

Figure 1: Creating Cluster (Instance Hosted)

2. Create a database user

This first user will have [atlasAdmin](#) permissions for this project. You'll need your database user's credentials in the next step.

Username

admin

Password

admin

HIDE

Copy

Create Database User

Figure 2: Create a database user

Figure 1 & Figure 2 represents steps to follow on MongoDB Atlas website (<https://cloud.mongodb.com/>).

Compass

New connection +

Saved connections

Recents

New Connection

Connect to a MongoDB deployment

URI ⓘ Edit Connection String ☐

mongodb+srv://admin:*****@tutorial6.sp5czon.mongodb.net/

Advanced Connection Options

General

Authentication

TLS/SSL

Proxy/SSH

In-Use Encryption

Advanced

Authentication Method

None

Username/Password

OIDC (Preview)

X.509

Kerberos

LDAP

AWS IAM

Username

admin

Password

Authentication Database ⓘ

Optional

Authentication Mechanism

Save

Save & Connect

Connect

Figure 3: Connecting to instance

Create Database

Database Name

mydatabase

Collection Name

☐ Time-Series

Time-series collections efficiently store sequences of measurements over a period of time. [Learn More](#)

☒ Additional preferences (e.g. Custom collation, Capped, Clustered collections)

☐ Capped Collection

Fixed-size collections that support high-throughput operations that insert and retrieve documents based on insertion order. [Learn More](#)

☐ Use Custom Collation

Cancel

Create Database

Figure 4: Create Database and initial collection (Create a simple database schema and attach to the instance)

The screenshot displays the MongoDB Atlas web interface. On the left sidebar, the 'test' collection under the 'mydatabase' database is selected. The main panel shows the 'Documents' tab for 'mydatabase.test', indicating 0 documents and 1 index. A message states 'This collection has no data'. Below the interface, a terminal window shows the following commands and output:

```
> _MONGOSH
> db.createDatabase("mydatabase")
> use mydatabase
< switched to db mydatabase
> db.createCollection("test")
< { ok: 1 }
Atlas atlas-gqj3is-shard-0 [primary] mydatabase>
```

Figure 5: Create a collection

```
> db.test.insertMany([
  { name: "John", age: 30 },
  { name: "Jane", age: 25 },
  { name: "Tom", age: 40 },
  { name: "John 1", age: 20 },
  { name: "Jane 2", age: 22 },
  { name: "Tom 3", age: 10 },
  {name: "adkfj", age: 3},
  {name: "afsadfadgfkbn", age: 11},
  {name: "sldfkgn", age:35}
]);
< {
  acknowledged: true,
  insertedIds: {
    '0': ObjectId("64a818e6ee3b2295d0b77798"),
    '1': ObjectId("64a818e6ee3b2295d0b77799"),
    '2': ObjectId("64a818e6ee3b2295d0b7779a"),
    '3': ObjectId("64a818e6ee3b2295d0b7779b"),
    '4': ObjectId("64a818e6ee3b2295d0b7779c"),
    '5': ObjectId("64a818e6ee3b2295d0b7779d"),
    '6': ObjectId("64a818e6ee3b2295d0b7779e"),
    '7': ObjectId("64a818e6ee3b2295d0b7779f"),
    '8': ObjectId("64a818e6ee3b2295d0b777a0")
  }
}
```

Figure 6: Insert Query (A query to insert multiple records and result)

```
> db.test.find()
< {
  _id: ObjectId("64a818e6ee3b2295d0b77798"),
  name: 'John',
  age: 30
}
{
  _id: ObjectId("64a818e6ee3b2295d0b77799"),
  name: 'Jane',
  age: 25
}
{
  _id: ObjectId("64a818e6ee3b2295d0b7779a"),
  name: 'Tom',
  age: 40
}
{
  _id: ObjectId("64a818e6ee3b2295d0b7779b"),
  name: 'John 1',
  age: 20
}
{
  _id: ObjectId("64a818e6ee3b2295d0b7779c"),
  name: 'Jane 2',
  age: 22
}
{
  id: ObjectId("64a818e6ee3b2295d0b7779d").
```

Figure 7: Retrieval query to get all records. (A query to retrieve multiple records and result)

```
{
  _id: ObjectId("64a818e6ee3b2295d0b777a0"),
  name: 'sldfkgn',
  age: 35
}
> db.test.updateOne(
  { _id: ObjectId("64a818e6ee3b2295d0b777a0") },
  { $set: { age: 40 } }
);
< {
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
```

Figure 8: Update query with old record (A query to update a record and result)

```
> db.test.findOne({_id: ObjectId("64a818e6ee3b2295d0b777a0")})
< {
  _id: ObjectId("64a818e6ee3b2295d0b777a0"),
  name: 'sldfkgn',
  age: 40
}
```

Figure 9: Retrieve modified record (A query to retrieve a specific record and result)

