

## Deploy Application on cloud

`RestApiWithAwsDbApplication`

```
package com;

import org.springframework.boot.SpringApplication;
import org.springframework.boot.autoconfigure.SpringBootApplication;
import org.springframework.boot.autoconfigure.domain.EntityScan;
import org.springframework.data.jpa.repository.config.EnableJpaRepositories;

@SpringBootApplication(scanBasePackages = "com")
@EntityScan(basePackages = "com.entity")
@EnableJpaRepositories(basePackages = "com.repository")
public class RestApiWithAwsDbApplication {

    public static void main(String[] args) {
        SpringApplication.run(RestApiWithAwsDbApplication.class, args);
        System.out.println("spring boot up on port number 8080");
    }
}
```

`Employee Class`

```
package com.entity;

import jakarta.persistence.Entity;
import jakarta.persistence.GeneratedValue;
import jakarta.persistence.GenerationType;
import jakarta.persistence.Id;
```

```
@Entity
public class Employee {
    @Id
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    private int eid;
    private String name;
    private float salary;
    public int getEid() {
        return eid;
    }
    public void setEid(int eid) {
        this.eid = eid;
    }
    public String getName() {
        return name;
    }
    public void setName(String name) {
        this.name = name;
    }
    public float getSalary() {
        return salary;
    }
    public void setSalary(float salary) {
        this.salary = salary;
    }
    @Override
    public String toString() {
        return "Employee [eid=" + eid + ", name=" + name + ", salary=" + salary + "]";
    }
}
```

```
}
```

#### EmployeeRepository Interface

```
package com.repository;

import org.springframework.data.jpa.repository.JpaRepository;
import org.springframework.stereotype.Repository;

import com.entity.Employee;

@Repository
public interface EmployeeRepository extends JpaRepository<Employee,
Integer>{

}
```

#### EmployeeService Class

```
package com.service;

import java.util.List;

import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Service;

import com.entity.Employee;
import com.repository.EmployeeRepository;

@Service
public class EmployeeService {

    @Autowired
    EmployeeRepository employeeRepository;

    public String storeEmployee(Employee emp) {
```

```
        employeeRepository.save(emp);

        return "Employee record stored";

    }

    public List<Employee> findAll() {
        return employeeRepository.findAll();
    }
}
```

#### EmployeeController Class

```
package com.controller;

import java.util.List;

import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.http.MediaType;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.PostMapping;
import org.springframework.web.bind.annotation.RequestBody;
import org.springframework.web.bind.annotation.RequestMapping;
import org.springframework.web.bind.annotation.RestController;

import com.entity.Employee;
import com.service.EmployeeService;

@RestController
@RequestMapping("employee")
public class EmployeeController {
```

```

@Autowired
EmployeeService employeeService;

// http://localhost:8080/employee/findAll
@GetMapping(value = "findAll", produces = MediaType.APPLICATION_JSON_VALUE)
public List<Employee> findAllEmployee() {
    return employeeService.findAll();
}

// http://localhost:8080/employee/store
//{"name":"Ravi","salary":34000}

@PostMapping(value = "store", consumes = MediaType.APPLICATION_JSON_VALUE)
public String storeEmployee(@RequestBody Employee emp) {
    return employeeService.storeEmployee(emp);
}

```

## Application.Properties

```

spring.datasource.driver-class-name=com.mysql.cj.jdbc.Driver
spring.datasource.url=jdbc:mysql://database-2.cdltsixolpkb.us-east-
1.rds.amazonaws.com:3306/awsdb
spring.datasource.username=admin
spring.datasource.password=Welcome123456
spring.jpa.hibernate.ddl-auto=update

```

## Pom.xml

```

<?xml version="1.0" encoding="UTF-8"?>
<project xmlns="https://maven.apache.org/POM/4.0.0"
xmlns:xsi="https://www.w3.org/2001/XMLSchema-instance">

