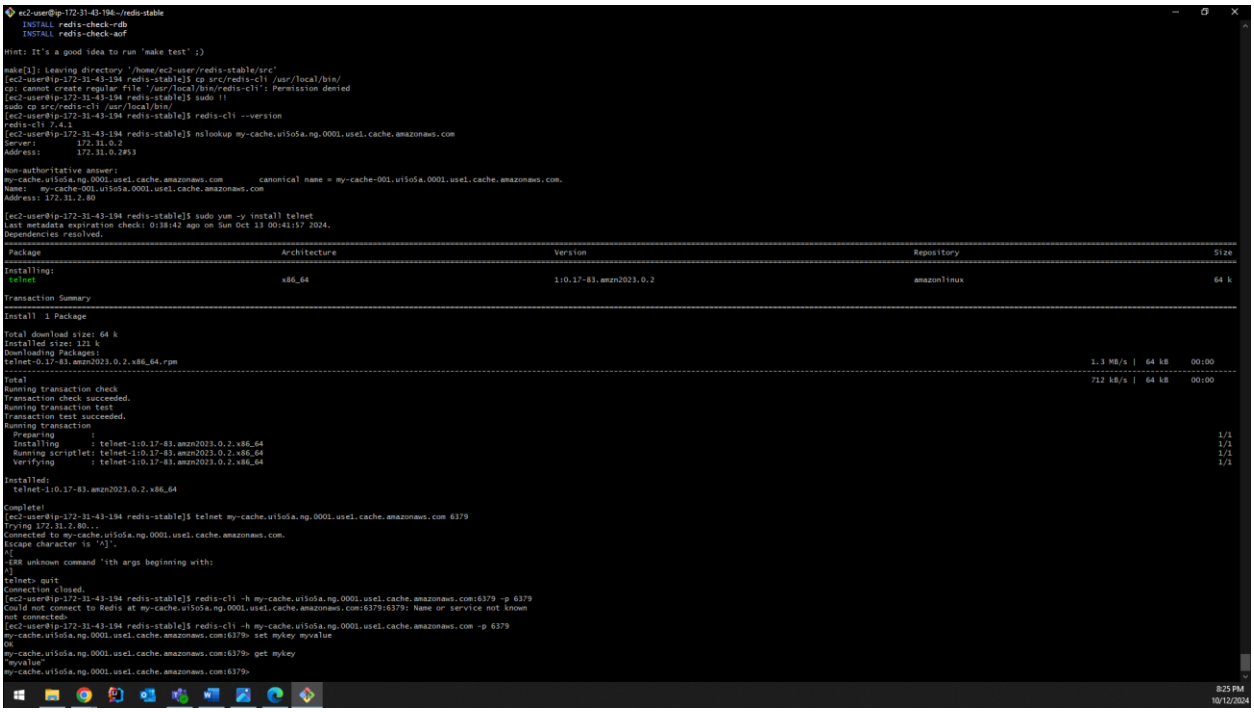

Instance summary for i-0a98a104eafd4daea (redis-ec2-1)
Connect
Instance state
Actions
Details
Status and alarms
Monitoring
Security
Networking
Storage
Tags


ec2-user@ip-172-31-43-194:~
sudo yum install gcc
Amazon Linux 2023
https://aws.amazon.com/linux/amazon-linux-2023


ec2-user@ip-172-31-43-194:~
redis-stable/tests/integration/failover.tcl
redis-stable/tests/integration/shutdown.tcl
redis-stable/tests/integration/psync2.tcl
redis-stable/tests/integration/dismiss-mem.tcl
redis-stable/tests/integration/aof-race.tcl
redis-stable/tests/integration/replication-4.tcl
redis-stable/tests/integration/logging.tcl
redis-stable/tests/integration/convert-zipmap-hash-on-load.tcl
redis-stable/tests/integration/block-repl.tcl
redis-stable/tests/integration/corrupt-dump-fuzzer.tcl
redis-stable/tests/integration/replication-buffer.tcl
redis-stable/tests/integration/replication-psync.tcl
redis-stable/tests/integration/replication-3.tcl
redis-stable/tests/integration/corrupt-dump.tcl
redis-stable/tests/integration/convert-ziplist-zset-on-load.tcl
redis-stable/tests/integration/redis-cli.tcl
redis-stable/tests/integration/replication.tcl
redis-stable/tests/integration/psync2-reg.tcl
redis-stable/tests/integration/psync2-master-restart.tcl
redis-stable/tests/instances.tcl
redis-stable/tests/sentinel
redis-stable/tests/sentinel/tests/
redis-stable/tests/sentinel/tests/10-replica-priority.tcl
redis-stable/tests/sentinel/tests/09-acl-support.tcl
redis-stable/tests/sentinel/tests/08-hostname-conf.tcl
redis-stable/tests/sentinel/tests/06-ckquorum.tcl
redis-stable/tests/sentinel/tests/helpers/
redis-stable/tests/sentinel/tests/helpers/check_leaked_fds.tcl
redis-stable/tests/sentinel/tests/includes/
redis-stable/tests/sentinel/tests/includes/utils.tcl
redis-stable/tests/sentinel/tests/includes/start-init-tests.tcl
redis-stable/tests/sentinel/tests/includes/init-tests.tcl
redis-stable/tests/sentinel/tests/includes/sentinel.conf
redis-stable/tests/sentinel/tests/13-info-command.tcl
redis-stable/tests/sentinel/tests/04-slave-selection.tcl
redis-stable/tests/sentinel/tests/00-base.tcl
redis-stable/tests/sentinel/tests/12-master-reboot.tcl
redis-stable/tests/sentinel/tests/01-conf-update.tcl
redis-stable/tests/sentinel/tests/14-debug-command.tcl
redis-stable/tests/sentinel/tests/15-config-set-config-get.tcl
redis-stable/tests/sentinel/tests/03-runtime-reconf.tcl
redis-stable/tests/sentinel/tests/05-manual.tcl
redis-stable/tests/sentinel/tests/07-down-conditions.tcl
