

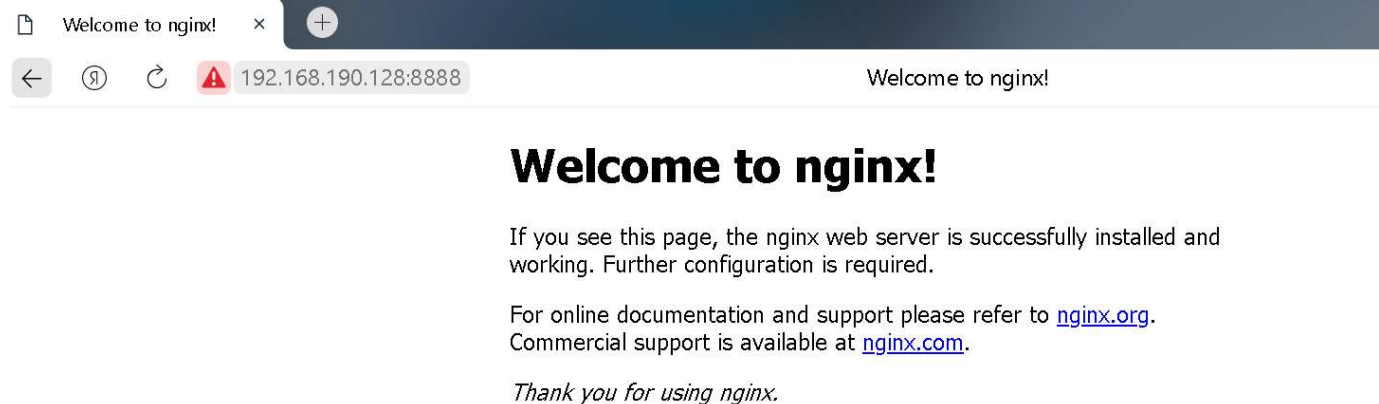
Lab #2. First pod



- `sudo kubectl run nginx --image=nginx:latest --port=80`
- `sudo kubectl get pods`

```
loki@ubuntumaster:~$ sudo kubectl get pods
NAME      READY   STATUS    RESTARTS   AGE
nginx     1/1     Running   0           36s
```

- `sudo kubectl port-forward nginx --address 0.0.0.0 8888:80`
- Access “master_ip:8888”



Lab #2. First pod



- `sudo kubectl describe pods nginx`
- `sudo kubectl exec nginx -- date`
- `sudo kubectl exec --tty --stdin nginx -- /bin/bash`
- `sudo kubectl delete pods nginx`



- `sudo vi first_manifest.yaml`

```
apiVersion: v1
kind: Pod
metadata:
  name: web-srv
  labels:
    app: web_server
    owner: ozz
    description: web_server
spec:
  containers:
  - name: nginx
    image: nginx:latest
    ports:
      - containerPort: 80
      - containerPort: 443
```

- `sudo kubectl apply -f first_manifest.yaml`



Lab #4. First deployment



■ `sudo vi first_deployment.yaml`

```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: web-deploy
  labels:
    app: web_server
    owner: ozz
    description: web_server
spec:
  replicas: 5
  selector:
    matchLabels:
      project: myweb
  template:
    metadata:
      labels:
        project: myweb
        owner: ozz
        description: web_server
    spec:
      containers:
        - name: myweb-httpd
          image: httpd:latest
          ports:
            - containerPort: 80
            - containerPort: 443
```

```
---
apiVersion: autoscaling/v2beta2
kind: HorizontalPodAutoscaler
metadata:
  name: web-deploy-autoscaling
spec:
  scaleTargetRef:
    apiVersion: apps/v1
    kind: Deployment
    name: myweb-autoscaling
  minReplicas: 5
  maxReplicas: 10
  metrics:
    - type: Resource
      resource:
        name: cpu
        target:
          type: Utilization
          averageUtilization: 75
    - type: Resource
      resource:
        name: memory
        target:
          type: Utilization
          averageUtilization: 80
```



Lab #4. First deployment



- `sudo kubectl apply -f first_deployment.yaml`

```
loki@ubuntumaster:~$ sudo kubectl get pods
```

NAME	READY	STATUS	RESTARTS	AGE
web-deploy-b475c947b-4dcfk	1/1	Running	0	42s
web-deploy-b475c947b-5vt59	1/1	Running	0	43s
web-deploy-b475c947b-96br9	1/1	Running	0	43s
web-deploy-b475c947b-nkr8k	1/1	Running	0	42s
web-deploy-b475c947b-s5gtb	1/1	Running	0	43s

- `sudo kubectl get deployment`
- `sudo kubectl delete deploy web-deploy`

