

Lab 3 - Zadanie

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Tworzenie namespace lab4

```
kubectl create namespace lab4
```

lab4-namespace.yaml

```
apiVersion: v1
kind: ResourceQuota
metadata:
  name: lab4-quota
spec:
  hard:
    pods: "5"
    limits.cpu: "1000m"
    limits.memory: "1Gi"
```

```
kubectl apply -n lab4 -f lab4-namespace.yaml
```

Deployment

restrictednginx.yaml

```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: restrictednginx
  namespace: lab4
spec:
  replicas: 3
  selector:
    matchLabels:
      app: nginx-template
  template:
    metadata:
      labels:
        app: nginx-template
    spec:
      containers:
      - name: nginx-container
        image: nginx
        resources:
          limits:
            memory: "256Mi"
            cpu: "250m"
          requests:
            memory: "64Mi"
            cpu: "125m"
```

```
kubectl apply -f restrictednginx.yaml
```

Sprawdzenie poprawności

Sprawdzenie przestrzeni nazw lab4

```
kubectl get namespace
```

```
PS D:\Studia IX\3. Programowanie full-stack w chmurze\2023-10-24_Lab_4> kubectl get namespace
NAME                STATUS    AGE
default             Active    27d
kube-node-lease     Active    27d
kube-public         Active    27d
kube-system         Active    27d
kubernetes-dashboard Active    27d
lab3                Active    14d
lab4                Active    20m
production          Active    27d
```

Sprawdzenie deployment w przestrzeni nazw lab4

```
kubectl get deployment restrictednginx -n lab4
```

```
PS D:\Studia IX\3. Programowanie full-stack w chmurze\2023-10-24_Lab_4> kubectl get deployment restrictednginx -n lab4
NAME                READY    UP-TO-DATE    AVAILABLE    AGE
restrictednginx     3/3      3             3             4m14s
```

Szczegóły podów w przestrzeni nazw lab4.

```
kubectl describe pods -n lab4
```

```
PS D:\Studia IX\3. Programowanie full-stack w chmurze\2023-10-24_Lab_4> kubectl describe pods -n lab4
Name:                restrictednginx-5bf5c9fcff-41lxx
Namespace:          lab4
Priority:            0
Node:               minikube/192.168.49.2
Start Time:         Tue, 07 Nov 2023 09:22:24 +0100
Labels:             app=nginx-template
                   pod-template-hash=5bf5c9fcff
Annotations:        <none>
Status:             Running
IP:                 10.244.0.38
IPs:                IP: 10.244.0.38
Controlled By:      ReplicaSet/restrictednginx-5bf5c9fcff
Containers:
  nginx-container:
    Container ID:    docker://aa973546893b8829795b99380fdc1126ebd726ffa8846cdd313e0824ac6acc74
    Image:           nginx
    Image ID:        docker-pullable://nginx@sha256:86e53c4c16a6a276b204b0fd3a8143d86547c967dc8258b3d47c3a21bb68d3c6
    Port:            <none>
    Host Port:       <none>
    State:           Running
      Started:       Tue, 07 Nov 2023 09:22:29 +0100
    Ready:           True
    Restart Count:    0
    Limits:
      cpu:            250m
      memory:         256Mi
    Requests:
      cpu:            125m
      memory:         64Mi
    Environment:      <none>
    Mounts:
      /var/run/secrets/kubernetes.io/serviceaccount from kube-api-access-d76rm (ro)
```

Polecenie pokazuje 3 utworzone pody.

```
Name:                restrictednginx-5bf5c9fcff-41lxx
Namespace:          lab4
Priority:            0
Node:               minikube/192.168.49.2
Start Time:         Tue, 07 Nov 2023 09:22:24 +0100
Labels:             app=nginx-template
                   pod-template-hash=5bf5c9fcff
Annotations:        <none>
Status:             Running
IP:                 10.244.0.38
IPs:                IP: 10.244.0.38
```

```
Name:                restrictednginx-5bf5c9fcff-9z742
Namespace:          lab4
Priority:            0
Node:               minikube/192.168.49.2
Start Time:         Tue, 07 Nov 2023 09:22:24 +0100
Labels:             app=nginx-template
                   pod-template-hash=5bf5c9fcff
Annotations:        <none>
Status:             Running
IP:                 10.244.0.39
IPs:                IP: 10.244.0.39
```

```
Name:                restrictednginx-5bf5c9fcff-1418b
Namespace:          lab4
Priority:            0
Node:               minikube/192.168.49.2
Start Time:         Tue, 07 Nov 2023 09:22:24 +0100
Labels:             app=nginx-template
                   pod-template-hash=5bf5c9fcff
Annotations:        <none>
Status:             Running
IP:                 10.244.0.37
IPs:                IP: 10.244.0.37
```