redis-stable/tests/sentinel/tests/11-port-0.tcl
redis-stable/tests/sentinel/tests/02-slaves-reconf.tcl
redis-stable/tests/sentinel/run.tcl
redis-stable/tests/sentinel/tmp/
redis-stable/tests/sentinel/tmp/.gitignore
redis-stable/tests/tmp/
redis-stable/tests/tmp/.gitignore
redis-stable/.gitignore
redis-stable/00-RELEASENOTES
redis-stable/TLS.md
redis-stable/INSTALL
redis-stable/redis.conf
redis-stable/Makefile
redis-stable/runtest-sentinel
redis-stable/runtest-cluster
redis-stable/CONTRIBUTING.md
redis-stable/runtest
redis-stable/REDISCONTRIBUTIONS.txt
redis-stable/MANIFESTO
redis-stable/SECURITY.md
redis-stable/.gitattributes
redis-stable/CODE_OF_CONDUCT.md
redis-stable/.codespell/
redis-stable/.codespell/.codespellrc
redis-stable/.codespell/wordlist.txt
redis-stable/.codespell/requirements.txt
redis-stable/sentinel.conf
redis-stable/runtest-moduleapi
[ec2-user@ip-172-31-43-194 ~]$
8:04 PM
10/12/2024


ec2-user@ip-172-31-43-194:~/redis-stable
dis-stable/tests/tmp/
dis-stable/tests/tmp/.gitignore
dis-stable/.gitignore
dis-stable/00-RELEASENOTES
dis-stable/TLS.md
dis-stable/INSTALL
dis-stable/redis.conf
dis-stable/Makefile
dis-stable/runtest-sentinel
dis-stable/runtest-cluster
dis-stable/CONTRIBUTING.md
dis-stable/runtest
dis-stable/REDISCONTRIBUTIONS.txt
dis-stable/MANIFESTO
dis-stable/SECURITY.md
dis-stable/.gitattributes
dis-stable/CODE_OF_CONDUCT.md
dis-stable/.codespell/
dis-stable/.codespell/.codespellrc
dis-stable/.codespell/wordlist.txt
dis-stable/.codespell/requirements.txt
dis-stable/sentinel.conf
dis-stable/runtest-moduleapi
2-user@ip-172-31-43-194 ~]$ cd redis-stable
2-user@ip-172-31-43-194 redis-stable]$ make
 src && make all
ke[1]: Entering directory '/home/ec2-user/redis-stable/src'
  CC Makefile.dep
 -rf redis-server redis-sentinel redis-cli redis-benchmark redis-check-rdb redis-check-aof *.o *.gcda *.gcno *.gcov redis.info lcov-html Makefile.dep *.so
 -f threads_mngr.d adlist.d quicklist.d ae.d anet.d dict.d ebuckets.d mstr.d kvstore.d server.d sds.d zmalloc.d lzf_c.d lzf_d.d pqsort.d zipmap.d sha1.d ziplist.d release.d networking.d util.d object.d db.d replication.d rdb.d t_string.d t_list.d t_set.d t_zset.d t_has
d config.d aof.d pubsub.d multi.d debug.d sort.d intset.d syncio.d cluster.d cluster_legacy.d crc16.d endianconv.d slowlog.d eval.d bio.d rio.d rand.d memtest.d syscheck.d crcspeed.d crc64.d bitops.d sentinel.d notify.d setproctitle.d blocked.d hyperloglog.d latency.d
