

## k8s-7、k8s+springboot项目升级,降级

笔记本: <Inbox>

创建时间: 2020/4/3 12:02

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(1) 首先搭建在k8s上搭建完springBoot项目

(2) 创建一个v0.0.2版本的springBoot项目,将pom中的版本升高一级

```
1 <?xml version="1.0" encoding="UTF-8"?>
2 <project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
3     xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/xsd/maven-4.0.0.xsd">
4     <modelVersion>4.0.0</modelVersion>
5     <parent>
6         <groupId>org.springframework.boot</groupId>
7         <artifactId>spring-boot-starter-parent</artifactId>
8         <version>2.2.5.RELEASE</version>
9         <relativePath/>
10    </parent>
11    <groupId>com.thunisoft</groupId>
12    <artifactId>k8s-demo</artifactId>
13    <version>0.0.2</version>
14    <name>k8s-demo</name>
15    <description>Demo project for Spring Boot</description>
```

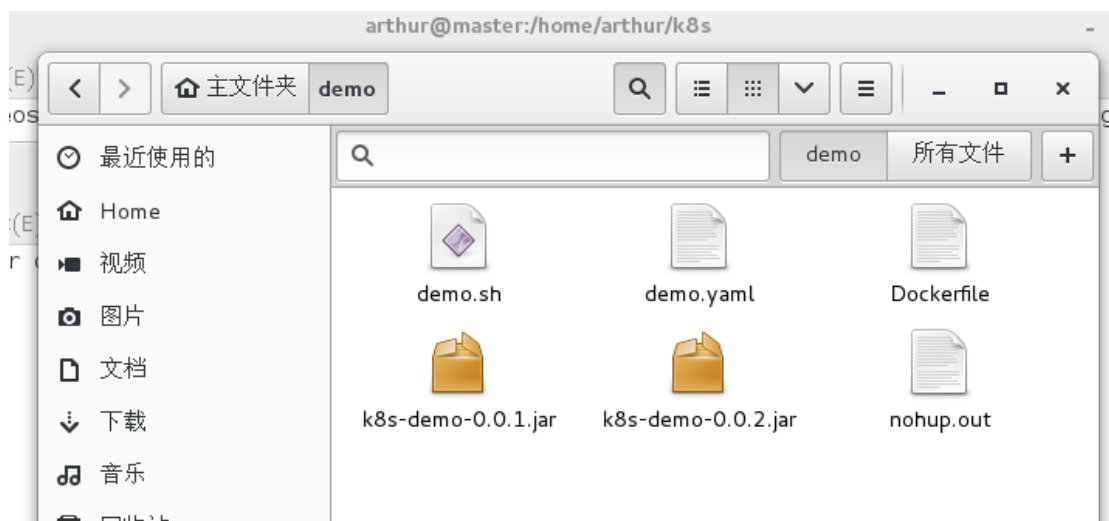
(3) 创建出来新的jar包

查看

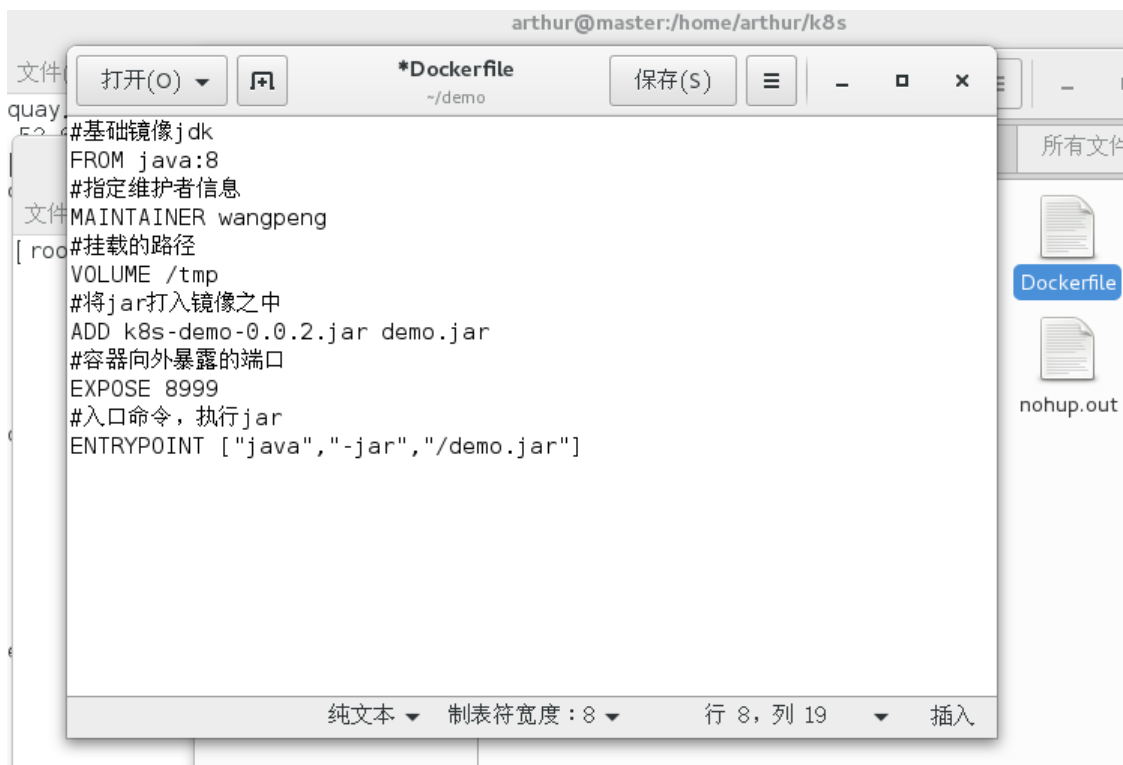
电脑 > 软件 (E:) > apache-maven-3.3.9 > repository > com > thunisoft > k8s-demo > 0.0.2

