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搭建基于SpringCloud的微服务应用

主讲人：李斌

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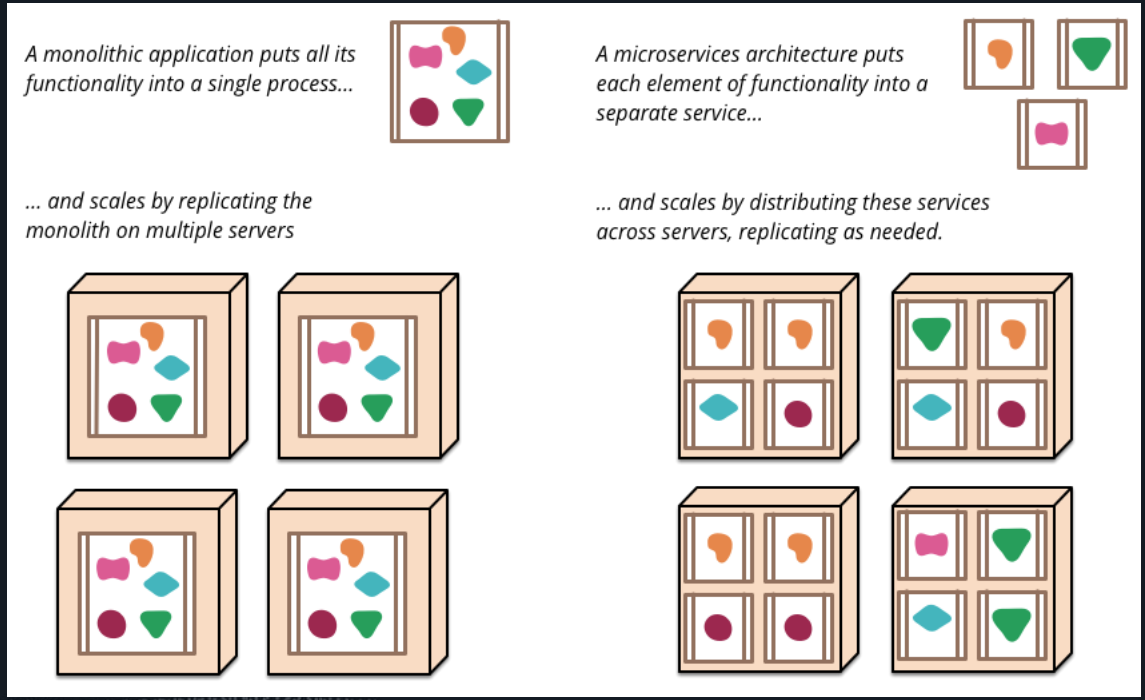