harkline.d redis-check-rdb.d redis-check-aof.d geo.d lazyfree.d module.d evict.d expire.d geohash.d geohash_helper.d childinfo.d defrag.d siphash.d rax.d t_stream.d listpack.d localtime.d lolwut.d lolwut5.d lolwut6.d acl.d tracking.d socket.d tls.d sha256.d timeout.d se
puaffinity.d monotonic.d mt19937-64.d resp_parser.d call_reply.d script_lua.d script.d functions.d function_lua.d commands.d strl.d connection.d unix.d logreqres.d anet.d adlist.d dict.d redis-cli.d zmalloc.d release.d ae.d redisassert.d crcspeed.d crc64.d siphash.d cr
16.d monotonic.d cli_common.d mt19937-64.d strl.d cli_commands.d ae.d anet.d redis-benchmark.d adlist.d dict.d zmalloc.d redisassert.d release.d crcspeed.d crc64.d siphash.d crc16.d monotonic.d cli_common.d mt19937-64.d strl.d
d ../deps && make distclean)
ke[2]: Entering directory '/home/ec2-user/redis-stable/deps'
d hiredis && make clean) > /dev/null || true
d linenoise && make clean) > /dev/null || true
d lua && make clean) > /dev/null || true
d jemalloc && [-f Makefile] && make distclean) > /dev/null || true
d hdr_histogram && make clean) > /dev/null || true
d fpconv && make clean) > /dev/null || true
m -f .make-*)
ke[2]: Leaving directory '/home/ec2-user/redis-stable/deps'
d modules && make clean)
ke[2]: Entering directory '/home/ec2-user/redis-stable/src/modules'
 -rf *.xo *.so
ke[2]: Leaving directory '/home/ec2-user/redis-stable/src/modules'
d ../tests/modules && make clean)
ke[2]: Entering directory '/home/ec2-user/redis-stable/tests/modules'
 -f commandfilter.so basics.so testrdb.so fork.so infotest.so propagate.so misc.so hooks.so blockonkeys.so blockonbackground.so scan.so datatype.so datatype2.so auth.so keyspace_events.so blockedclient.so getkeys.so getchannels.so test_lazyfree.so timer.so defragtest.s
 keyspecs.so hash.so zset.so stream.so mallocsize.so aclcheck.so list.so subcommands.so reply.so cmdintrospection.so eventloop.so moduleconfigs.so moduleconfigstwo.so publish.so usercall.so postnotifications.so moduleauthtwo.so rdbloadsave.so crash.so commandfilter.xo b
ics.xo testrdb.xo fork.xo infotest.xo propagate.xo misc.xo hooks.xo blockonkeys.xo blockonbackground.xo scan.xo datatype.xo datatype2.xo auth.xo keyspace_events.xo blockedclient.xo getkeys.xo getchannels.xo test_lazyfree.xo timer.xo defragtest.xo keyspecs.xo hash.xo zs
t.xo stream.xo mallocsize.xo aclcheck.xo list.xo subcommands.xo reply.xo cmdintrospection.xo eventloop.xo moduleconfigs.xo moduleconfigstwo.xo publish.xo usercall.xo postnotifications.xo moduleauthtwo.xo rdbloadsave.xo crash.xo