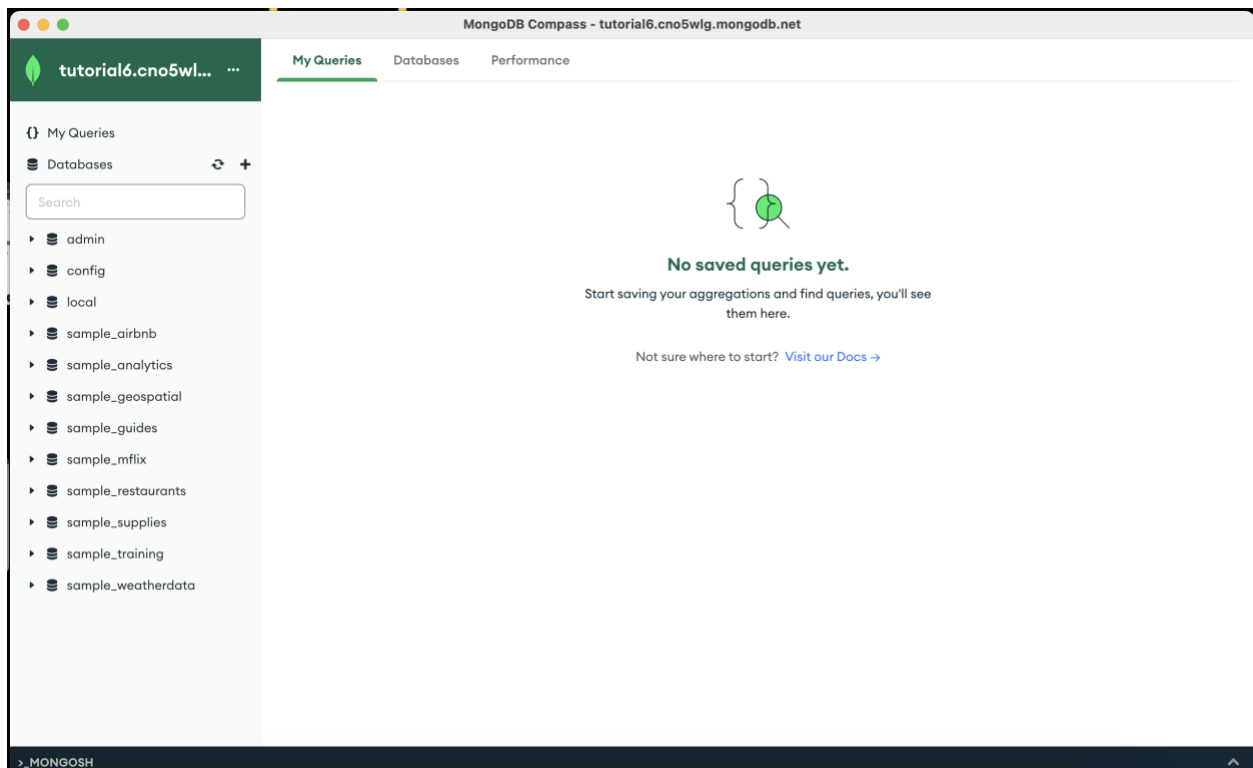


Figure 10: Database connected using created admin user

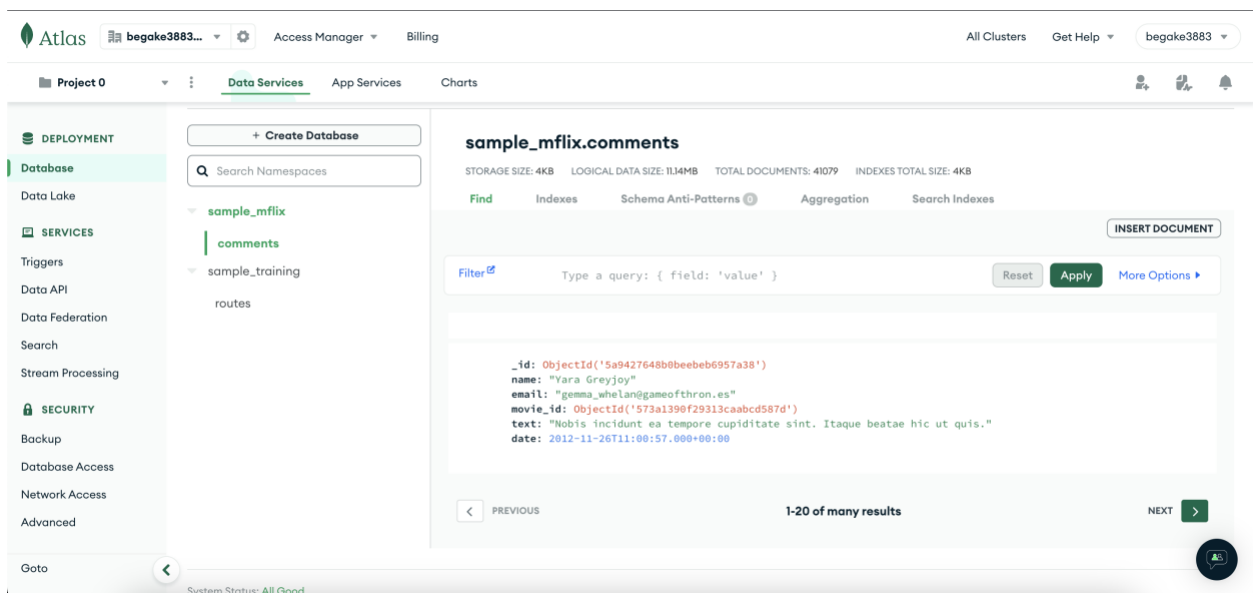


Figure 11: Sample Database schema

Figure 4, Figure 5, Figure 6, Figure 7, Figure 8, Figure 9 & Figure 10 is done on MongoDB Compass application.

Caption represents description of steps performed.