名称	修改日期	类型	大小
_remote.repositories	2020/4/3 12:05	REPOSITORIES ...	1 KB
k8s-demo-0.0.2.jar	2020/4/3 12:05	JAR 文件	17,182 KB
k8s-demo-0.0.2.pom	2020/4/3 12:04	POM 文件	2 KB

(4) 将jar包放到虚拟机demo问价夹中



(5) 修改Docker文件,把原来的k8s-demo-0.0.1改成新文件名称



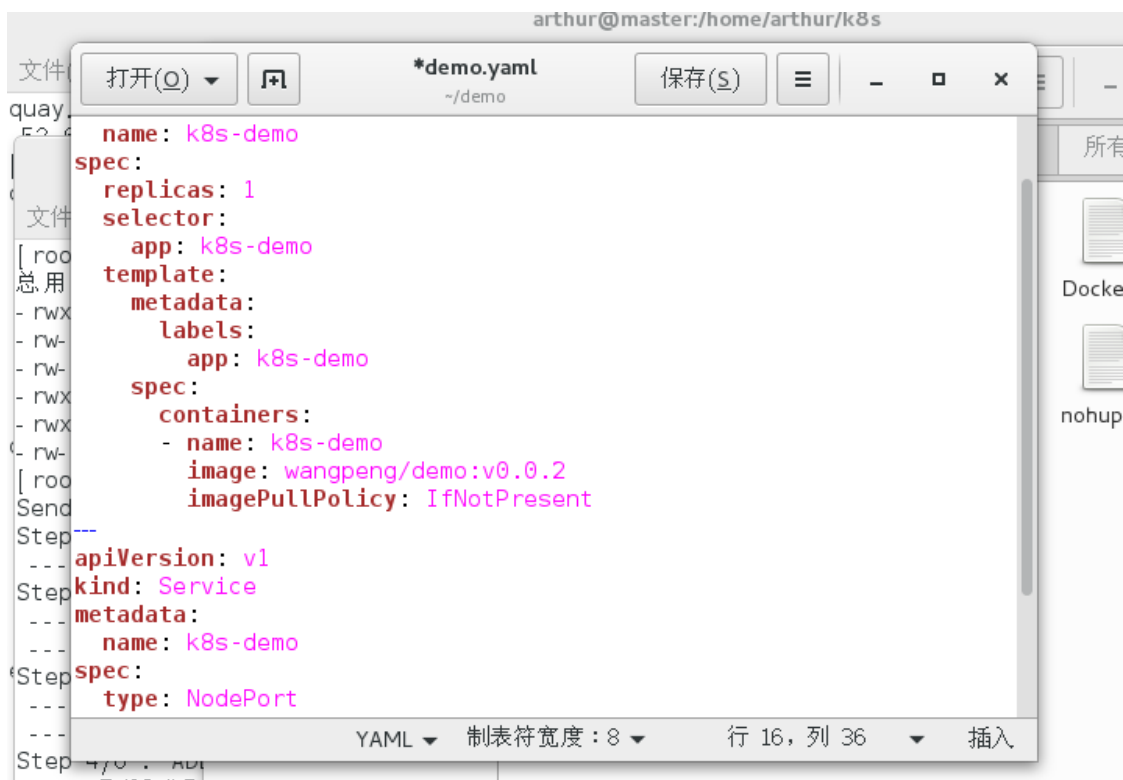
#### (6) 直接docker命令,创建镜像文件

```
docker build -t wangpeng/demo:v0.0.2 .
```