ke[2]: Leaving directory '/home/ec2-user/redis-stable/tests/modules'
m -f .make-*)
ho STD=-pedantic -DREDIS_STATIC='' -std=gnu11 >> .make-settings
ho WARN=-Wall -W -Wno-missing-field-initializers -Werror=deprecated-declarations -Wstrict-prototypes >> .make-settings
ho OPT=-O3 -flto=auto -fno-omit-frame-pointer >> .make-settings
ho MALLOC=jemalloc >> .make-settings
ho BUILD_TLS= >> .make-settings
ho USE_SYSTEMD= >> .make-settings
ho CFLAGS= >> .make-settings
ho LDFLAGS= >> .make-settings
ho REDIS_CFLAGS= >> .make-settings
ho REDIS_LDFLAGS= >> .make-settings
ho PREV_FINAL_CFLAGS=-pedantic -DREDIS_STATIC='' -std=gnu11 -Wall -W -Wno-missing-field-initializers -Werror=deprecated-declarations -Wstrict-prototypes -O3 -flto=auto -fno-omit-frame-pointer -g -ggdb   -I../deps/hiredis -I../deps/linenoise -I../deps/lua/src -I../deps/
dr_histogram -I../deps/fpconv -DUSE_JEMALLOC -I../deps/jemalloc/include >> .make-settings
ho PREV_FINAL_LDFLAGS=-O3 -flto=auto -fno-omit-frame-pointer -g -ggdb -rdynamic >> .make-settings
d ../deps && make hiredis linenoise lua hdr_histogram fpconv jemalloc)
ke[2]: Entering directory '/home/ec2-user/redis-stable/deps'
d hiredis && make clean) > /dev/null || true
8:05 PM
10/12/2024


ec2-user@ip-172-31-43-194:~/redis-stable
CC script.o
CC functions.o
CC function_lua.o
CC commands.o
CC strl.o
CC connection.o
CC unix.o
CC logreqres.o
LINK redis-server
INSTALL redis-sentinel
CC redis-cli.o
CC redisassert.o
CC cli_common.o
CC cli_commands.o
LINK redis-cli
CC redis-benchmark.o
LINK redis-benchmark
INSTALL redis-check-rdb
INSTALL redis-check-aof
Hint: It's a good idea to run 'make test' ;)
make[1]: Leaving directory '/home/ec2-user/redis-stable/src'
[ec2-user@ip-172-31-43-194 redis-stable]$ cp src/redis-cli /usr/local/bin/
cp: cannot create regular file '/usr/local/bin/redis-cli': Permission denied
[ec2-user@ip-172-31-43-194 redis-stable]$ sudo !!
sudo cp src/redis-cli /usr/local/bin/
[ec2-user@ip-172-31-43-194 redis-stable]$ redis-cli --version
redis-cli 7.4.1
[ec2-user@ip-172-31-43-194 redis-stable]$ nslookup my-cache.ui5o5a.ng.0001.use1.cache.amazonaws.com
Server: 172.31.0.2
Address: 172.31.0.2#53
Non-authoritative answer:
my-cache.ui5o5a.ng.0001.use1.cache.amazonaws.com canonical name = my-cache-001.ui5o5a.0001.use1.cache.amazonaws.com.
Name: my-cache-001.ui5o5a.0001.use1.cache.amazonaws.com
Address: 172.31.2.80
[ec2-user@ip-172-31-43-194 redis-stable]$ sudo yum -y install telnet
Last metadata expiration check: 0:38:42 ago on Sun Oct 13 00:41:57 2024.
Dependencies resolved.