```

```

xsi:schemaLocation="https://maven.apache.org/POM/4.0.0
https://maven.apache.org/xsd/maven-4.0.0.xsd">
<modelVersion>4.0.0</modelVersion>
<parent>
    <groupId>org.springframework.boot</groupId>
    <artifactId>spring-boot-starter-parent</artifactId>
    <version>3.1.8</version>
    <relativePath/> <!-- lookup parent from repository -->
</parent>
<groupId>com.example</groupId>
<artifactId>RestAPIWithAWSDb</artifactId>
<version>0.0.1-SNAPSHOT</version>
<name>RestAPIWithAWSDb</name>
<description>Demo project for Spring Boot</description>
<properties>
    <java.version>17</java.version>
</properties>
<dependencies>
    <dependency>
        <groupId>org.springframework.boot</groupId>
        <artifactId>spring-boot-starter-data-jpa</artifactId>
    </dependency>
    <dependency>
        <groupId>org.springframework.boot</groupId>
        <artifactId>spring-boot-starter-web</artifactId>
    </dependency>

    <dependency>
        <groupId>org.springframework.boot</groupId>
        <artifactId>spring-boot-devtools</artifactId>
        <scope>runtime</scope>
        <optional>true</optional>
    </dependency>
    <dependency>
        <groupId>com.mysql</groupId>
        <artifactId>mysql-connector-j</artifactId>
        <scope>runtime</scope>
    </dependency>
    <dependency>
        <groupId>org.springframework.boot</groupId>
        <artifactId>spring-boot-starter-test</artifactId>
        <scope>test</scope>
    </dependency>
</dependencies>

<build>
    <plugins>
        <plugin>
            <groupId>org.springframework.boot</groupId>
            <artifactId>spring-boot-maven-plugin</artifactId>
            <configuration>
                <image>
                    <builder>paketobuildpacks/builder-
jammy-base:latest</builder>
                </image>
            </configuration>
        </plugin>
    </plugins>
</build>

</project>

```



```
← ⌂ ▲ Not secure | 35.173.130.175:8080/employee/findAll

1 [
2   {
3     "eid": 1,
4     "name": "Siddhartha",
5     "salary": 68000
6   },
7   {
8     "eid": 2,
9     "name": "Raja",
10    "salary": 86000
11  },
12  {
13    "eid": 3,
14    "name": "Raju",
15    "salary": 84000
16  },
17  {
18    "eid": 4,
19    "name": "Amrit",
20    "salary": 171000
21  }
22 ]
```



Navigator

SCHEMAS

Filter objects

awsdb

Tables

Views

Stored Procedures

Functions

sys

Query 1



```
1 • use awsdb;
2 • show tables;
3 • desc employee
4 ✘ select * from employee;
```

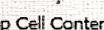
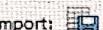
Limit to 1000 rows

Result Grid



Filter Rows:

Edit:



Export/Import:



Wrap Cell Content:

	eid	name	salary
▶	1	Siddhartha	68000
	2	Raja	86000
	3	Raju	84000
	4	Amrit	171000
•	HULL	HULL	HULL

Administration Schemas

Information

No object selected

employee 5

Output

Action Output

- | # | Time     | Action                               |
|---|----------|--------------------------------------|
| 1 | 12:24:16 | use awsdb                            |
| 2 | 12:28:54 | show tables                          |
| 3 | 12:29:12 | desc employee                        |
| 4 | 12:30:31 | select * from employee LIMIT 0, 1000 |
| 5 | 12:31:35 | select * from employee LIMIT 0, 1000 |
| 6 | 12:44:34 | select * from employee LIMIT 0, 1000 |