#### 创建成功

```
lrw----- . 1 root root 2375 4月 2 19:34 nohup.out
[root@master demo]# docker build -t wangpeng/demo:v0.0.2 .
Sending build context to Docker daemon 35.2MB
Step 1/6 : FROM java:8
---> d23bdf5b1b1b
Step 2/6 : MAINTAINER wangpeng
---> Using cache
---> ecc6081aa32d
Step 3/6 : VOLUME /tmp
---> Using cache
---> 5f4619754ad2
Step 4/6 : ADD k8s-demo-0.0.2.jar demo.jar
---> 7d63db54ef82
Step 5/6 : EXPOSE 8999
---> Running in cce5a6302e5a
Removing intermediate container cce5a6302e5a
---> b1a195d51e3b
Step 6/6 : ENTRYPOINT [\"java\", \"-jar\", \"/demo.jar\"]
---> Running in c1b0a8d3c5ba
Removing intermediate container c1b0a8d3c5ba
---> 6138b6b58a92
Successfully built 6138b6b58a92
Successfully tagged wangpeng/demo:v0.0.2
[root@master demo]#
```

#### (7) 修改demo.yaml文件,修改镜像名称



(8) 执行项目升级命令

查询镜像命令 docker images

```

[ root@master demo] # docker images
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
wangpeng/demo        v0.0.2             6138b6b58a92       10 minutes ago     661MB
wangpeng/demo        v0.0.1             5db6ba3cf186       2 hours ago        661MB
k8s.gcr.io/kube-proxy v1.18.0            43940c34f24f       8 days ago         117MB
k8s.gcr.io/kube-controller-manager v1.18.0            d3e55153f52f       8 days ago         162MB
k8s.gcr.io/kube-apiserver v1.18.0            74060cea7f70       8 days ago         173MB
k8s.gcr.io/kube-scheduler v1.18.0            a31f78c7c8ce       8 days ago         95.3MB
kubernetesui/dashboard v2.0.0-rc6         cdc71b5a8a0e       2 weeks ago        221MB
k8s.gcr.io/pause      3.2                80d28bedfe5d       6 weeks ago        683kB

```

查询服务所属空间 kubectl get svc --all-namespaces

```

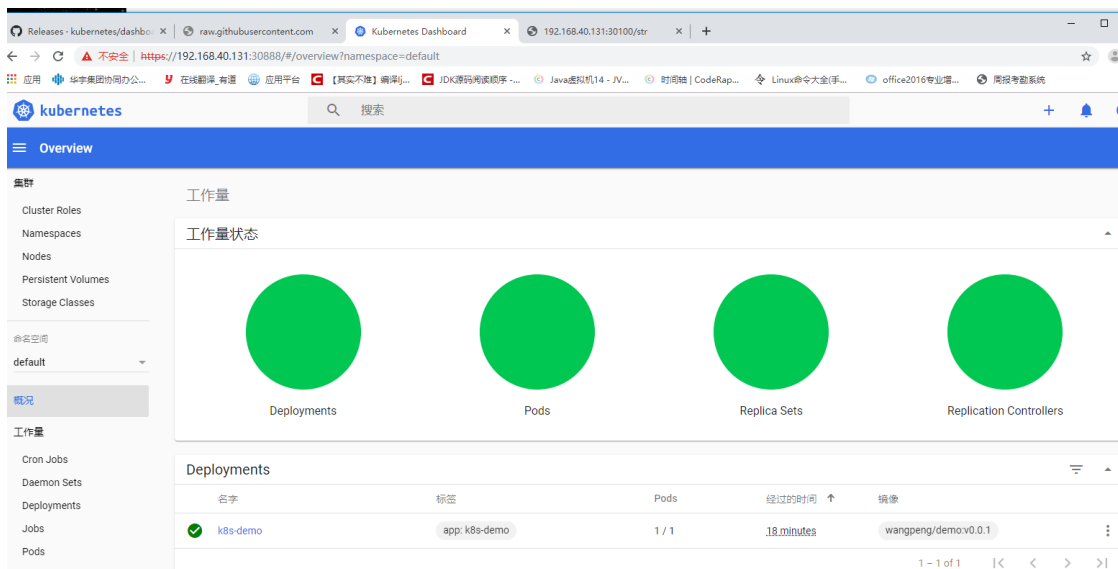
[ root@master demo] # kubectl get svc --all-namespaces
NAMESPACE   NAME          TYPE          CLUSTER-IP   EXTERNAL-IP   PORT(S)          AGE
default     k8s-demo      NodePort      10.106.168.5 <none>        9999:30100/TCP   67m
default     kubernetes    ClusterIP     10.96.0.1    <none>        443/TCP          16h
kube-system kube-dns       ClusterIP     10.96.0.10   <none>        53/UDP,53/TCP,9153/TCP 16h
kubernetes-dashboard dashboard-metrics-scraper ClusterIP      10.100.74.241 <none>        8000/TCP         3h37m
kubernetes-dashboard kubernetes-dashboard NodePort      10.100.91.135 <none>        443:30888/TCP   3h37m