Package Architecture Version Repository Size
Installing:
telnet x86_64 1:0.17-83.amzn2023.0.2 amazonlinux 64 k
Transaction Summary
Install 1 Package
Total download size: 64 k
Installed size: 121 k
Downloading Packages:
telnet-0.17-83.amzn2023.0.2.x86_64.rpm 1.3 MB/s | 64 kB 00:00
Total 712 kB/s | 64 kB 00:00
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
Preparing :
Installing : telnet-1:0.17-83.amzn2023.0.2.x86_64
Running scriptlet: telnet-1:0.17-83.amzn2023.0.2.x86_64
Verifying : telnet-1:0.17-83.amzn2023.0.2.x86_64
Installed:
telnet-1:0.17-83.amzn2023.0.2.x86_64
Complete!
[ec2-user@ip-172-31-43-194 redis-stable]$
8:21 PM
10/12/2024


ec2-user@ip-172-31-43-194:~/redis-stable
INSTALL redis-check-rdb
INSTALL redis-check-aof
Hint: It's a good idea to run 'make test' ;)
make[1]: Leaving directory '/home/ec2-user/redis-stable/src'
[ec2-user@ip-172-31-43-194 redis-stable]$ cp src/redis-cli /usr/local/bin/
cp: cannot create regular file '/usr/local/bin/redis-cli': Permission denied
[ec2-user@ip-172-31-43-194 redis-stable]$ sudo !!
sudo cp src/redis-cli /usr/local/bin/
[ec2-user@ip-172-31-43-194 redis-stable]$ redis-cli --version
redis-cli 7.4.1
[ec2-user@ip-172-31-43-194 redis-stable]$ nslookup my-cache.ui5o5a.ng.0001.use1.cache.amazonaws.com
Server: 172.31.0.2
Address: 172.31.0.2#53
Non-authoritative answer:
my-cache.ui5o5a.ng.0001.use1.cache.amazonaws.com canonical name = my-cache-001.ui5o5a.0001.use1.cache.amazonaws.com.
Name: my-cache-001.ui5o5a.0001.use1.cache.amazonaws.com
Address: 172.31.2.80
[ec2-user@ip-172-31-43-194 redis-stable]$ sudo yum -y install telnet
Last metadata expiration check: 0:38:42 ago on Sun Oct 13 00:41:57 2024.
Dependencies resolved.
Package Architecture Version Repository Size
Installing:
telnet x86_64 1:0.17-83.amzn2023.0.2 amazonlinux 64 k
Transaction Summary
Install 1 Package
Total download size: 64 k
Installed size: 121 k
Downloading Packages:
telnet-0.17-83.amzn2023.0.2.x86_64.rpm 1.3 MB/s | 64 kB 00:00
Total 712 kB/s | 64 kB 00:00
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
Preparing :
Installing : telnet-1:0.17-83.amzn2023.0.2.x86_64
Running scriptlet: telnet-1:0.17-83.amzn2023.0.2.x86_64
Verifying : telnet-1:0.17-83.amzn2023.0.2.x86_64
Installed:
telnet-1:0.17-83.amzn2023.0.2.x86_64
Complete!
[ec2-user@ip-172-31-43-194 redis-stable]$ telnet my-cache.ui5o5a.ng.0001.use1.cache.amazonaws.com 6379
Trying 172.31.2.80...
Connected to my-cache.ui5o5a.ng.0001.use1.cache.amazonaws.com.
Escape character is '^]'.
^[
-ERR unknown command 'ith args beginning with:
^]
telnet> quit
Connection closed.
[ec2-user@ip-172-31-43-194 redis-stable]$ redis-cli -h my-cache.ui5o5a.ng.0001.use1.cache.amazonaws.com:6379 -p 6379
Could not connect to Redis at my-cache.ui5o5a.ng.0001.use1.cache.amazonaws.com:6379:6379: Name or service not known
not connected>
[ec2-user@ip-172-31-43-194 redis-stable]$ redis-cli -h my-cache.ui5o5a.ng.0001.use1.cache.amazonaws.com -p 6379
my-cache.ui5o5a.ng.0001.use1.cache.amazonaws.com:6379> set mykey myvalue
OK
my-cache.ui5o5a.ng.0001.use1.cache.amazonaws.com:6379> get mykey
"myvalue"
my-cache.ui5o5a.ng.0001.use1.cache.amazonaws.com:6379>
8:25 PM
10/12/2024