http://martinfowler.com/articles/microservices.html

从单体应用到微服务

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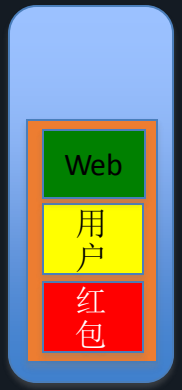
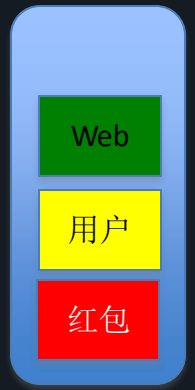
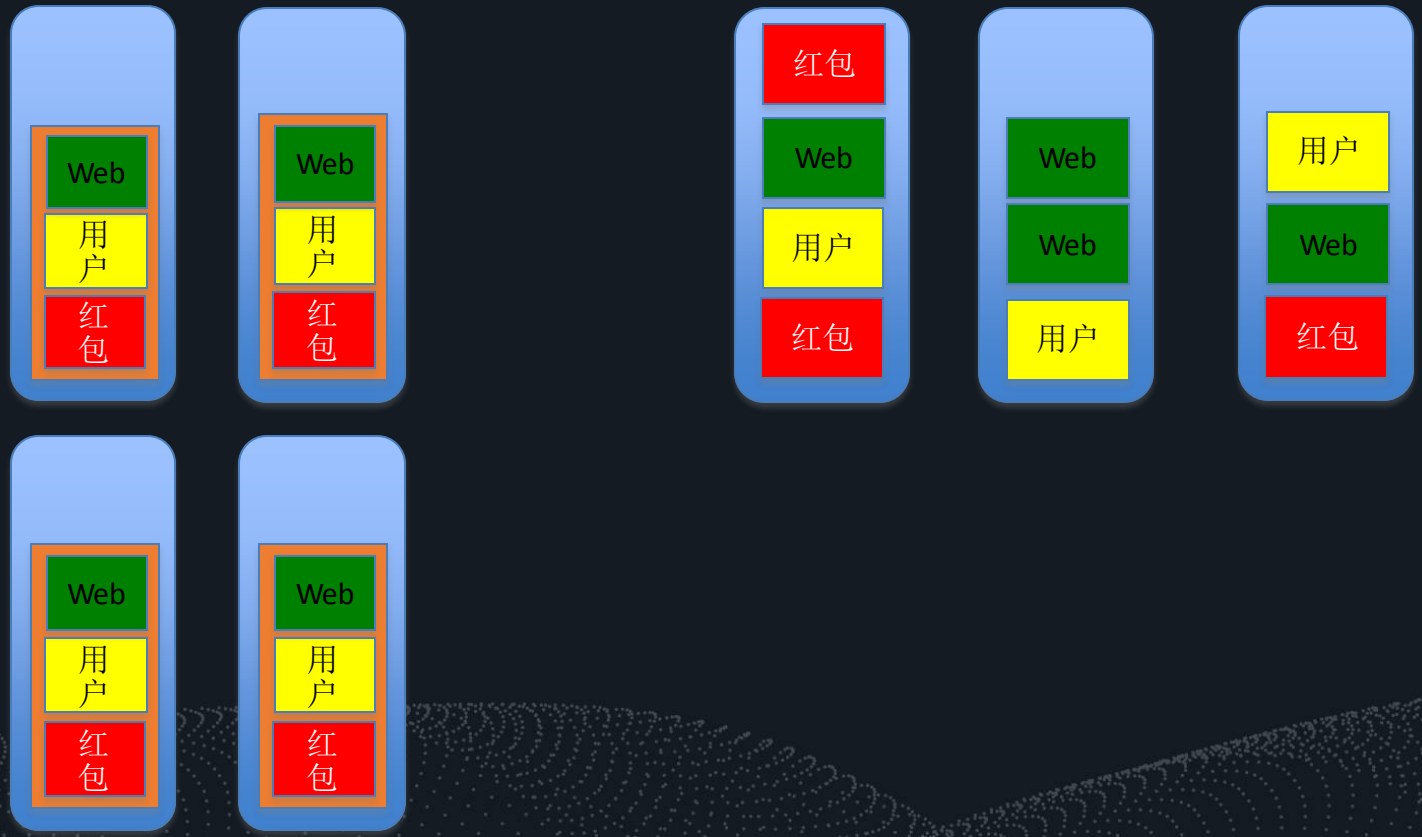




