

DOCKER搭建测试环境

dockercon14

June 9-10, 2014 • San Francisco



困境 DILEMMA

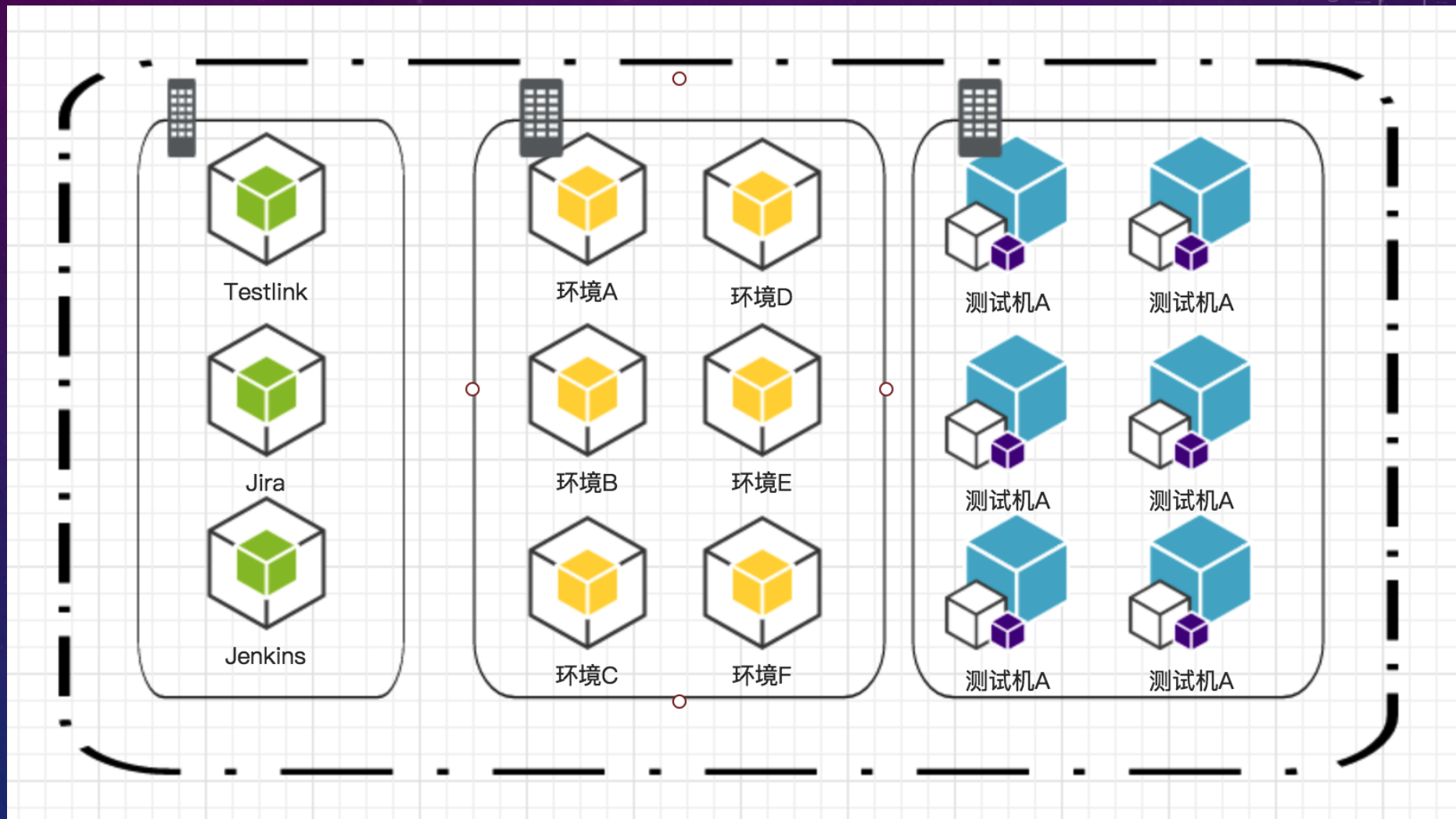
- 环境搭建困难
- 环境不一致
- 一套环境多人共用
- 测试机器稀缺

解决方案 SOLUTION

- 自动化
- 标准化
- 集群化

DOCKER

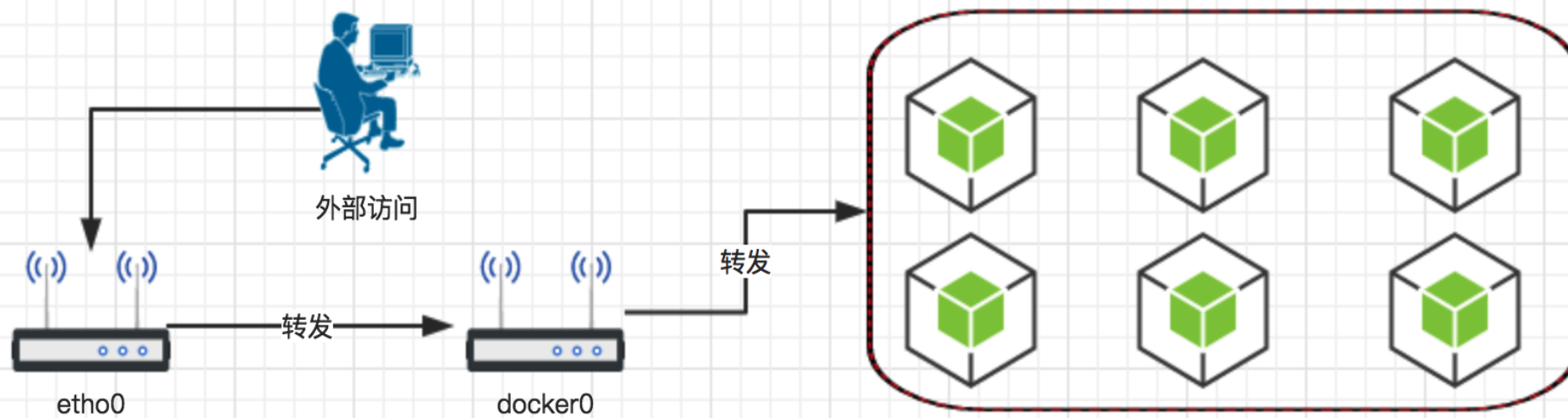
