

Lab 02 RSMortgage Service Discovery Service 🡪 REST Microservice

**RSMortgage Spring Cloud Service Discovery**

Udemy Spring Cloud Course

Presented By

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**Rolling Stone Technology**

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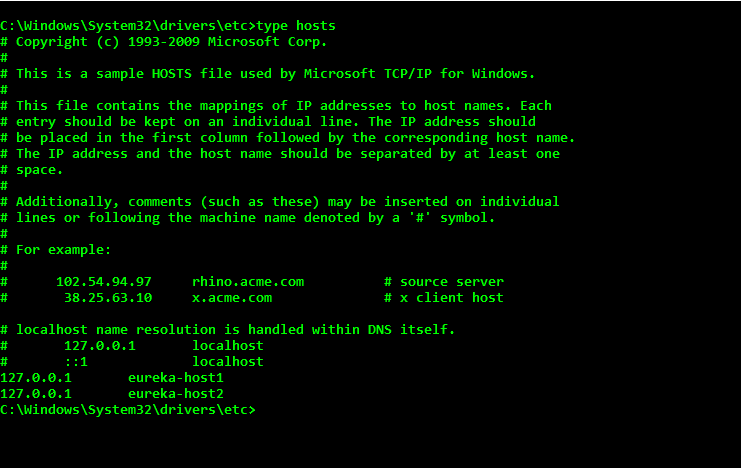
Chapter 1

*Spring Cloud Eureka Service Discovery Project Creation*

1.0 - Introduction

The purpose of this guide is to help walk through the process of creating a Spring Boot / Cloud based Service Discovery application.

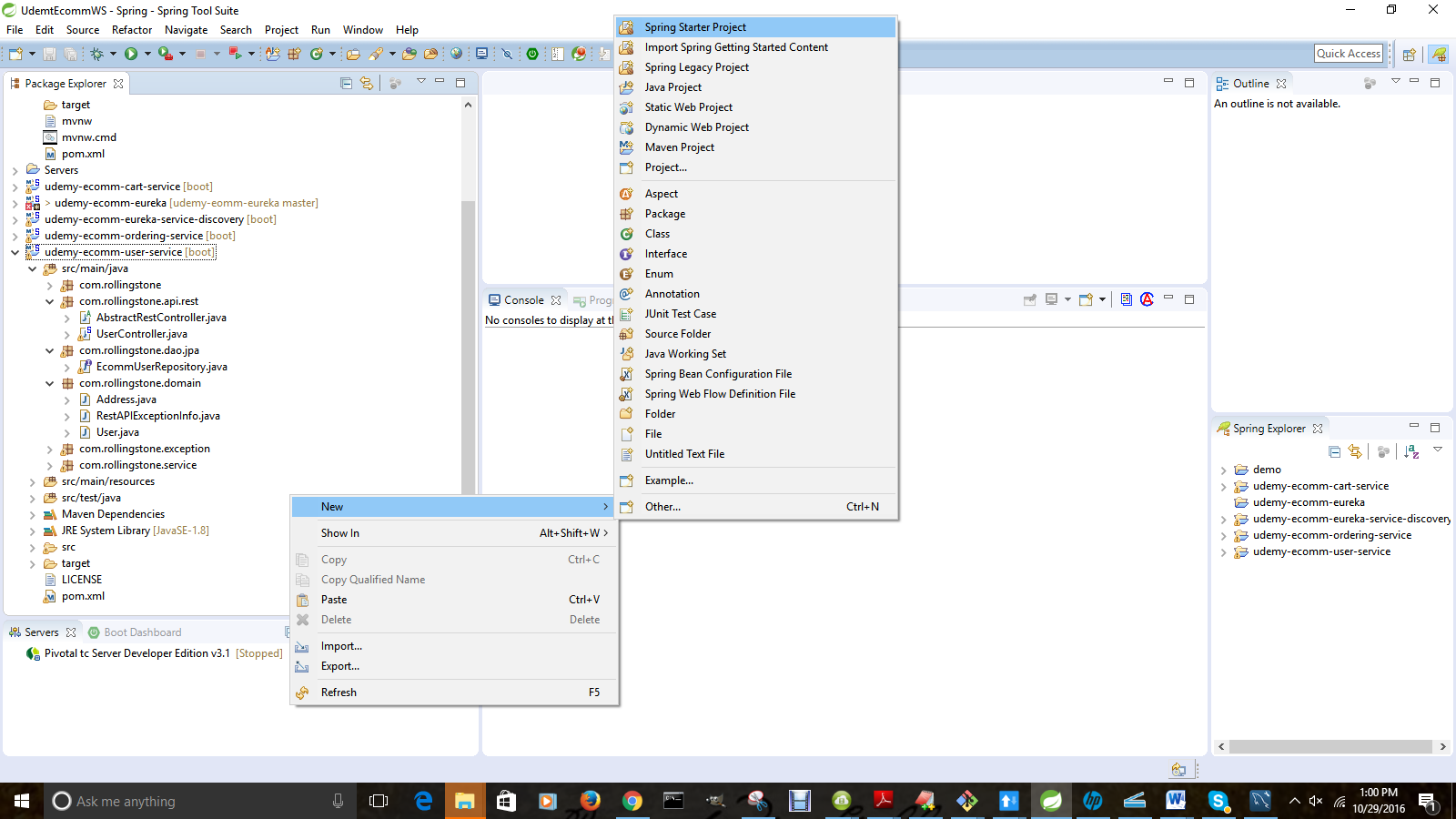
1.1 – Update the hosts file in windows to look like this