单体应用：模块之间内部调用

微服务应用：服务组合

水平扩展



服务更新

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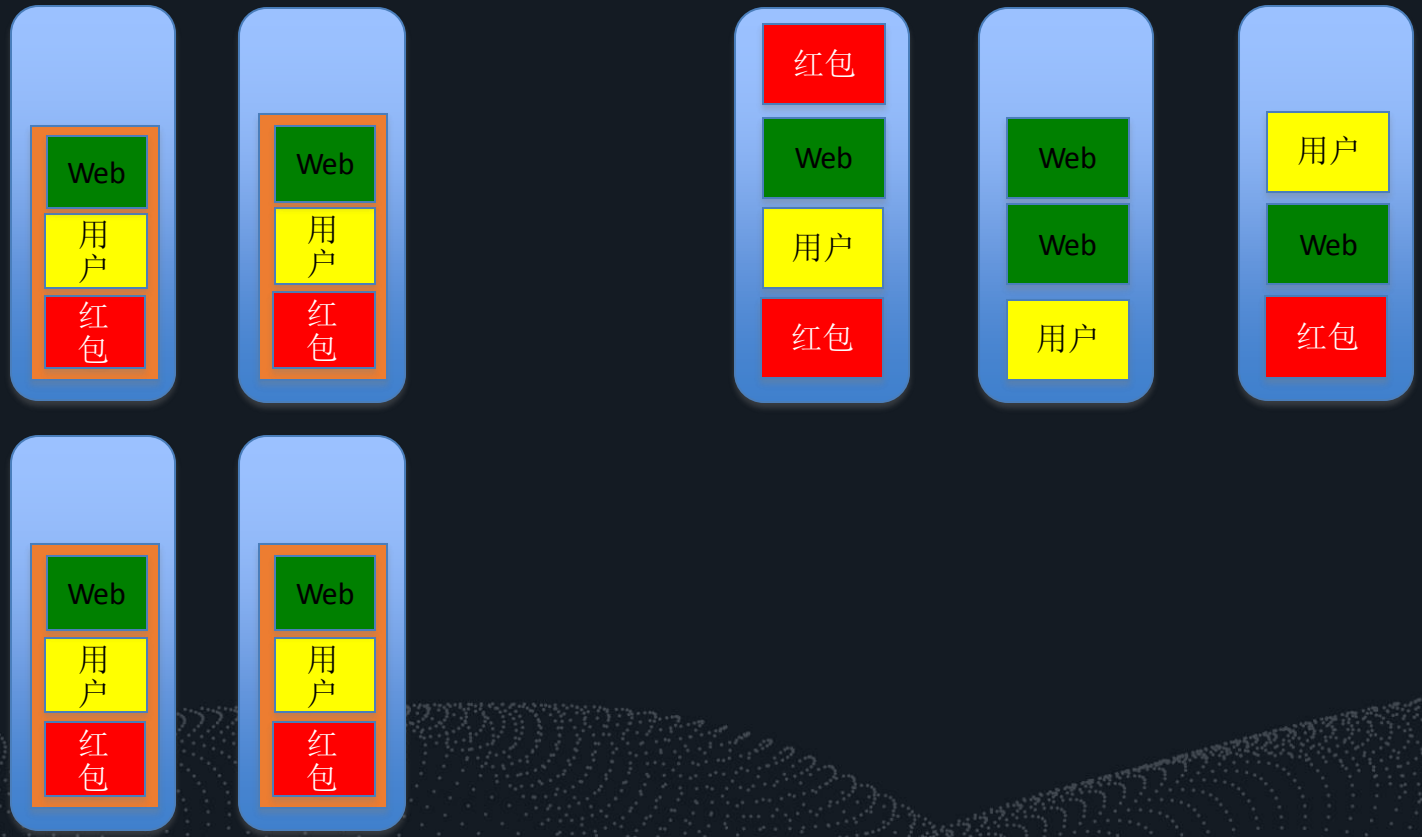
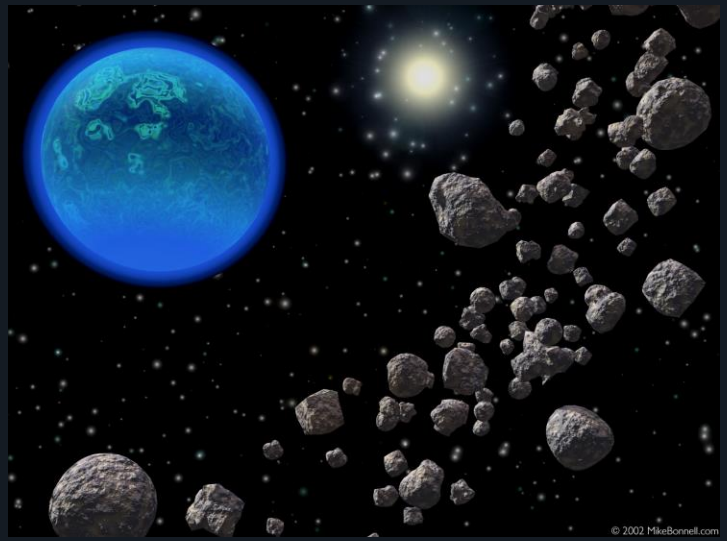


