

Lesson 04 Demo 03

Setting up Eureka Server

Objective: To set up an Eureka Server, which acts as a service registry and enables

service discovery in a Spring Cloud application

Tool required: Eclipse IDE

Prerequisites: None

Steps to be followed:

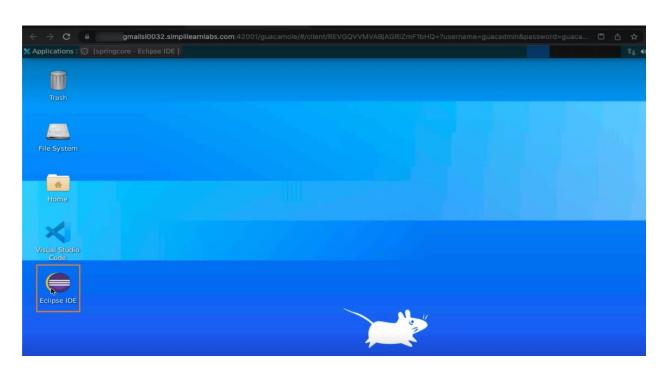
1. Creating a new Spring Starter project

2. Configuring the Eureka Server properties

3. Running the Eureka Server

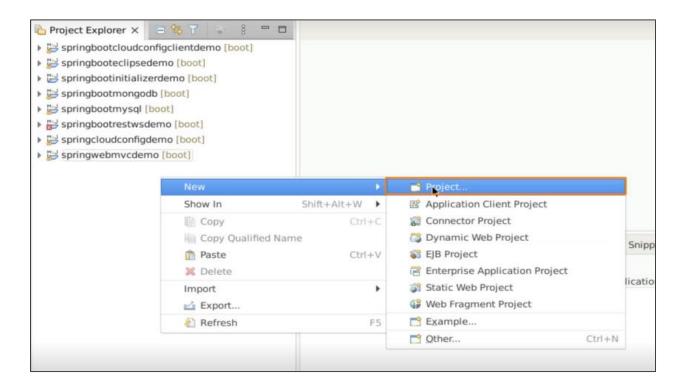
Step 1: Creating a new Spring Starter project