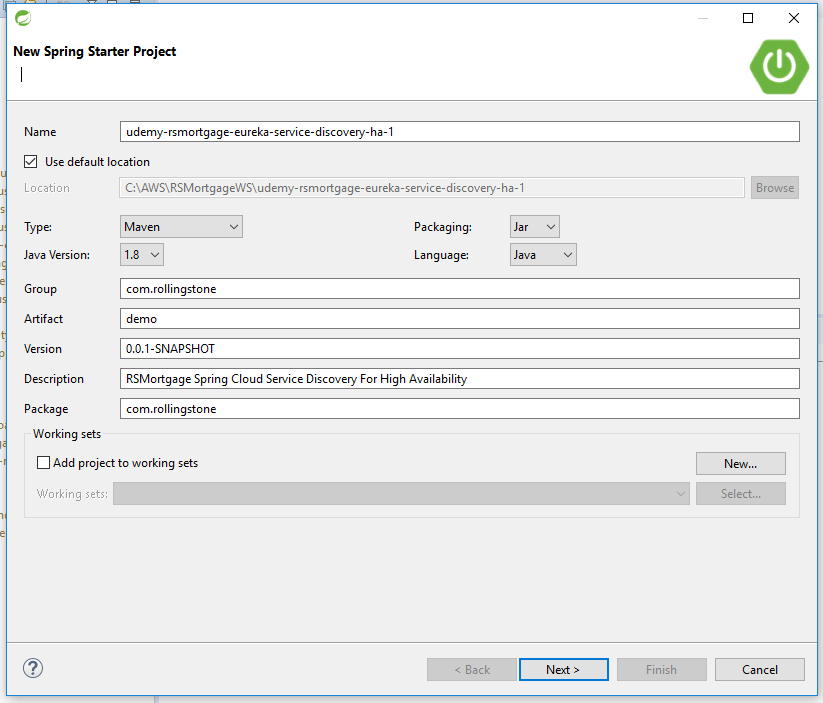
1.2 – Update the /etc/hosts file MacOS

1.3 – Update the /etc/hosts file Linux

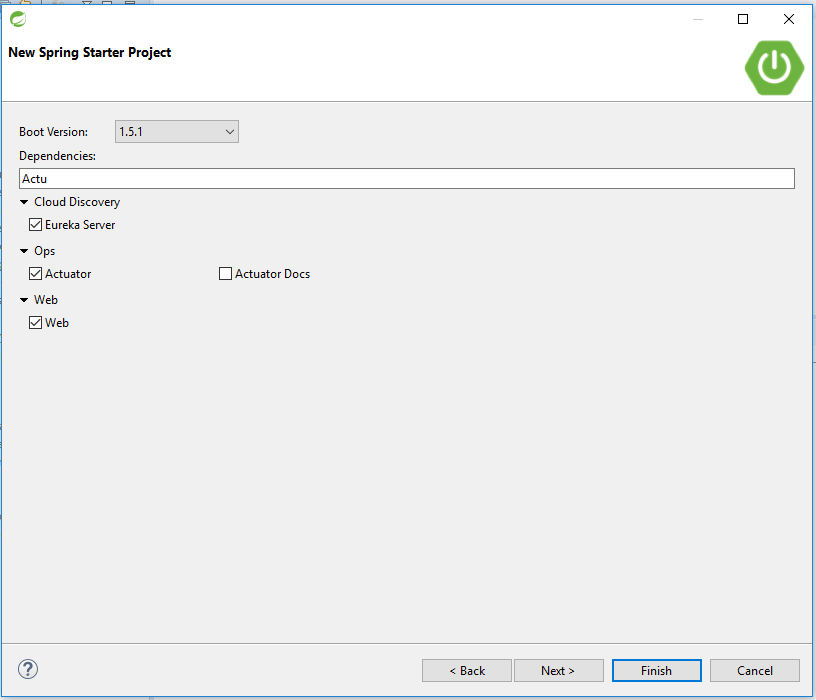
1.4 – Create a new Spring Starter Project



1.5 – Fill initial values

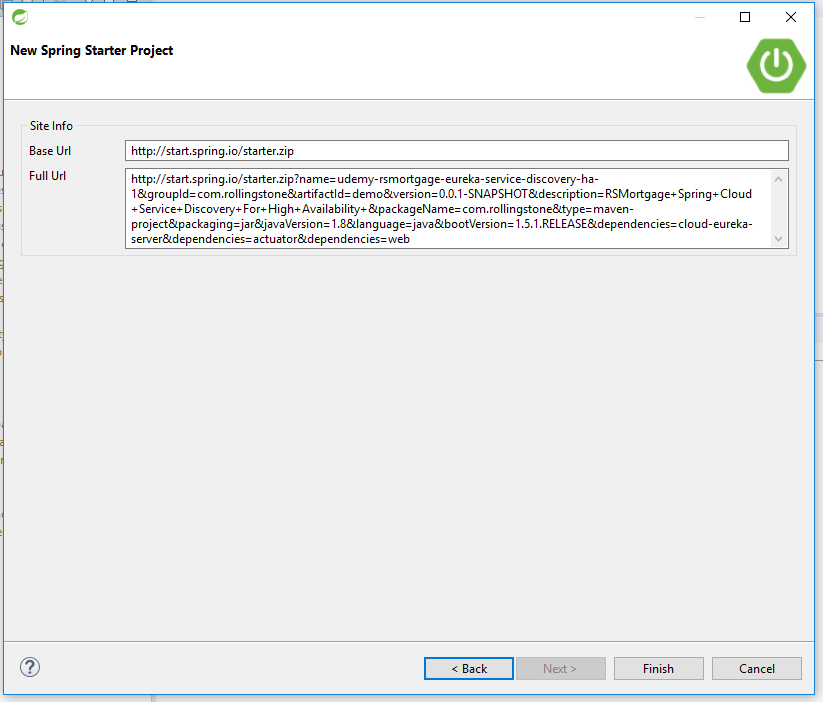


1.6 – Choose Eureka and Web as starter projects

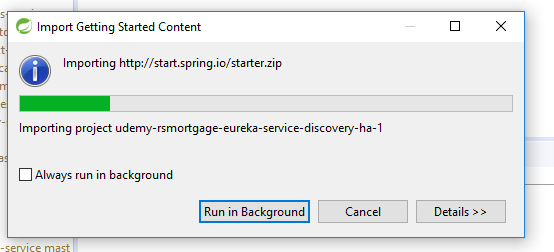


.

1.7 – Click Finish Now



1.8 – Let Spring Tool Suite Prepare the Project



1.9 – Verify the project identification in the pom.xml

<groupId>com.rollingstone</groupId>

<artifactId>udemy-rsmortgage-eureka-service-discovery-ha</artifactId>

<version>0.0.1-SNAPSHOT</version>

<packaging>jar</packaging>

<name>udemy-rsmortgage-eureka-service-discovery-ha</name>

<description>Spring Starter Project for Service Discovery</description>

1.10 – Add Parent project

<parent>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-parent</artifactId>

<version>1.4.1.RELEASE</version>

<relativePath/> <!-- lookup parent from repository -->

</parent>

1.11 – Add Properties

<properties>

<project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>

<project.reporting.outputEncoding>UTF-8</project.reporting.outputEncoding>

<java.version>1.8</java.version>

</properties>

1.12 – Add Dependencies

<dependencies>

<dependency>

<groupId>org.springframework.cloud</groupId>

<artifactId>spring-cloud-starter-eureka-server</artifactId>

</dependency>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-web</artifactId>

</dependency>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-test</artifactId>

