

## 1. 扩容前后对比

```
Summary:
Total:      12.7508 secs
Slowest:    2.8531 secs
Fastest:    0.0624 secs
Average:    2.3022 secs
Requests/sec: 7.7642
```

```
Summary:
Total:      10.2345 secs
Slowest:    1.4321 secs
Fastest:    0.0498 secs
Average:    0.9215 secs
Requests/sec: 23.857
```

## 2. 命令/步骤

```
# 查看当前product服务的副本数
kubectl get deployment product -n gomall -o jsonpath='{.spec.replicas}'

# 查看product服务Pod运行状态
kubectl get pods -n gomall -l app=product

# 将frontend服务端口转发到本地
kubectl port-forward -n gomall service/frontend 8080:8080 &

# 执行负载测试（新开终端）
hey -c 20 -z 10s http://localhost:8080

# 查看product服务日志
kubectl logs -n gomall -l app=product --tail=50 -f

# 将product服务从1个副本扩容到3个副本
kubectl scale -n gomall deployment/product --replicas=3

# 检查扩容是否成功
kubectl get deployment product -n gomall

# 查看所有product Pod状态
kubectl get pods -n gomall -l app=product -w

# 执行相同的负载测试
hey -c 20 -z 10s http://localhost:8080
```