1.1 Open Eclipse IDE

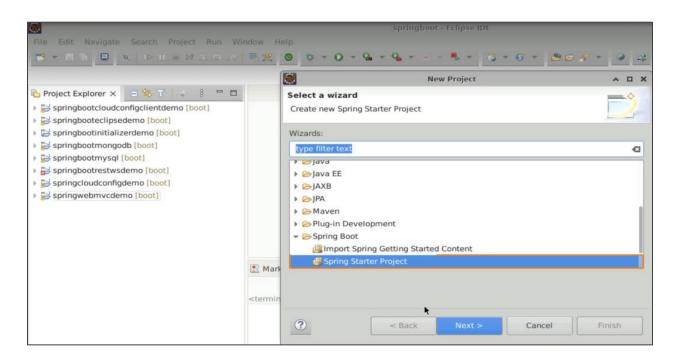




1.2 Go to File > New > Project to open the Project Creation Wizard

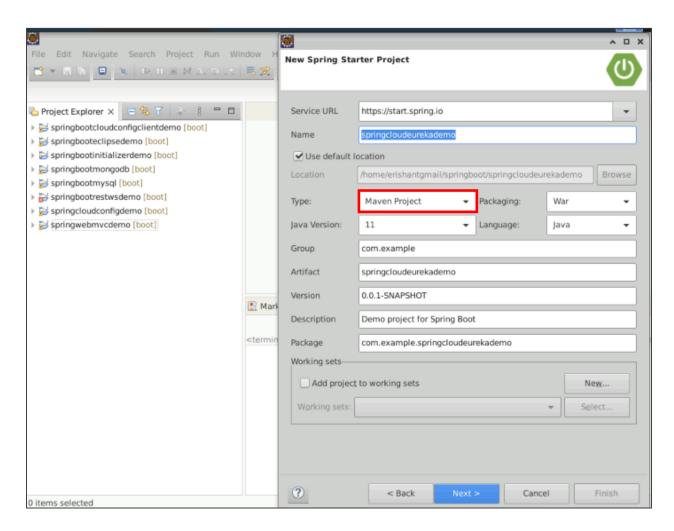


1.3 Select Spring Starter Project and click Next



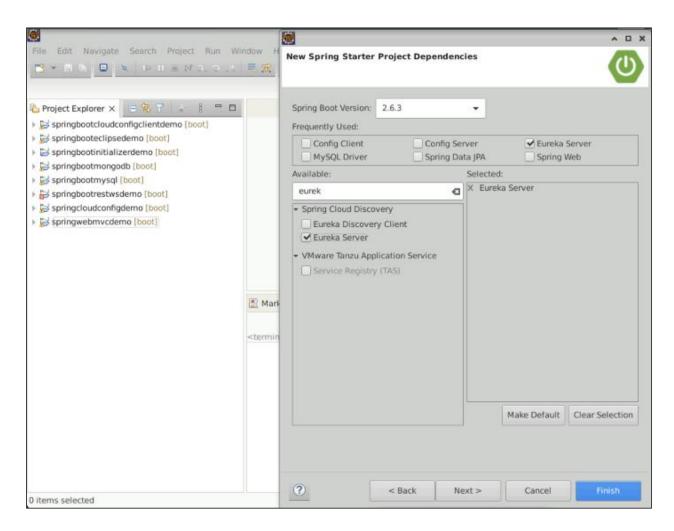


1.4 Enter the project name as **springcloudeurekademo** and select Maven as the build tool. Now, click **Next**



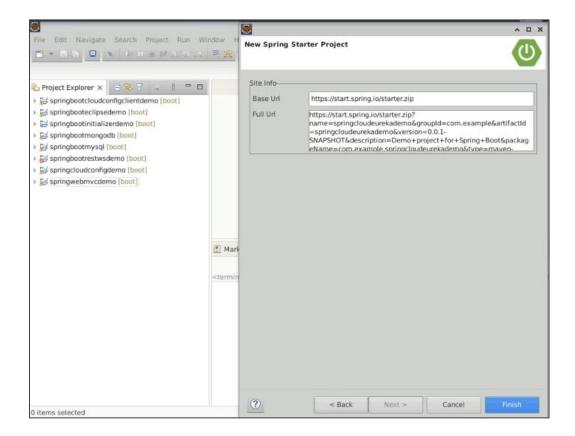


1.5 Choose the desired project dependencies, like Eureka Server, and click Next



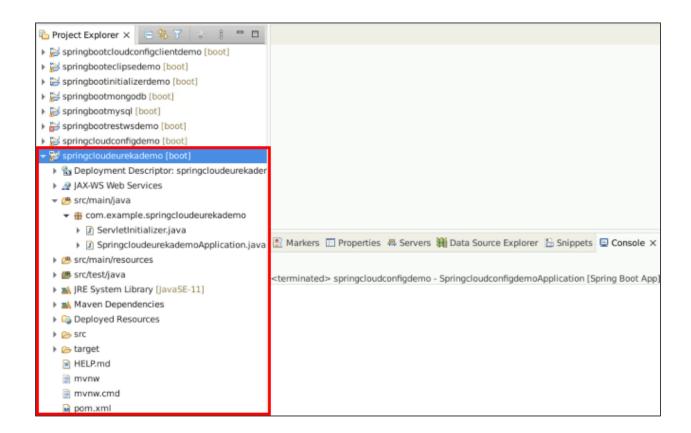


1.6 Click Finish



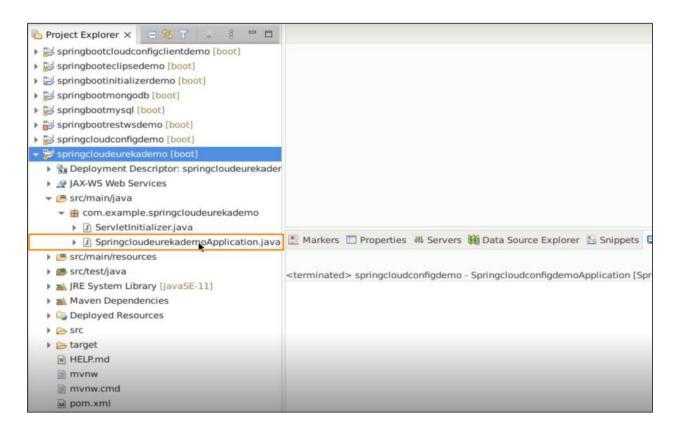
The eclipse will generate the project structure and download the necessary dependencies.







