



链滴

# Spring Cloud 实战系列（一）服务注册与发现 Eureka

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来源网站: [链滴](#)

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## 配置 eureka 主工程

创建一个主 Maven 工程，springcloud-parent，删除 src 目录。

pom.xml

```
<?xml version="1.0" encoding="UTF-8"?>

<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/xsd/maven-4.0.0.xsd">
  <modelVersion>4.0.0</modelVersion>
  <packaging>pom</packaging>
  <modules>
    <module>eureka-server</module>
    <module>eureka-client</module>
  </modules>
  <parent>
    <groupId>org.springframework.boot</groupId>
    <artifactId>spring-boot-starter-parent</artifactId>
    <version>2.1.4.RELEASE</version>
    <relativePath/> <!-- lookup parent from repository -->
  </parent>
  <groupId>com.wit</groupId>
  <artifactId>springcloud-parent</artifactId>
  <version>0.0.1-SNAPSHOT</version>
  <name>springcloud-parent</name>
  <description>springcloud-parent</description>

  <properties>
    <java.version>1.8</java.version>
```

```

<spring-cloud.version>Finchley.RELEASE</spring-cloud.version>
</properties>

<!-- 引入eureka -->
<dependencyManagement>
    <dependencies>
        <dependency>
            <groupId>org.springframework.cloud</groupId>
            <artifactId>spring-cloud-dependencies</artifactId>
            <version>${spring-cloud.version}</version>
            <type>pom</type>
            <scope>import</scope>
        </dependency>
    </dependencies>
</dependencyManagement>

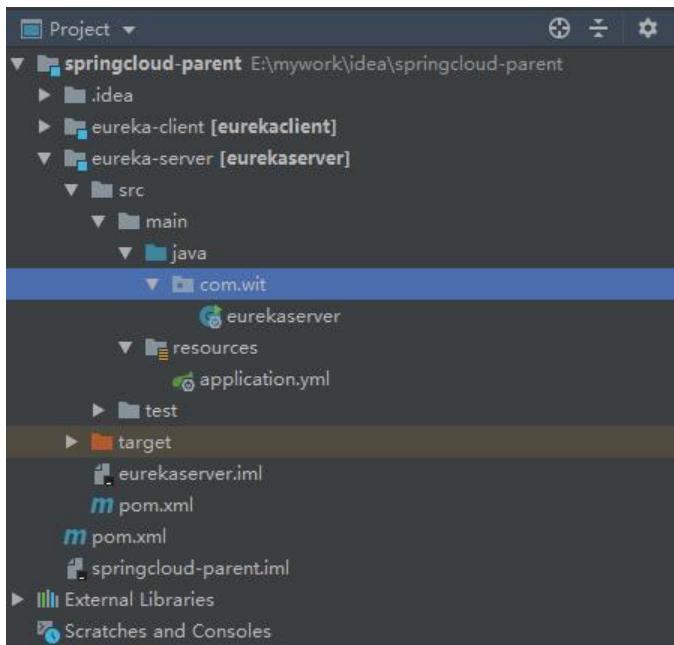
<build>
    <plugins>
        <plugin>
            <groupId>org.springframework.boot</groupId>
            <artifactId>spring-boot-maven-plugin</artifactId>
        </plugin>
    </plugins>
</build>

</project>

```

## 配置 eureka-server

在 springcloud-parent 上创建（ New --> Module ） eureka-server 项目，  
eureka-server 目录



pom.xml

```
<?xml version="1.0" encoding="UTF-8"?>

<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/xsd/maven-4.0.0.xsd">
  <parent>
    <artifactId>springcloud-parent</artifactId>
    <groupId>com.wit</groupId>
    <version>0.0.1-SNAPSHOT</version>
  </parent>
  <modelVersion>4.0.0</modelVersion>

  <artifactId>eureka-server</artifactId>

  <name>eureka-server</name>
  <!-- FIXME change it to the project's website -->
  <url>http://www.example.com</url>

  <properties>
    <project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>
    <maven.compiler.source>1.7</maven.compiler.source>
    <maven.compiler.target>1.7</maven.compiler.target>
  </properties>

  <dependencies>
    <dependency>
      <groupId>junit</groupId>
      <artifactId>junit</artifactId>
      <version>4.11</version>
      <scope>test</scope>
    </dependency>
    <!-- 添加依赖 eureka-server -->
    <dependency>
      <groupId>org.springframework.cloud</groupId>
      <artifactId>spring-cloud-starter-netflix-eureka-server</artifactId>
      <version>2.1.1.RELEASE</version>
    </dependency>
  </dependencies>

  <build>
    <pluginManagement><!-- lock down plugins versions to avoid using Maven defaults (may be moved to parent pom) -->
      <plugins>
        <!-- clean lifecycle, see https://maven.apache.org/ref/current/maven-core/lifecycles.html#clean_Lifecycle -->
        <plugin>
          <artifactId>maven-clean-plugin</artifactId>
          <version>3.1.0</version>
        </plugin>
        <!-- default lifecycle, jar packaging: see https://maven.apache.org/ref/current/maven-core/default-bindings.html#Plugin_bindings_for_jar_packaging -->
        <plugin>
```

```

        <artifactId>maven-resources-plugin</artifactId>
        <version>3.0.2</version>
    </plugin>
    <plugin>
        <artifactId>maven-compiler-plugin</artifactId>
        <version>3.8.0</version>
    </plugin>
    <plugin>
        <artifactId>maven-surefire-plugin</artifactId>
        <version>2.22.1</version>
    </plugin>
    <plugin>
        <artifactId>maven-jar-plugin</artifactId>
        <version>3.0.2</version>
    </plugin>
    <plugin>
        <artifactId>maven-install-plugin</artifactId>
        <version>2.5.2</version>
    </plugin>
    <plugin>
        <artifactId>maven-deploy-plugin</artifactId>
        <version>2.8.2</version>
    </plugin>
    <!-- site lifecycle, see https://maven.apache.org/ref/current/maven-core/lifecycles.html#site_Lifecycle -->
    <plugin>
        <artifactId>maven-site-plugin</artifactId>
        <version>3.7.1</version>
    </plugin>
    <plugin>
        <artifactId>maven-project-info-reports-plugin</artifactId>
        <version>3.0.0</version>
    </plugin>
</plugins>
</pluginManagement>
</build>
</project>
```

