

Exposee - MongoDB

The company database stores information about employees, positions, cities, countries and departments.

This document provides details on how to access and query the database with different users.

As this document goes to GitHub, I've removed sensitive information such as server name, usernames and passwords. I've provided another document to the integrator with real credentials.

First of all - download mongosh (2.4.0) - this gives shell access to DB

<https://www.mongodb.com/try/download/shell>

Connection string for admin user. This user is admin and has access to everything:

```
mongosh "mongodb+srv://<SERVER_NAME> --apiVersion 1 --username <USERNAME>
--password <PASSWORD>
```

Once in, type this to use the company db:

```
use company;
```

These are the five collections stored in the database:

employees, positions, cities, countries, departments

Example queries:

Find all employees:

```
db.employees.find();
```

Find employee by name:

```
db.employees.findOne({ name: <name> });
```

Find all employees with salary greater than 60000:

```
db.employees.find({ salary: { $gt: 60000 } });
```

Find all employees in specific department:

```
db.employees.find({ department_id: db.departments.findOne({ name:
<department_name> })._id });
```

Insert new employee:

```
// If no id is given, mongodb will generate a unique id automatically
db.employees.insertOne({ name: <name> });
```

Bulk insert new employees:

```
db.employees.insertMany([
  { name: <name> },
  { name: <name> }
]);
```

Update existing employee:

```
db.employees.updateOne({ name: <name> }, { $set: { salary: <salary> } });
```

Bulk update existing employees:

```
db.employees.updateMany({  
  db.departments.findOne({ name: <department_name> })._id,  
  { $set {salary: <salary> } } );
```

Users:

readonly:

This user can:

- read all collections from the company db

This user cannot:

- insert anything to the company db
- update any existing entity
- delete any existing entity

salaryreadonly:

As it is right now, mongodb does not provide any way to add granularity to different collections and restrict properties given when querying a collection. However, “views” can be created and be assigned to a database user, which is basically just a new collection with only a few properties.

This user can:

- read two properties from the employee collection (salary, accountNumber)

This user cannot:

- insert anything to the company db
- update any existing entity
- delete any existing entity
- see any other collection than “salaryView”

To login as any of these users, please log out of admin and use the connection string again.

```
--username <READ_ONLY_USERNAME> --password <READ_ONLY_PASS>
```

```
--username <SALARY_ONLY_USERNAME> --password <SALARY_ONLY_PASSWORD>
```