http://www.starwars.com/



http://www.mikebonnell.com/

微服务架构支持

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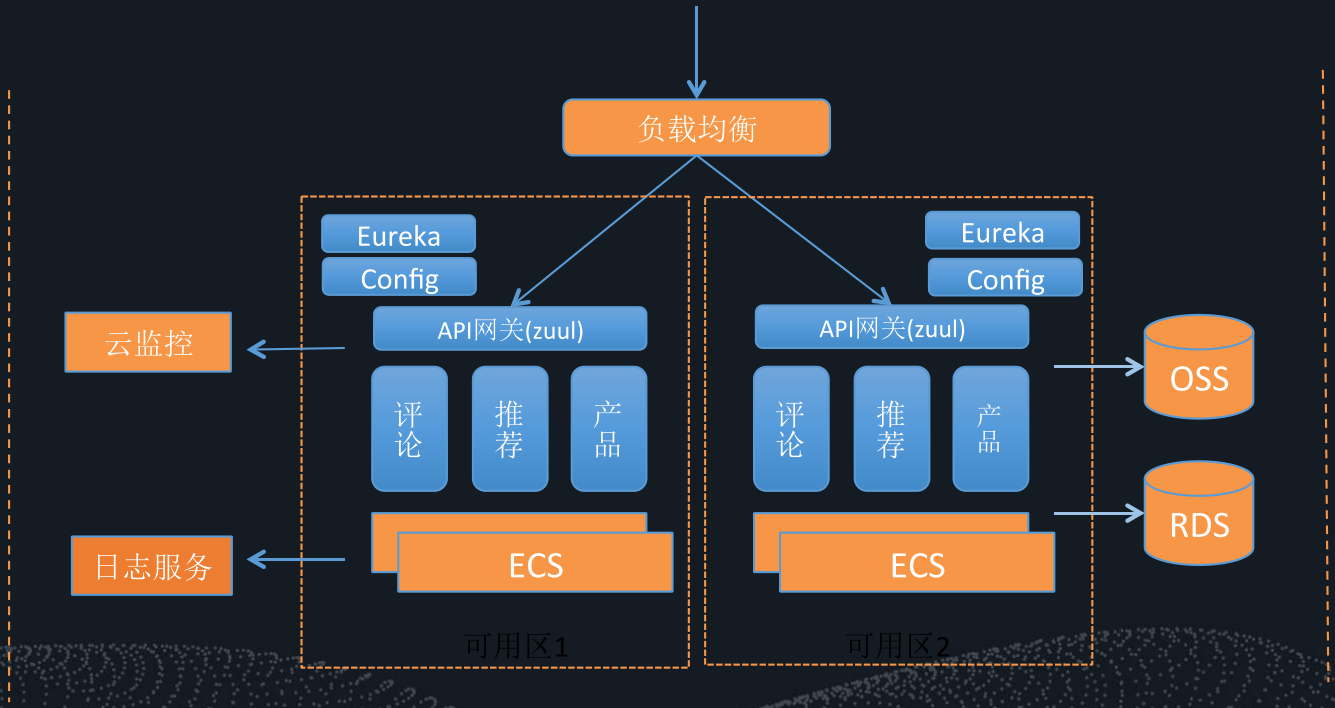
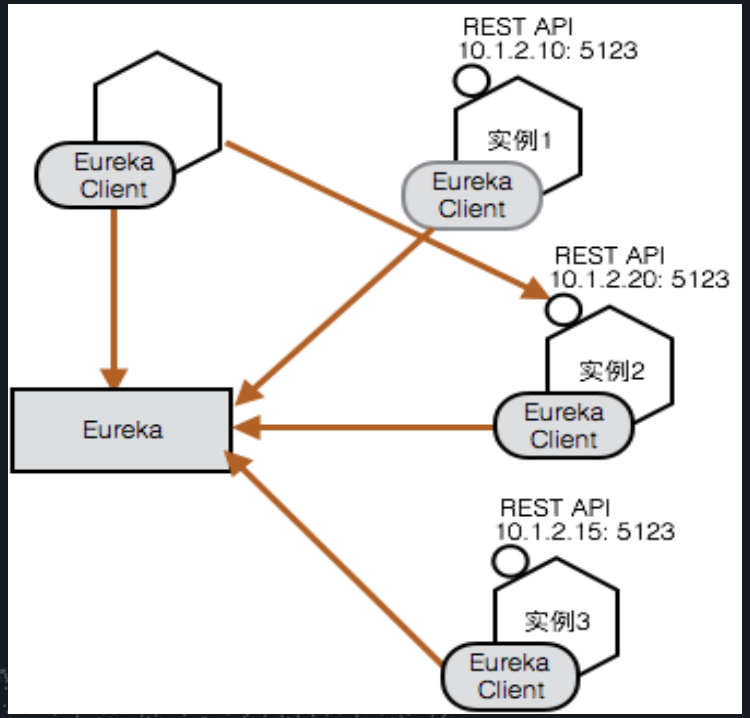
Spring Cloud

服务发现: Eureka
断路器: Hystrix
智能路由: Zuul
Rest API调用: Feign
配置管理: Config Server
等...