## eurekaserver

```

package com.wit;

import org.springframework.boot.SpringApplication;
import org.springframework.boot.autoconfigure.SpringBootApplication;
import org.springframework.cloud.netflix.eureka.server.EnableEurekaServer;

/**
 * 主程序
 */
@SpringBootApplication
@EnableEurekaServer // eureka-server
public class eurekaserver
{
    public static void main( String[] args )
```

```
{
    SpringApplication.run(eurekaserver.class);
}
}
```

## application.yml

```
server:
  port: 1129
eureka:
  client:
    register-with-eureka: false
    fetch-registry: false
    service-url:
      defaultZone: http://localhost:1129/eureka/
spring:
  application:
    name: eureka-server
```

启动程序，输入 `http://localhost:1129/` 启动成功。

The screenshot shows the Spring Eureka dashboard at `http://localhost:1129`. The top navigation bar includes links for HOME and LAST 1000 SINCE STARTUP. The main content area is divided into sections: System Status, DS Replicas, and General Info.

- System Status:** Displays environment (test), data center (default), current time (2019-04-26T00:58:02 +0800), uptime (00:00), lease expiration enabled (false), renew threshold (1), and renew count (0).
- DS Replicas:** Shows a single entry for 'localhost'.
- General Info:** Displays a table with columns Application, AMIs, Availability Zones, and Status. It shows 'No instances available'.