1.7 Navigate to the **src/main/java package** and open the file: **SpringcloudeurekademoApplication.java**

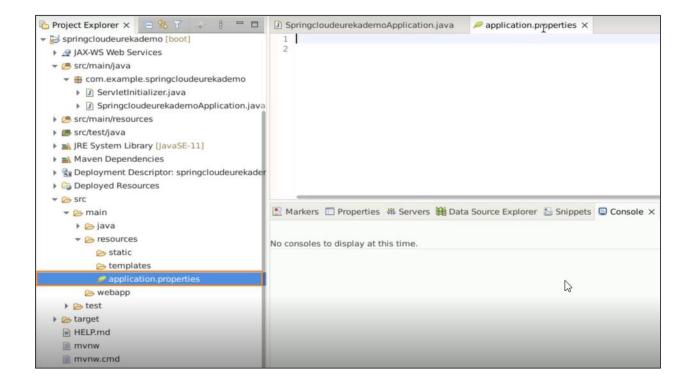


1.8 Add the @EnableEurekaServer annotation to the main class to declare it as a Eureka server



Step 2: Configuring the Eureka Server properties

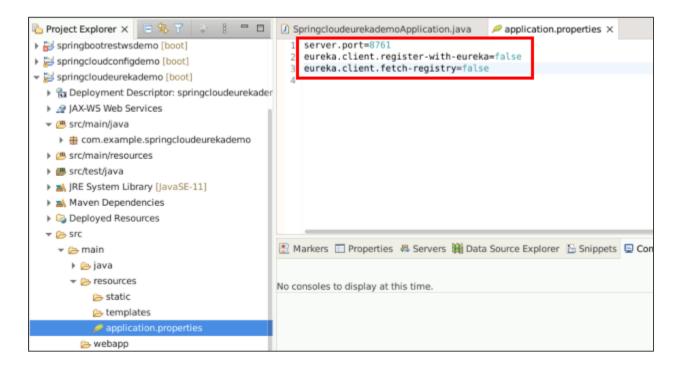
2.1 Open the application.properties file located in src/main/resources





2.2 Add the following configuration properties:

server.port=8761 eureka.client.registerWithEureka=false eureka.client.fetchRegistry=false

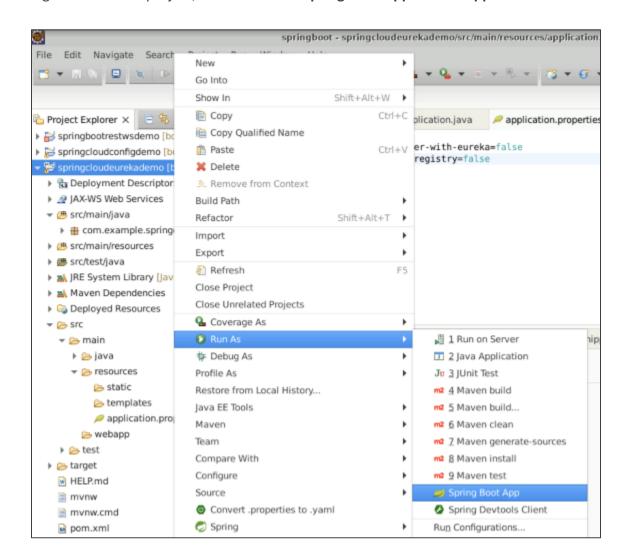


2.3 Save the application.properties file



Step 3: Running the Eureka Server

3.1 Right-click on the project, select Run As > Spring Boot App or Java Application



Observe the console output in the Eclipse IDE to verify that the Tomcat server has started on the configured port and that the Eureka server has started successfully.

