

第

3

节

PetClinic微服务镜像构建

本课内容

- 演示如何构建SC版PetClinic微服务的镜像
 - Review Dockerfile
 - 演示一键构建所有微服务镜像



docker-maven-plugin

父Pom

```
<profile>
  <id>buildDocker</id>
  <build>
    <pluginManagement>
      <plugins>
        <plugin>
          <groupId>com.spotify</groupId>
          <artifactId>docker-maven-plugin</artifactId>
          <version>${docker.plugin.version}</version>
          <executions>
            <execution>
              <phase>install</phase>
              <goals>
                <goal>build</goal>
              </goals>
            </execution>
          </executions>
          <configuration>
            <imageName>${docker.image.prefix}/${project.artifactId}</imageName>
            <dockerDirectory>${docker.image.dockerfile.dir}</dockerDirectory>
            <serverId>docker-hub</serverId>
            <registryUrl>https://index.docker.io/v1/</registryUrl>
            <resources>
              <resource>
                <targetPath>/</targetPath>
                <directory>${project.build.directory}</directory>
                <include>${project.build.finalName}.jar</include>
              </resource>
            </resources>
            <buildArgs>
              <ARTIFACT_NAME>${project.build.finalName}</ARTIFACT_NAME>
              <EXPOSED_PORT>${docker.image.exposed.port}</EXPOSED_PORT>
            </buildArgs>
          </configuration>
        </plugin>
      </plugins>
    </build>
  </profile>
</profiles>
```

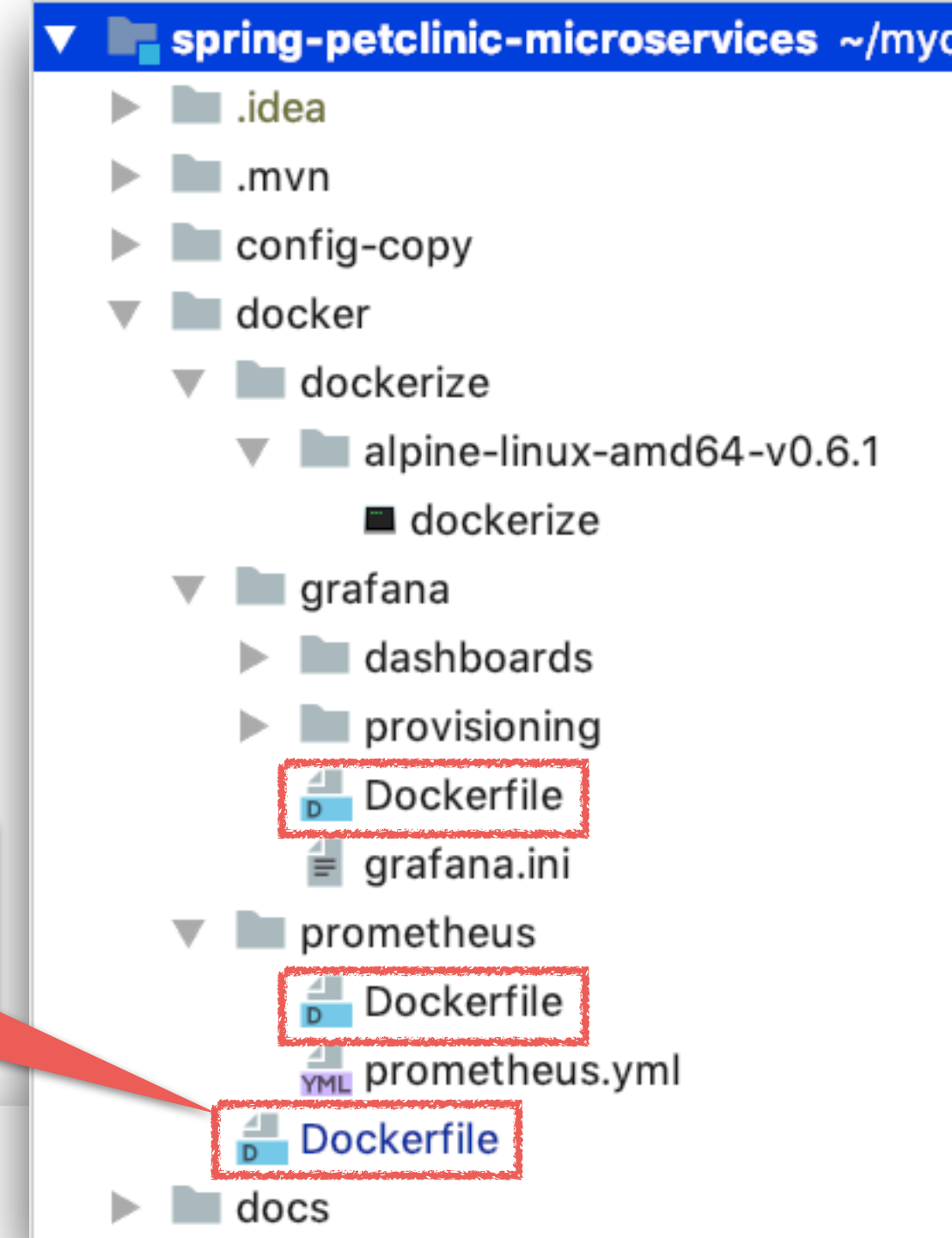
子项目Pom

```
<profiles>
  <profile>
    <id>buildDocker</id>
    <build>
      <plugins>
        <plugin>
          <groupId>com.spotify</groupId>
          <artifactId>docker-maven-plugin</artifactId>
          <version>${docker.plugin.version}</version>
        </plugin>
      </plugins>
    </build>
  </profile>
</profiles>
```