```

创建一个deployment 命令: kubectl create deployment [部署名称] --image=[镜像名称]:[版本号]

```
kubectl create deployment k8s-demo --image=wangpeng/demo:v0.0.1
```

在页面查看 deployment k8s-demo



点击右侧编辑发现,创建出来的容器名称和k8s-demo不符合,可以在网页上直接修改成k8s-demo

YAML

JSON

```
100 metadata:
101   creationTimestamp: null
102   labels:
103     app: k8s-demo
104 spec:
105   containers:
106   - name: demo
107     image: 'wangpeng/demo:v0.0.1'
108     resources: {}
109     terminationMessagePath: /dev/termination-log
110     terminationMessagePolicy: File
111     imagePullPolicy: IfNotPresent
112   restartPolicy: Always
113   terminationGracePeriodSeconds: 30
114   dnsPolicy: ClusterFirst
115   securityContext: {}
116   schedulerName: default-scheduler
117 strategy:
118   type: RollingUpdate
119   rollingUpdate:
120     maxUnavailable: 25%
121     maxSurge: 25%
122   revisionHistoryLimit: 10
123   progressDeadlineSeconds: 600
124 status:
```

此操作相当于: `kubectl apply -f <spec.yaml>`

执行升级命令 `kubectl set image deployments /[空间名称] [服务名称]=[镜像名称]:[版本号]`

```
[root@master demo]# kubectl set image deployments/k8s-demo k8s-
demo=wangpeng/demo:v0.0.2
deployment.apps/k8s-demo image updated
```

不清楚这里升级是否正确如果不正确,可以在页面上升级服务的版本

Deployments						
名字	命名空间	标签	Pods	经过的时间 ↑	镜像	
✓ k8s-demo	default	app: k8s-demo	10 / 10	28 minutes	wangpeng/demo:v0.0.2	⋮
1 - 1 of 1  < < > >						
Pods						
项目: 11						
Replica Sets						
名字	命名空间	标签	Pods	经过的时间 ↑	镜像	
✓ k8s-demo-588d78845b	default	app: k8s-demo pod-template-hash: 588d78845b	10 / 10	6 minutes	wangpeng/demo:v0.0.2	⋮
✓ k8s-demo-7c4d5b8497	default	app: k8s-demo pod-template-hash: 7c4d5b8497	0 / 0	7 minutes	wangpeng/demo:v0.0.1	⋮
1 - 2 of 2  < < > >						
Replications Controllers						
名字	命名空间	标签	Pods	经过的时间 ↑	镜像	
✓ k8s-demo	default	app: k8s-demo	1 / 1	an hour	wangpeng/demo:v0.0.1	⋮

选择右侧三个点,点击编辑将镜像版本号修改最新版本,将v0.0.1修改成v0.0.2保存

编辑文件

YAML	JSON
100	metadata:
101	creationTimestamp: null
102	labels:
103	app: k8s-demo
104	spec:
105	containers:
106	- name: demo
107	image: 'wangpeng/demo:v0.0.1'
108	resources: {}
109	terminationMessagePath: /dev/termination-log
110	terminationMessagePolicy: File
111	imagePullPolicy: IfNotPresent
112	restartPolicy: Always
113	terminationGracePeriodSeconds: 30
114	dnsPolicy: ClusterFirst
115	securityContext: {}
116	schedulerName: default-scheduler
117	strategy:
118	type: RollingUpdate
119	rollingUpdate:
120	maxUnavailable: 25%
121	maxSurge: 25%
122	revisionHistoryLimit: 10
123	progressDeadlineSeconds: 600
124	status:

此操作相当于: `kubectl apply -f <spec.yaml>`

项目版本就升级了

后面会讲解K8S共享存储