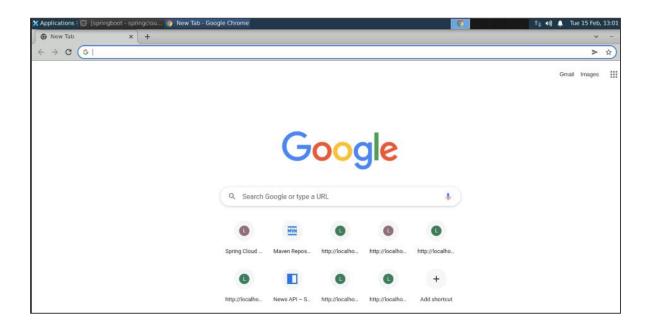


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    SpringcloudeurekademoApplication.java

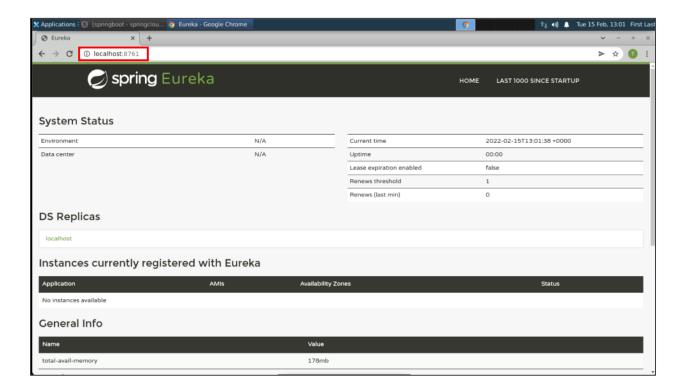
                                        application.properties ×
                                                                                                   server.port=8761
     eureka.client.register-with-eureka=false
     eureka.client.fetch-registry=false
🙎 Markers 🔳 Properties 🤻 Servers 🙀 Data Source Explorer 🕒 Snippets 🖳 Console 🗴
springcloudeurekademo - SpringcloudeurekademoApplication [Spring Boot App] /usr/eclipse/plugins/org.eclipse.justj.openjdk.hotspot.jre.full.linux.x86_64_17.0.1.v20
2022-02-15 13:01:11.741
                          INFO 17291 ---
                                                   Thread-9] o.s.c.n.e.server.EurekaServerBootstrap
                                                                                                          Setting the eureka configuration
2022-02-15 13:01:11.752
                                                  Thread-9] o.s.c.n.e.server.EurekaServerBootstrap
Thread-9] o.s.c.n.e.server.EurekaServerBootstrap
                          INFO 17291 ---
                                                                                                          isAws returned false
2022-02-15 13:01:11.753
                          INFO 17291 ---
                                                                                                          Initialized server context
2022-02-15 13:01:11.753
                          INFO 17291
                                                   Thread-9] c.n.e.r.PeerAwareInstanceRegistryImpl
                                                                                                          Got 1 instances from neighboring
2022-02-15 13:01:11.753
                          INFO 17291 ---
                                                   Thread-9] c.n.e.r.PeerAwareInstanceRegistryImpl
                                                                                                          Renew threshold is: 1
2022-02-15 13:01:11.753
                          INFO 17291 ---
                                                  Thread-9] c.n.e.r.PeerAwareInstanceRegistryImpl
                                                                                                          Changing status to UP
2022-02-15 13:01:11.762
                                                      main] o.s.b.w.embedded.tomcat.TomcatWebServer
                          INFO 17291 ---
                                                                                                          Tomcat started on port(s): 8761
2022-02-15 13:01:11.763
                          INFO 17291
                                                      main] .s.c.n.e.s.EurekaAutoServiceRegistration
                                                                                                          Updating port to 8761
2022-02-15 13:01:11.792
                          INFO 17291
                                                       main] c.e.s.SpringcloudeurekademoApplication
                                                                                                           Started SpringcloudeurekademoApp
2022-02-15 13:01:11.823
                          INFO 17291 ---
                                                  Thread-9] e.s.EurekaServerInitializerConfiguration
                                                                                                          Started Eureka Server
2022-02-15 13:01:12.540
2022-02-15 13:01:12.540
                          INFO 17291 --- [on(3)-127.0.0.1] o.a.c.c.C.[Tomcat].[localhost].[/]
                                                                                                          Initializing Spring DispatcherSeg
                                                                                                          Initializing Servlet 'dispatcher
                          INFO 17291
                                          [on(3)-127.0.0.1] o.s.web.servlet.DispatcherServlet
2022-02-15 13:01:12.541 INFO 17291
                                      --- [on(3)-127.0.0.1] o.s.web.servlet.DispatcherServlet
                                                                                                          Completed initialization in 1 ms
```

3.2 Open a web browser





3.3 Enter the following URL in the address bar: **localhost:8761** (replace 8761 with the configured port if different)



The Eureka Server dashboard will open, displaying the Eureka Server homepage.