<scope>test</scope>

</dependency>

</dependencies>

1.13 – Add DependencyManagement

<dependencyManagement>

<dependencies>

<dependency>

<groupId>org.springframework.cloud</groupId>

<artifactId>spring-cloud-dependencies</artifactId>

<version>Camden.SR1</version>

<type>pom</type>

<scope>import</scope>

</dependency>

</dependencies>

</dependencyManagement>

1.14 – Add Build Section

<build>

<plugins>

<plugin>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-maven-plugin</artifactId>

</plugin>

</plugins>

</build>

1.15 –Create application.yml under resource directory

eureka:

instance:

hostname: localhost

client:

registerWithEureka: **true**

fetchRegistry: **true**

serviceUrl:

defaultZone: http://${eureka.instance.hostname}:${server.port}/eureka/

---

spring:

profiles: eureka-host1

server:

port: 8761

eureka:

instance:

hostname: eureka-host1

client:

serviceUrl:

defaultZone: http://eureka-host2:8762/eureka/

---

spring:

profiles: eureka-host2

server:

port: 8762

eureka:

instance:

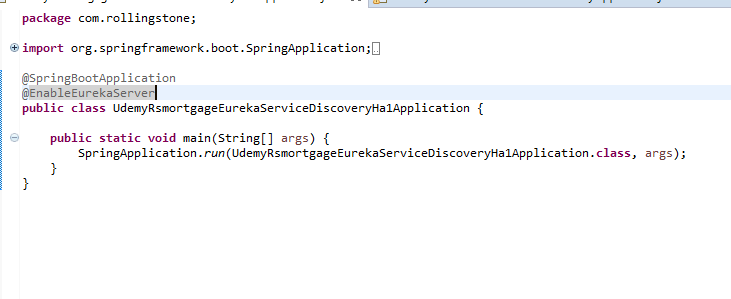
hostname: eureka-host2

client:

serviceUrl:

defaultZone: http://eureka-host1:8761/eureka/

1.16 –Add annotation to the Main Class



**package** com.rollingstone;

**import** org.springframework.boot.SpringApplication;

**import** org.springframework.boot.autoconfigure.SpringBootApplication;

**import** org.springframework.cloud.netflix.eureka.server.EnableEurekaServer;

@SpringBootApplication

@EnableEurekaServer

**public** **class** UdemyRsmortgageEurekaServiceDiscoveryHaApplication {

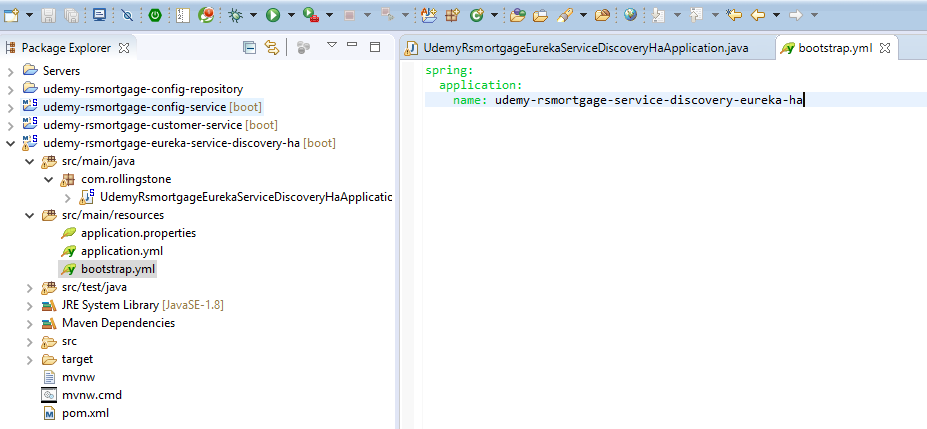
**public** **static** **void** main(String[] args) {

SpringApplication.*run*(UdemyRsmortgageEurekaServiceDiscoveryHaApplication.**class**, args);

}

}

1.17 –Add bootstrap.yml under resources folder

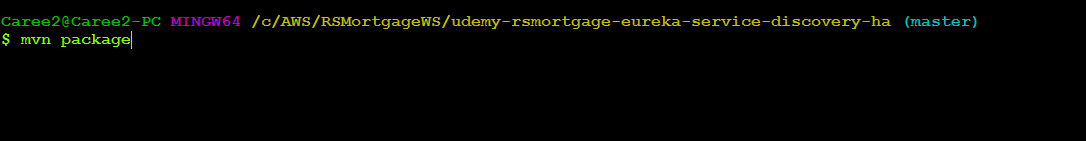


spring:

application:

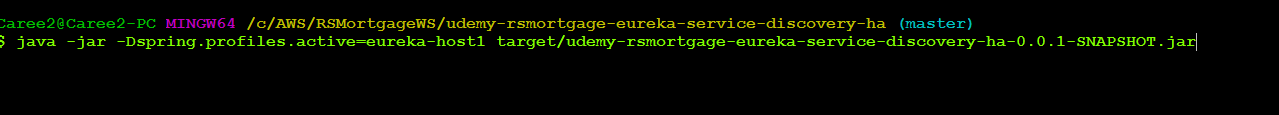
name: udemy-rsmortgage-service-discovery-eureka-ha