Dockerfile

微服务项目公共
Dockerfile

```
1  >> FROM openjdk:8-jre-alpine
2  VOLUME /tmp
3  ARG ARTIFACT_NAME
4  ARG EXPOSED_PORT
5  ENV SPRING_PROFILES_ACTIVE docker
6
7  ADD dockerize/alpine-linux-amd64-v0.6.1/dockerize dockerize
8  RUN chmod +x dockerize
9  ADD ${ARTIFACT_NAME}.jar /app.jar
10 RUN touch /app.jar
11 EXPOSE ${EXPOSED_PORT}
12 ENTRYPOINT ["java", "-XX:+UnlockExperimentalVMOptions", "-XX:+UseCGroupMemoryLimitForHeap", "-Djava.security.egd=file:/dev/./urandom", "-jar", "/app.jar"]
```



一键镜像构建

<https://github.com/spring2go/spring-petclinic-microservices>

```
1. william@jskill: ~/mydev/github/spring2go/spring-petclinic-microservices (zsh)
→ spring-petclinic-microservices git:(master) x pwd
/Users/william/mydev/github/spring2go/spring-petclinic-microservices
→ spring-petclinic-microservices git:(master) x mvn clean install -PbuildDocker
```

```
1. william@jskill: ~/mydev/github/spring2go/spring-petclinic-microservices (zsh)
ProgressMessage{id=null, status=null, stream=null, error=null, progress=null, progressDetail=null}
Successfully built 10eff80742a7
Successfully tagged springcommunity/spring-petclinic-api-gateway:latest
[INFO] Built springcommunity/spring-petclinic-api-gateway
[INFO] -----
[INFO] Reactor Summary for spring-petclinic-microservices 2.2.1:
[INFO]
[INFO] spring-petclinic-microservices ..... SUCCESS [ 0.297 s]
[INFO] spring-petclinic-admin-server ..... SUCCESS [ 16.835 s]
[INFO] spring-petclinic-customers-service ..... SUCCESS [ 20.902 s]
[INFO] spring-petclinic-vets-service ..... SUCCESS [ 22.731 s]
[INFO] spring-petclinic-visits-service ..... SUCCESS [ 18.127 s]
[INFO] spring-petclinic-config-server ..... SUCCESS [ 15.180 s]
[INFO] spring-petclinic-discovery-server ..... SUCCESS [ 21.782 s]
[INFO] spring-petclinic-api-gateway ..... SUCCESS [ 35.474 s]
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 02:31 min
[INFO] Finished at: 2020-02-22T20:55:32+08:00
[INFO] -----
→ spring-petclinic-microservices git:(master) x
```

镜像构建成功

```
1. william@jskill: ~/mydev/github/spring2go/spring-petclinic-microservices (zsh)
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 02:31 min
[INFO] Finished at: 2020-02-22T20:55:32+08:00
[INFO] -----
→ spring-petclinic-microservices git:(master) ✕ docker images
REPOSITORY                                TAG                IMAGE ID           CREATED            SIZE
springcommunity/spring-petclinic-api-gateway  latest            10eff80742a7      2 minutes ago     205MB
springcommunity/spring-petclinic-discovery-server  latest            ce2f594667b4      3 minutes ago     198MB
springcommunity/spring-petclinic-config-server    latest            26734bac3771      3 minutes ago     162MB
springcommunity/spring-petclinic-visits-service   latest            ce4c1c8c9c0c      4 minutes ago     236MB
springcommunity/spring-petclinic-vets-service     latest            50dac977a383      4 minutes ago     240MB
springcommunity/spring-petclinic-customers-service latest            439ef6ea3a3f      4 minutes ago     236MB
springcommunity/spring-petclinic-admin-server     latest            dece1297d3dd      5 minutes ago     197MB
```

本课小结



- 演示如何构建SC版PetClinic微服务镜像，注意点：
 - docker-maven-plugin
 - UseCGroupMemoryLimitForHeap
 - 使用克隆版 <https://github.com/spring2go/spring-petclinic-microservices>
 - mvn clean install -PbuildDocker