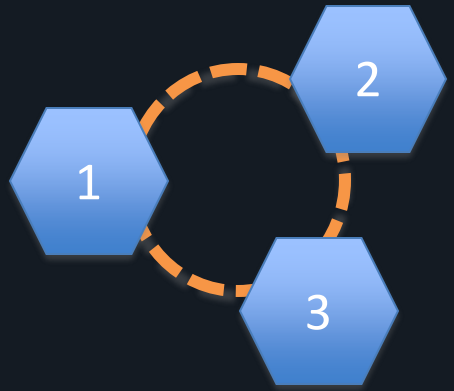
利用Eureka进行服务发现



实践环节

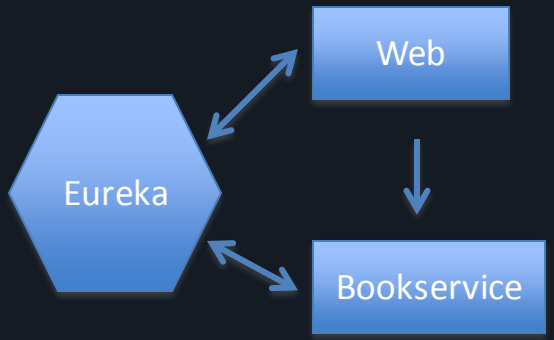
一

高可用Eureka服务



二

服务注册与发现



（一）高可用Eureka

eureka-ha.yml

```yaml
version: '3'
services:
  eureka1:
    image: registry.cn-beijing.aliyuncs.com/microservice-springcloud/demo-eurekaserver
    networks:
      default:
        aliases:
          - eureka
    ports:
      - "8761:8761"
    environment:
      - ADDITIONAL_EUREKA_SERVER_LIST=http://eureka2:8761/eureka/,http://eureka3:8761/eureka/
    labels:
      - "aliyun.logs.eureka=stdout"
  eureka2:
    image: registry.cn-beijing.aliyuncs.com/microservice-springcloud/demo-eurekaserver
    networks:
      default:
        aliases:
          - eureka
    ports:
      - "8762:8761"
    environment:
      - ADDITIONAL_EUREKA_SERVER_LIST=http://eureka1:8761/eureka/,http://eureka3:8761/eureka/

  eureka3:
    image: registry.cn-beijing.aliyuncs.com/microservice-springcloud/demo-eurekaserver
    networks:
      default:
        aliases:
          - eureka
    ports:
      - "8763:8761"
    environment:
      - ADDITIONAL_EUREKA_SERVER_LIST=http://eureka1:8761/eureka/,http://eureka2:8761/eureka/
```

"8761"

"8761"

"8761"

https://code.aliyun.com/zktest/springcloud/blob/master/compose/eureka-ha.yml

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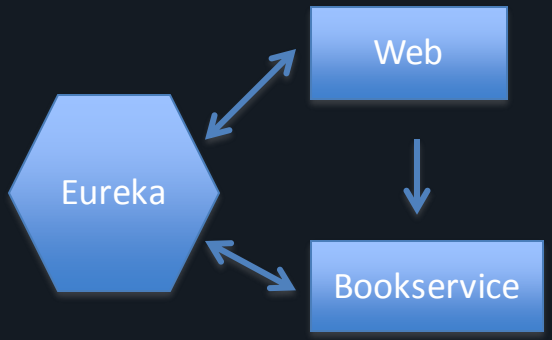
```
version: '3'
services:
  eureka1:
    image: registry.cn-beijing.aliyuncs.com/microservice-springcloud/demo-eurekaserver
ports:
     - "8761:8761"
    environment:
     - ADDITIONAL_EUREKA_SERVER_LIST=http://eureka2:8761/eureka/,http://eureka3:8761/eureka/
eureka2:
    image: registry.cn-beijing.aliyuncs.com/microservice-springcloud/demo-eurekaserver
    networks:
      default:
...
```

（二）服务注册与发现



feign-aliimage.yaml — UNREGISTERED

```yaml
version: '3'
services:
  eureka:
    image: registry.cn-beijing.aliyuncs.com/microservice-springcloud/demo-eurekaserver
    ports:
      - "30006:8761"

  web:
    image: registry.cn-beijing.aliyuncs.com/microservice-springcloud/demo-webfeign
    environment:
      - EUREKA_SERVER_ADDRESS=http://eureka:8761/eureka
    ports:
      - "30005:8080"

  bookservice:
    image: registry.cn-beijing.aliyuncs.com/microservice-springcloud/demo-bookservice
    environment:
      - EUREKA_SERVER_ADDRESS=http://eureka:8761/eureka
```

Line 18, Column 56 | Spaces: 2 | YAML

https://code.aliyun.com/zktest/springcloud/blob/master/compose/feign-aliimage.yml

```
version: '3'
services:
 eureka:
   image: registry.cn-beijing.aliyuncs.com/microservice-springcloud/demo-eurekaserver
   ports:
    - "30006:8761"

 web:
   image: registry.cn-beijing.aliyuncs.com/microservice-springcloud/demo-webfeign
   environment:
    - EUREKA_SERVER_ADDRESS=http://eureka:8761/eureka
   ports:
    - "30005:8080"

 bookservice:
   image: registry.cn-beijing.aliyuncs.com/microservice-springcloud/demo-bookservice
   environment:
    - EUREKA_SERVER_ADDRESS=http://eureka:8761/eureka
```

精彩内容，请访问阿里云容器团队博客

https://yq.aliyun.com/teams/11

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