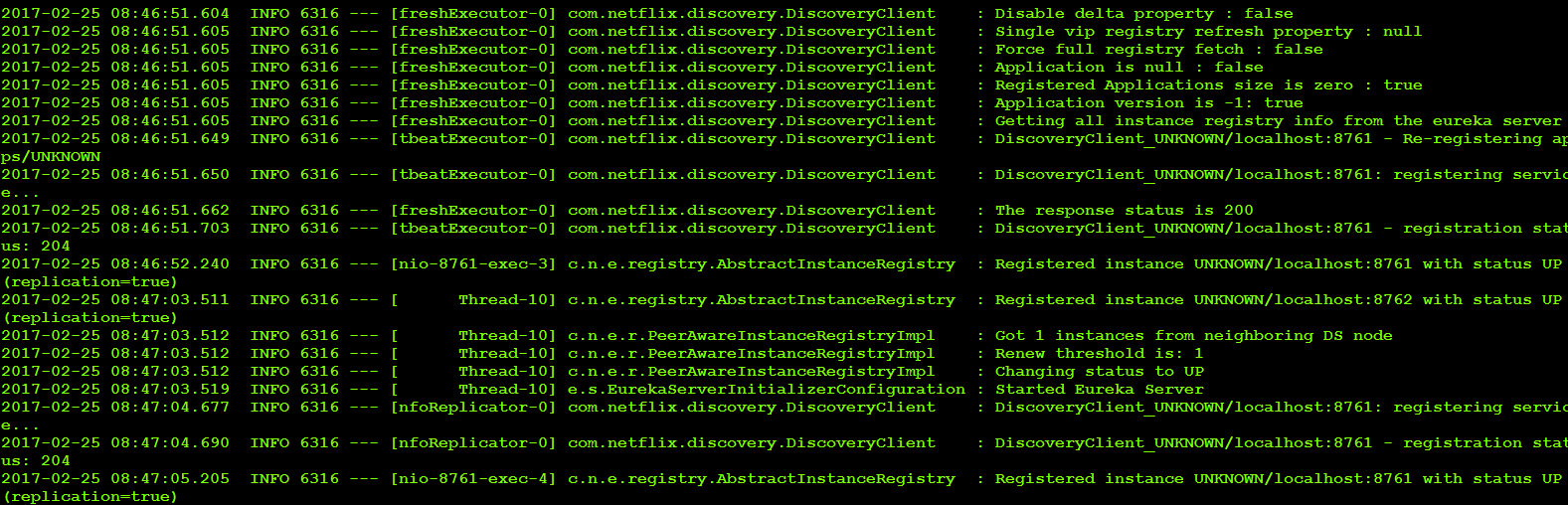
1.18 –Open Git Bash in project folder



1.19 –Run the first instance

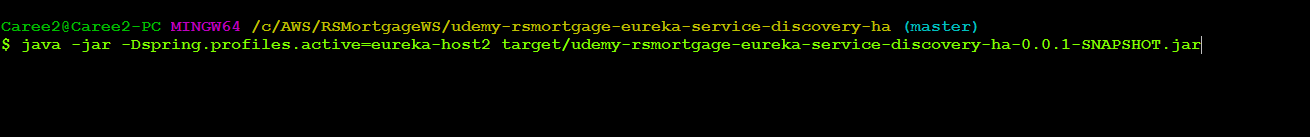
java -jar -Dspring.profiles.active=eureka-host1 target/udemy-rsmortgage-eureka-service-discovery-ha-0.0.1-SNAPSHOT.jar