Message

0 row(s) affected

1 row(s) returned

3 row(s) returned

1 row(s) returned

3 row(s) returned

4 row(s) returned

Object Info Session



22°C

Haze



Search



Scanned with OKEN Scanner

```
[ec2-user@ip-172-31-34-243 ~]$ java -version
openjdk version "21.0.2" 2024-01-16 LTS
OpenJDK Runtime Environment Corretto-21.0.2.13.1 (build 21.0.2+13-LTS)
OpenJDK 64-Bit Server VM Corretto-21.0.2.13.1 (build 21.0.2+13-LTS, mixed mode, sharing)
[ec2-user@ip-172-31-34-243 ~]$ wget https://mybucket1212345672.s3.amazonaws.com/RestAPIWithAWSDb-0.0.1-SNAPSHOT.jar
--2024-02-14 07:37:36-- https://mybucket1212345672.s3.amazonaws.com/RestAPIWithAWSDb-0.0.1-SNAPSHOT.jar
Resolving mybucket1212345672.s3.amazonaws.com (mybucket1212345672.s3.amazonaws.com)... 16.182.39.89, 52.216.30.4, 52.216.36.249, ...
Connecting to mybucket1212345672.s3.amazonaws.com (mybucket1212345672.s3.amazonaws.com)|16.182.39.89|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 45027425 (43M) [binary/octet-stream]
Saving to: 'RestAPIWithAWSDb-0.0.1-SNAPSHOT.jar'

RestAPIWithAWSDb-0.0.1-SN 100%[=====] 42.94M 70.6MB/s in 0.6s

2024-02-14 07:37:37 (70.6 MB/s) - 'RestAPIWithAWSDb-0.0.1-SNAPSHOT.jar' saved [45027425]
```

```
[ec2-user@ip-172-31-34-243 ~]$ ls
RestAPIWithAWSDb-0.0.1-SNAPSHOT.jar
[ec2-user@ip-172-31-34-243 ~]$ java -jar RestAPIWithAWSDb-0.0.1-SNAPSHOT.jar
```

```
:: Spring Boot ::   (v3.1.8)

2024-02-14T07:39:19.891Z  INFO 25787 --- [           main] com.RestApiWithAwsDbApplication      : Starting RestApiWithAwsDbApplication v0.0.1-SNAPSHOT using Java 21.0.2 with PID 25787 (/home/ec2-user/RestAPIWithAWSDb-0.0.1-SNAPSHOT.jar started by ec2-user in /home/ec2-user)
2024-02-14T07:39:19.895Z  INFO 25787 --- [           main] com.RestApiWithAwsDbApplication      : No active profile set, falling back to 1 default profile: "default"
2024-02-14T07:39:22.021Z  INFO 25787 --- [           main] .s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Spring Data JPA repositories in DEFAULT mode.
2024-02-14T07:39:22.141Z  INFO 25787 --- [           main] .s.d.r.c.RepositoryConfigurationDelegate : Finished Spring Data repository scanning in 102 ms. Found 1 JPA repository interface.
2024-02-14T07:39:24.069Z  INFO 25787 --- [           main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat initialized with port(s): 8080 (http)
2024-02-14T07:39:24.097Z  INFO 25787 --- [           main] o.apache.catalina.core.StandardService : Starting service [Tomcat]
2024-02-14T07:39:24.097Z  INFO 25787 --- [           main] o.apache.catalina.core.StandardEngine : Starting Servlet engine: [Apache Tomcat/10.1.18]
2024-02-14T07:39:24.364Z  INFO 25787 --- [           main] o.a.c.c.C.[Tomcat].[localhost].[/]      : Initializing Spring embedded WebApplicationContext
2024-02-14T07:39:24.366Z  INFO 25787 --- [           main] w.s.c.ServletWebServerApplicationContext : Root WebApplicationContext: initialization finished in 4201 ms
```



```
2024-02-14T07:39:24.003Z INFO 25787 --- [tomcat initialized with port(s): 8080 (http)
2024-02-14T07:39:24.097Z INFO 25787 --- [tarting service [Tomcat]
2024-02-14T07:39:24.097Z INFO 25787 --- [tarting Servlet engine: [Apache Tomcat/10.1.18]
2024-02-14T07:39:24.364Z INFO 25787 --- [nitializing Spring embedded WebApplicationContext
2024-02-14T07:39:24.366Z INFO 25787 --- [oot WebApplicationContext: initialization completed in 4301 ms
2024-02-14T07:39:25.205Z INFO 25787 --- [HH000204: Processing PersistenceUnitInfo [name: default]
2024-02-14T07:39:25.379Z INFO 25787 --- [HH000412: Hibernate ORM core version 6.2.20.Final
2024-02-14T07:39:25.385Z INFO 25787 --- [HH000406: Using bytecode reflection optimizer
2024-02-14T07:39:25.956Z INFO 25787 --- [o LoadTimeWeaver setup: ignoring JPA class transformer
2024-02-14T07:39:26.001Z INFO 25787 --- [ikariPool-1 - Starting...
2024-02-14T07:39:26.890Z INFO 25787 --- [ikariPool-1 - Added connection com.mysql.cj.jdbc.ConnectionImpl@215a34b4
2024-02-14T07:39:26.892Z INFO 25787 --- [ikariPool-1 - Start completed.
2024-02-14T07:39:28.855Z INFO 25787 --- [HH000489: No JTA platform available (set 'hibernate.transaction.jta.platform' to enable JTA platform integration)
2024-02-14T07:39:28.951Z INFO 25787 --- [nitialized JPA EntityManagerFactory for persistence unit 'default'
2024-02-14T07:39:29.656Z WARN 25787 --- [pring.jpa.open-in-view is enabled by default. Therefore, database queries may be performed during view rendering. Explicitly configure spring.jpa.open-in-view to disable this warning
2024-02-14T07:39:30.591Z INFO 25787 --- [omcat started on port(s): 8080 (http) with context path ''
2024-02-14T07:39:30.631Z INFO 25787 --- [tarted RestApiWithAwsDbApplication
2024-02-14T07:39:30.631Z INFO 25787 --- [spring boot up on port number 8080
2024-02-14T07:44:35.924Z INFO 25787 --- [nio-8080-exec-2] o.a.c.c.C.[Tomcat].[localhost].[/]nitializing Spring DispatcherServlet 'dispatcherServlet'
2024-02-14T07:44:35.926Z INFO 25787 --- [nio-8080-exec-2] o.s.web.servlet.DispatcherServletnitializing Servlet 'dispatcherServlet'
2024-02-14T07:44:35.935Z INFO 25787 --- [nio-8080-exec-2] o.s.web.servlet.DispatcherServletompleted initialization in 6 ms
```

