

we already set up service registry now we are gonna set up admin server
zipkin tells about response time of request and data come back
admin server helps to know the health of the server

api server 1 --- server registry
api server 2 --- admin server
zipkin server

add eureka server in dependency
`@EnableEurekaServer` add to main file

`server.port=8761` -- microservices will automatically registry
`eureka.client.register-with-eureka=false` -- this is not client
`eureka.client.fetch-registry=false` -- no fetching should happen

admin server :

this will use spring activator in background but it provides ui to monitor the health of microservices

create a new spring starter project

ADD DEPENDENCY:

```
<dependency>
  <groupId>de.codecentric</groupId>
  <artifactId>spring-boot-admin-starter-server</artifactId>
</dependency>
<dependency>
  <groupId>org.springframework.boot</groupId>
  <artifactId>spring-boot-starter-web</artifactId>
</dependency>
```

Enable Admin Server by adding `@EnableAdminServer` annotation to your main class:

`server.port:8081`

`localhost:8081`

Zipkin SERVER:

1. Download Zipkin Servers: <https://zipkin.io/pages/quickstart> ---> choose java and latest version
--> click ---> zip got downloaded

now copy it and make a folder in c and paste it in new folder --zipkin folder

2. To run jar file : java -jar file-name

now open cmd -- and use `{{ java -jar zipkin-server-3.5.1-exec.jar }}` to run the zipkin server locally

3. Access that on port 9411

In cmd we will get the link paste it to get ui

Now its tym to create the first microservices:

```
add : zipkin
      spring web
      spring dev tools
      spring boot activator
      admin client
      eruka discoury client
```

finish

<http://127.0.0.1:9411/>

```
spring.application.name=microservice-1
server.port=8082
```

Eureka - Optional if you are running eureka on port 8671 if it is not there also it will work
`eureka.client.service-url.defaultZone=http://localhost:8761/eureka`

```
# Admin Server
spring.boot.admin.client.url=http://localhost:8081
```

management.endpoints.web.exposure.include=*

Zipkin - Optional to mention. It will register with ZIPKIN Automatically if it is not there also it will work

spring.zipkin.base-url=http://localhost:9411

now make controller layer :

```
@RestController
@RequestMapping("/user")
public class Controller {
    @GetMapping("/msg")
    public String userSignin()
    {
        return "it is working";
    }
}
```

then run the app go to eureka and click on the microservices : you will get this in status

<http://sasank2323:8082/actuator/info>----> remove actuator and info and add user url

<http://sasank2323:8082/user/msg>

- Design Patterns (Singleton, Factory, Strategy, etc.)