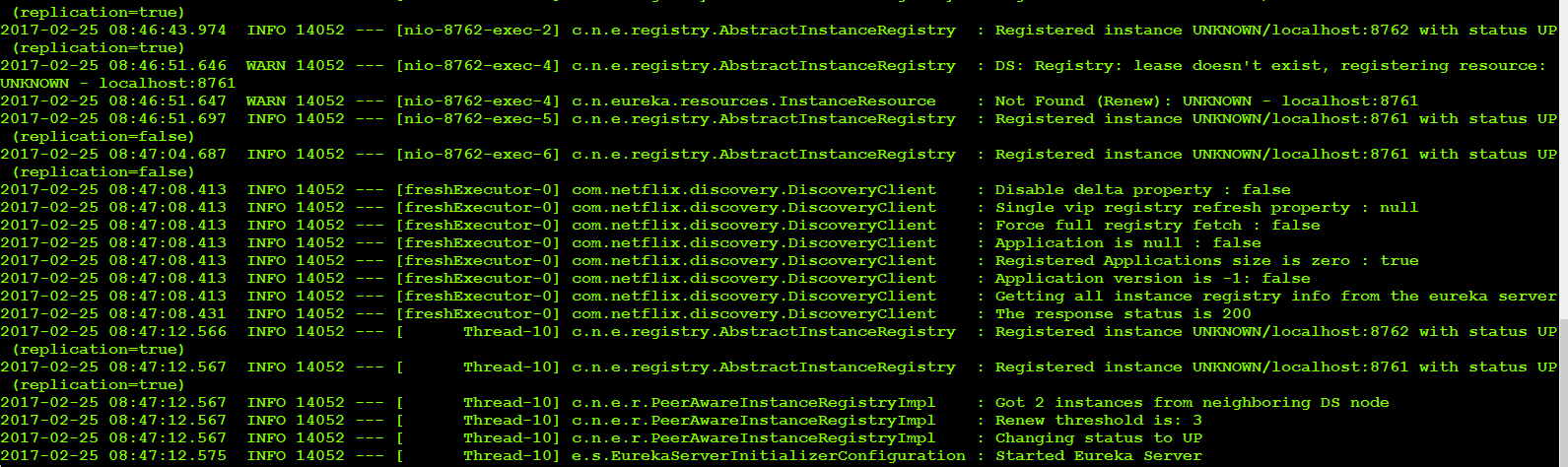




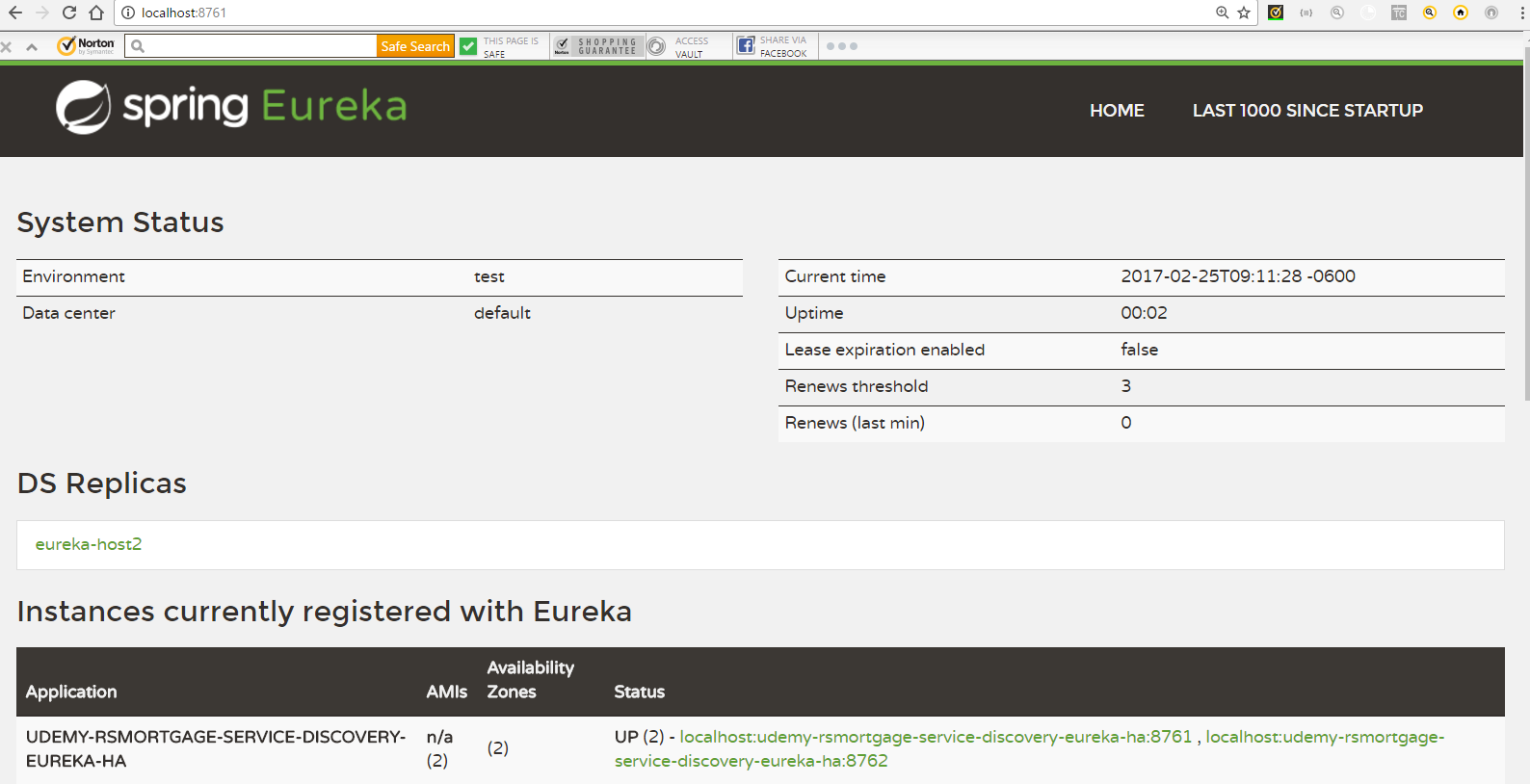
1.20 –Run the second instance

java -jar -Dspring.profiles.active=eureka-host2 target/udemy-rsmortgage-eureka-service-discovery-ha-0.0.1-SNAPSHOT.jar