## 配置 eureka-client

在 springcloud-parent 上创建 ( New --> Module ) eureka-client 项目

pom.xml

```
<?xml version="1.0" encoding="UTF-8"?>
```

```
<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
         xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/xsd/maven-4.0.0.xsd">
    <parent>
        <artifactId>springcloud-parent</artifactId>
        <groupId>com.wit</groupId>
        <version>0.0.1-SNAPSHOT</version>
    </parent>
```

```
<modelVersion>4.0.0</modelVersion>

<artifactId>eureka-client</artifactId>

<name>eureka-client</name>
<!-- FIXME change it to the project's website -->
<url>http://www.example.com</url>

<properties>
    <project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>
    <maven.compiler.source>1.7</maven.compiler.source>
    <maven.compiler.target>1.7</maven.compiler.target>
</properties>

<dependencies>
    <dependency>
        <groupId>junit</groupId>
        <artifactId>junit</artifactId>
        <version>4.11</version>
        <scope>test</scope>
    </dependency>

    <!-- 添加 eureka client 依赖 -->
    <dependency>
        <groupId>org.springframework.cloud</groupId>
        <artifactId>spring-cloud-starter-netflix-eureka-client</artifactId>
        <version>2.0.0.RELEASE</version>
    </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>
    </dependency>
</dependencies>

<build>
    <pluginManagement><!-- lock down plugins versions to avoid using Maven defaults (may be moved to parent pom) -->
        <plugins>
            <!-- clean lifecycle, see https://maven.apache.org/ref/current/maven-core/lifecycles.html#clean_Lifecycle -->
            <plugin>
                <artifactId>maven-clean-plugin</artifactId>
                <version>3.1.0</version>
            </plugin>
            <!-- default lifecycle, jar packaging: see https://maven.apache.org/ref/current/maven-core/default-bindings.html#Plugin_bindings_for_jar_packaging -->
            <plugin>
                <artifactId>maven-resources-plugin</artifactId>
                <version>3.0.2</version>

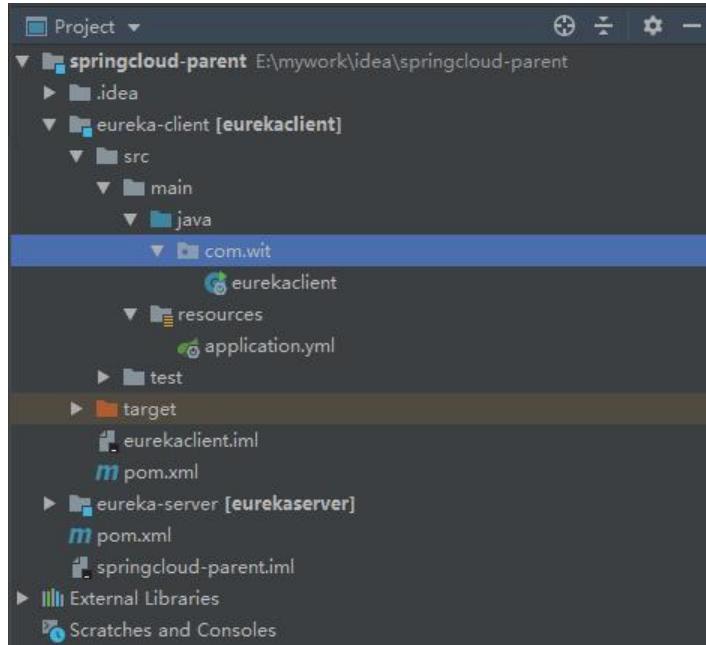
```

```

        </plugin>
        <plugin>
            <artifactId>maven-compiler-plugin</artifactId>
            <version>3.8.0</version>
        </plugin>
        <plugin>
            <artifactId>maven-surefire-plugin</artifactId>
            <version>2.22.1</version>
        </plugin>
        <plugin>
            <artifactId>maven-jar-plugin</artifactId>
            <version>3.0.2</version>
        </plugin>
        <plugin>
            <artifactId>maven-install-plugin</artifactId>
            <version>2.5.2</version>
        </plugin>
        <plugin>
            <artifactId>maven-deploy-plugin</artifactId>
            <version>2.8.2</version>
        </plugin>
        <!-- site lifecycle, see https://maven.apache.org/ref/current/maven-core/lifecycles.h
ml#site_Lifecycle -->
        <plugin>
            <artifactId>maven-site-plugin</artifactId>
            <version>3.7.1</version>
        </plugin>
        <plugin>
            <artifactId>maven-project-info-reports-plugin</artifactId>
            <version>3.0.0</version>
        </plugin>
    </plugins>
</pluginManagement>
</build>
</project>

```

## eureka-client 目录



## eurekaclient

```
package com.wit;
```

```
import org.springframework.boot.SpringApplication;
import org.springframework.boot.autoconfigure.EnableAutoConfiguration;
import org.springframework.boot.autoconfigure.SpringBootApplication;
import org.springframework.cloud.netflix.eureka.EnableEurekaClient;

/**
 * 主程序
 */
@SpringBootApplication
@EnableEurekaClient // eureka 客户端
public class eurekaclient
{
    public static void main( String[] args )
    {
        SpringApplication.run(eurekaclient.class);
    }
}
```

## application.yml

```
eureka:
  client:
    service-url:
      defaultZone: http://localhost:1129/eureka/
server:
  port: 1130
spring:
  application:
    name: eureka-client
```

启动程序，输入 `http://localhost:1129/` 看到如下图就表示启动成功。

```
[INFO] 17866 --- [infoReplicator-0] com.netflix.discovery.DiscoveryClient : DiscoveryClient_EUREKA-CLIENT/DESKTOP-ILIOCPC:eureka-client:1130: registering service...
[INFO] 17866 --- [infoReplicator-0] com.netflix.discovery.DiscoveryClient : DiscoveryClient_EUREKA-CLIENT/DESKTOP-ILIOCPC:eureka-client:1130 - registration status: 204
[INFO] 17866 --- [main] o.s.b.c.embedded.tomcat.TomcatWebServer : Tomcat started on port(s): 1130 (http) with context path ''
[INFO] 17866 --- [main] o.s.w.s.eurekaclient : Started eurekaclient in 2.863 seconds (JVM running for 3.386)
```

刷新，就可以看到 eureka-client 注册到 eureka-server 里了。

The screenshot shows the Spring Eureka dashboard at `http://localhost:1129/`. The top navigation bar includes links for 'HOME' and 'LAST 1000 SINCE STARTUP'. The main content area is divided into sections: 'System Status' and 'DS Replicas'. In 'System Status', environment is 'test' and data center is 'default'. In 'DS Replicas', there is one entry for 'localhost'. Under 'Instances currently registered with Eureka', there is a table with columns: Application, AMIs, Availability Zones, and Status. One row is shown: 'EUREKA-CLIENT' with 'n/a (1)' in AMIs, '(1)' in Availability Zones, and 'UP (1) - DESKTOP-ILIOCPC:eureka-client:1130' in Status. A red box highlights this row. At the bottom, there is a 'General Info' section with a table for Name and Value.