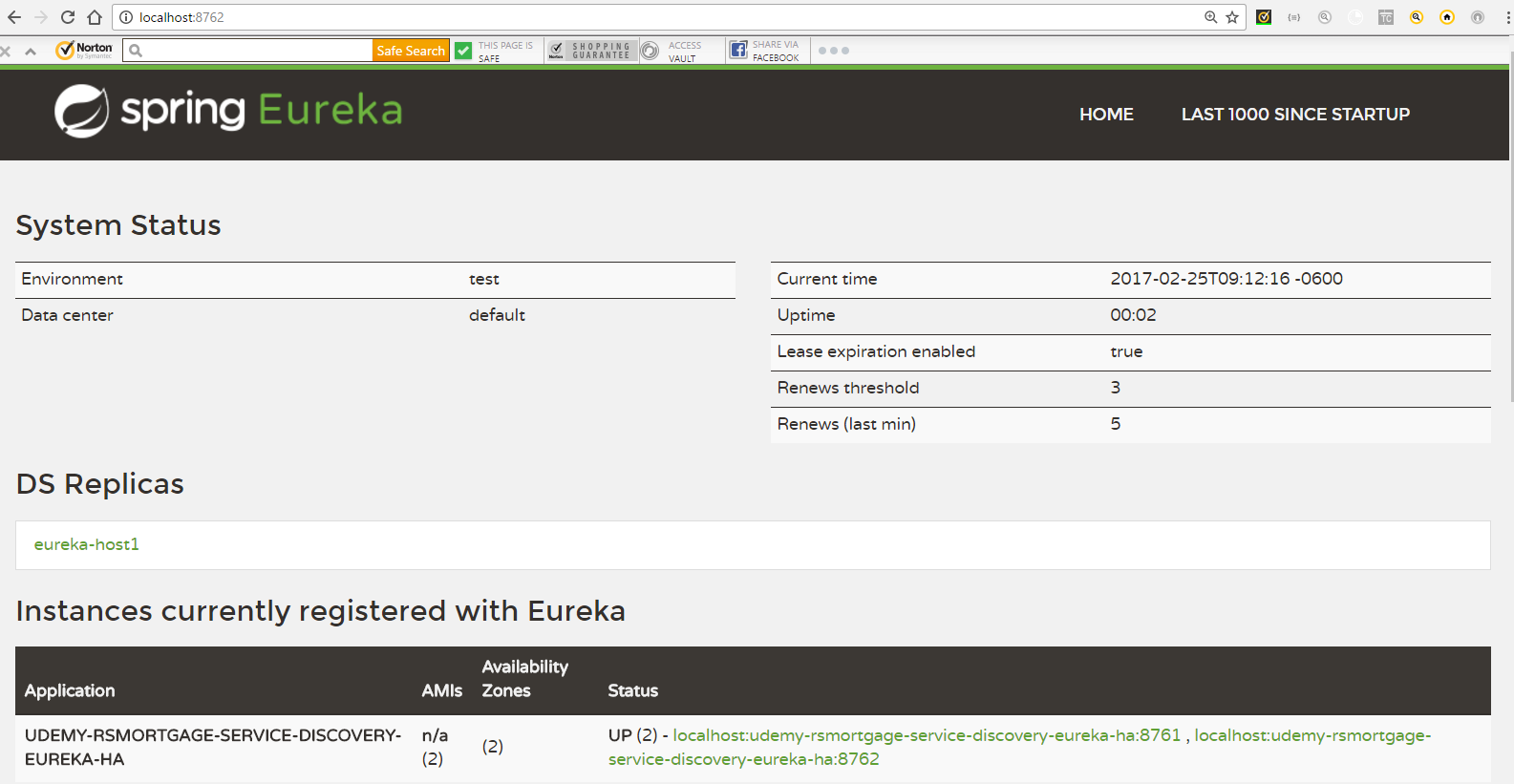




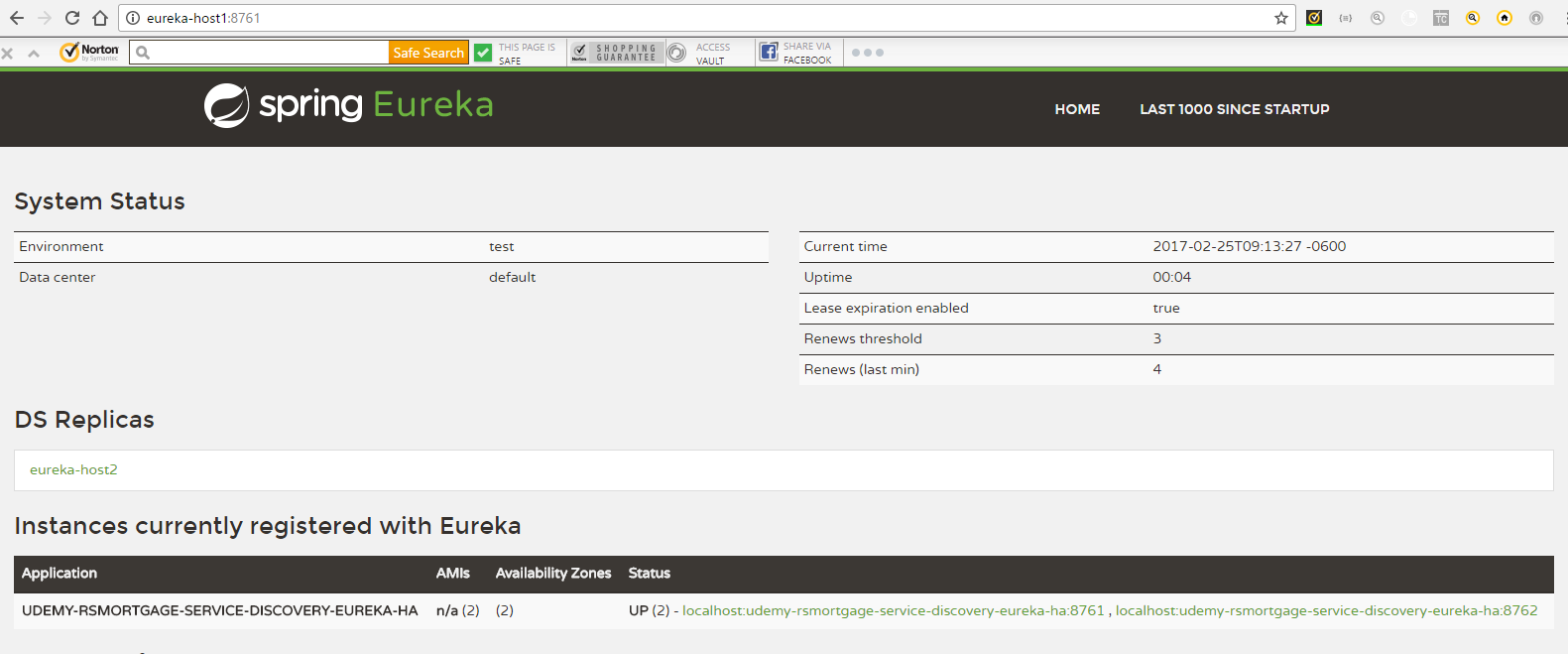
1.21 – Navigate to <http://localhost:8761>



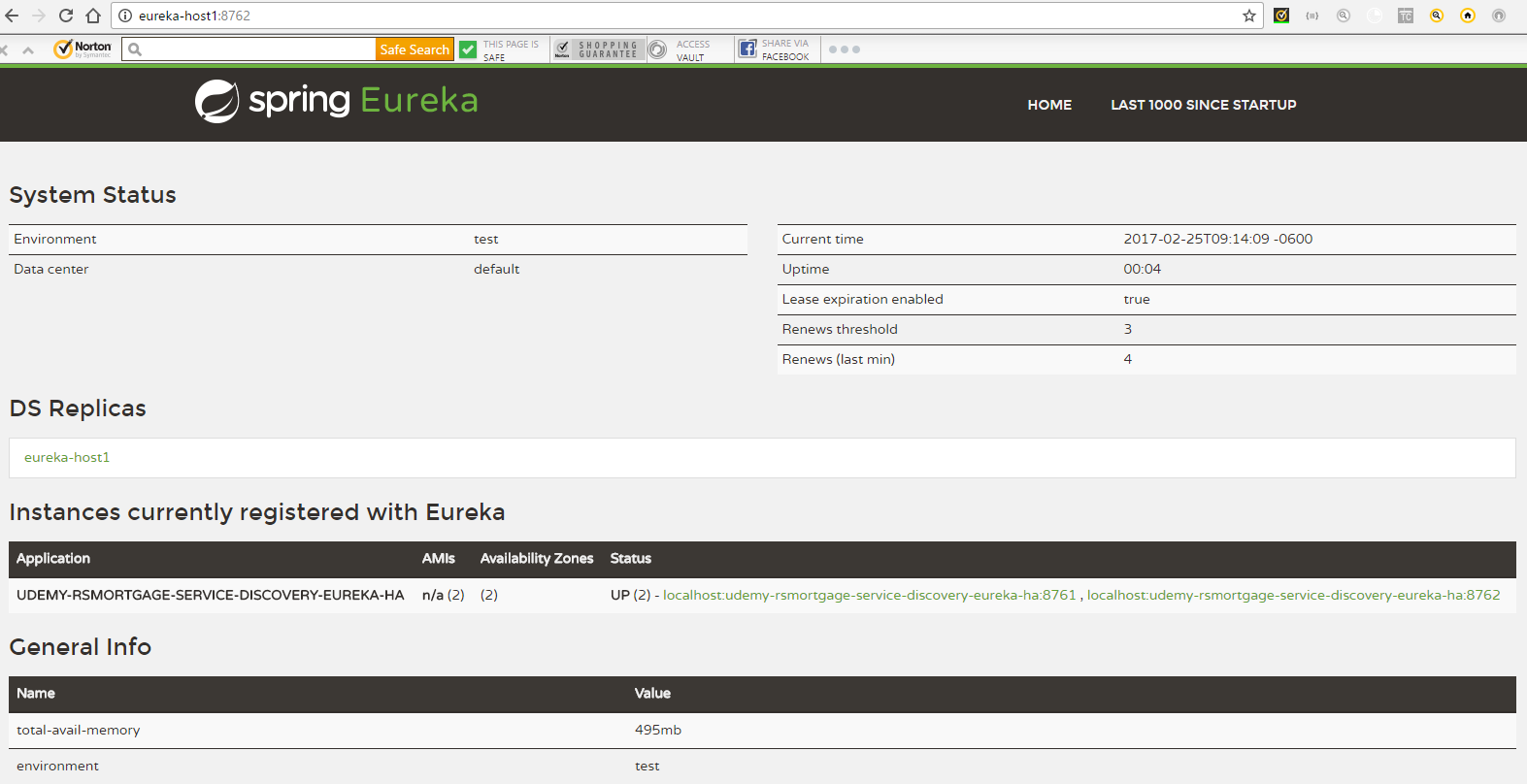
1.22 – Navigate to <http://localhost:8762>

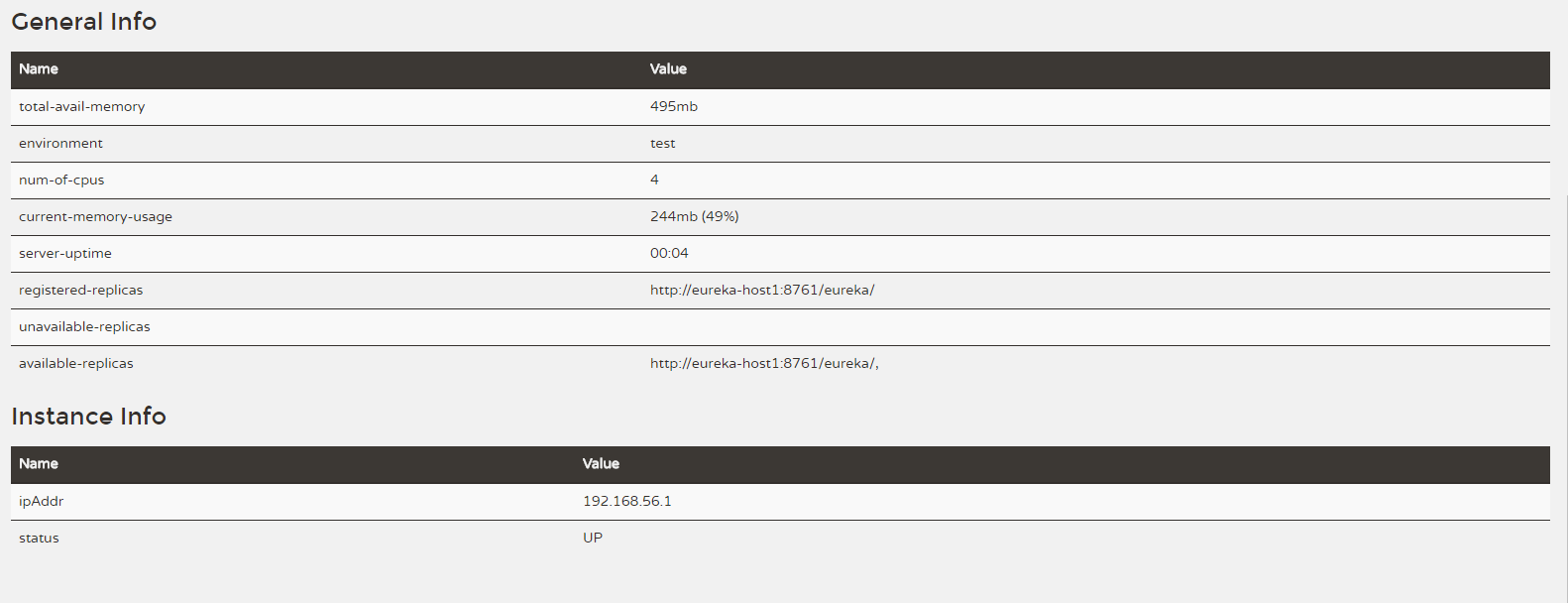


1.23 – Navigate to <http://eureka-host1:8761/>

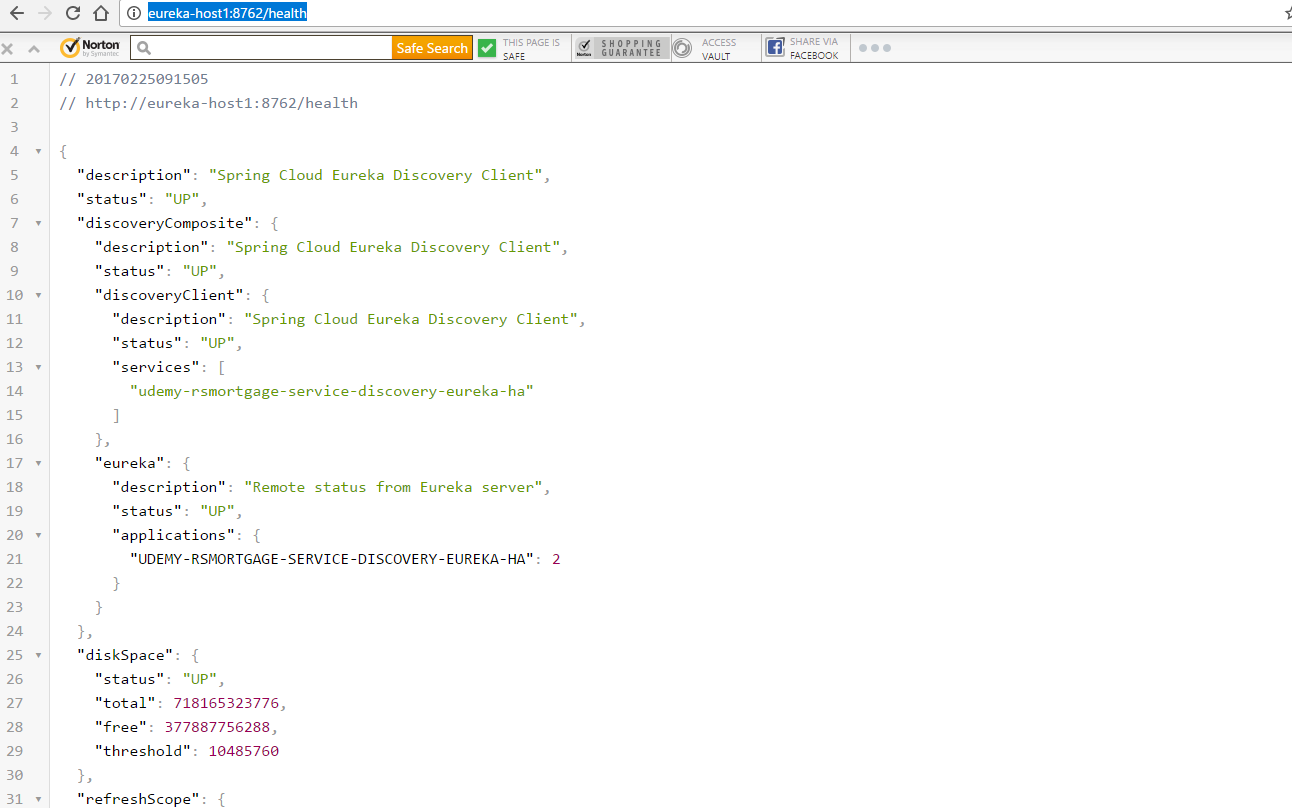


1.24 – Navigate to <http://eureka-host2:8762/>





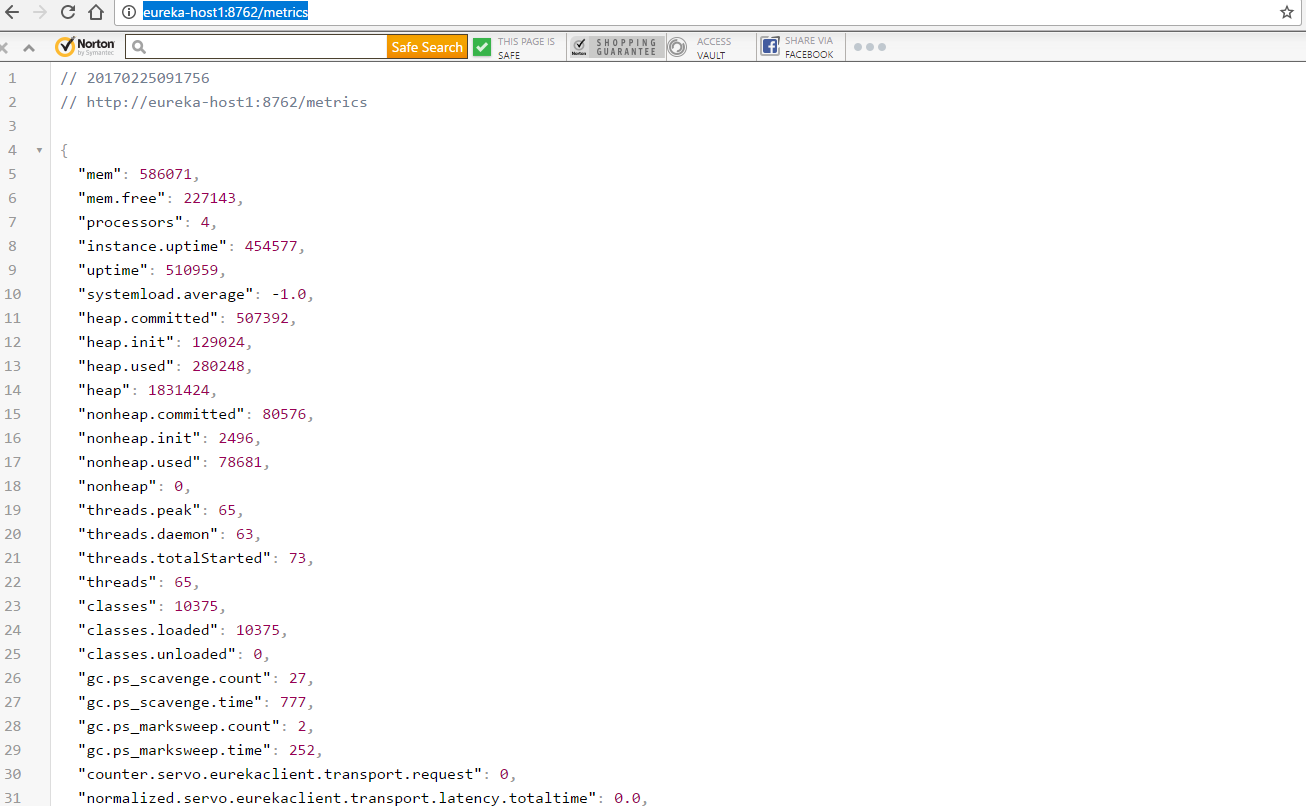
1.24 – Navigate to <http://eureka-host1:8762/health>



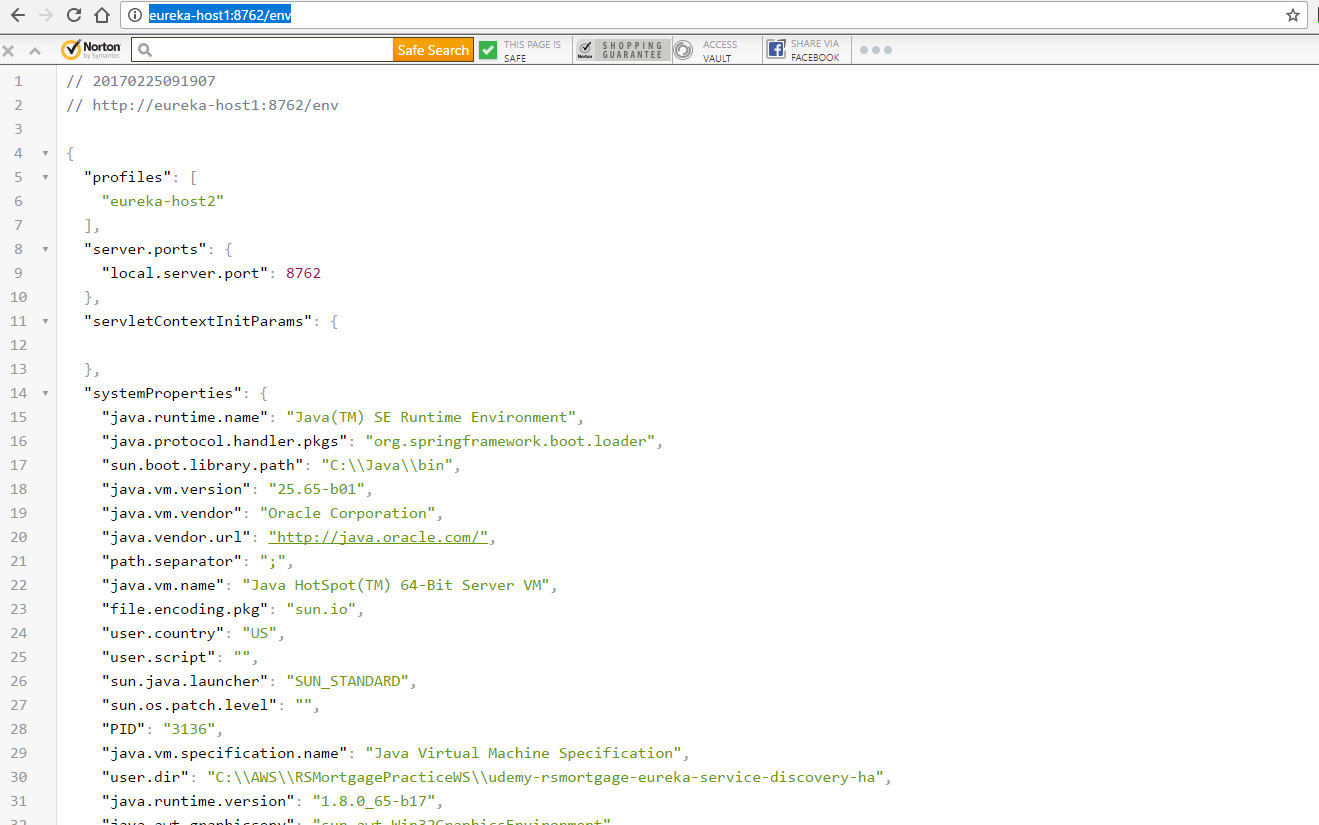
1.25 – Navigate to <http://eureka-host1:8762/beans>



1.26 – Navigate to <http://eureka-host1:8762/metrics>



1.27 – Navigate to <http://eureka-host1:8762/env>



1.18 – Conclusion

This document listed the steps as well as provided the explanation of creating a Spring Boot application based on Spring Cloud Service Discovery.