- 节省资源
- 简化运维成本
- 迁移方便
- 用完既删



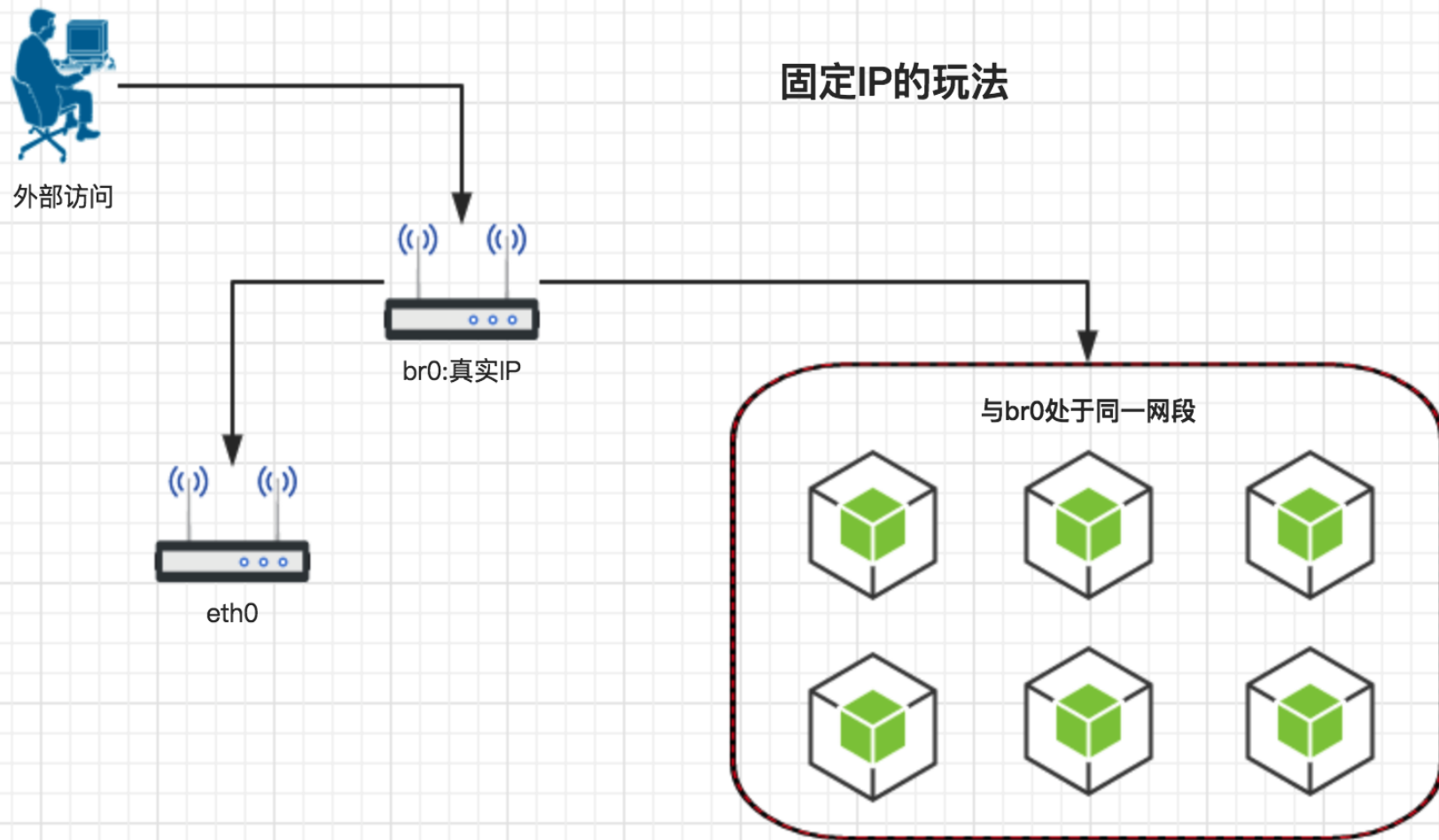
网络的玩法 NETWORK

- 端口映射
- 固定IP

端口映射的玩法



固定IP的玩法



环境部署 DEPLOYMENT

- Container模式
- 打包模式

container模式



模块A



模块B



模块C



模块D

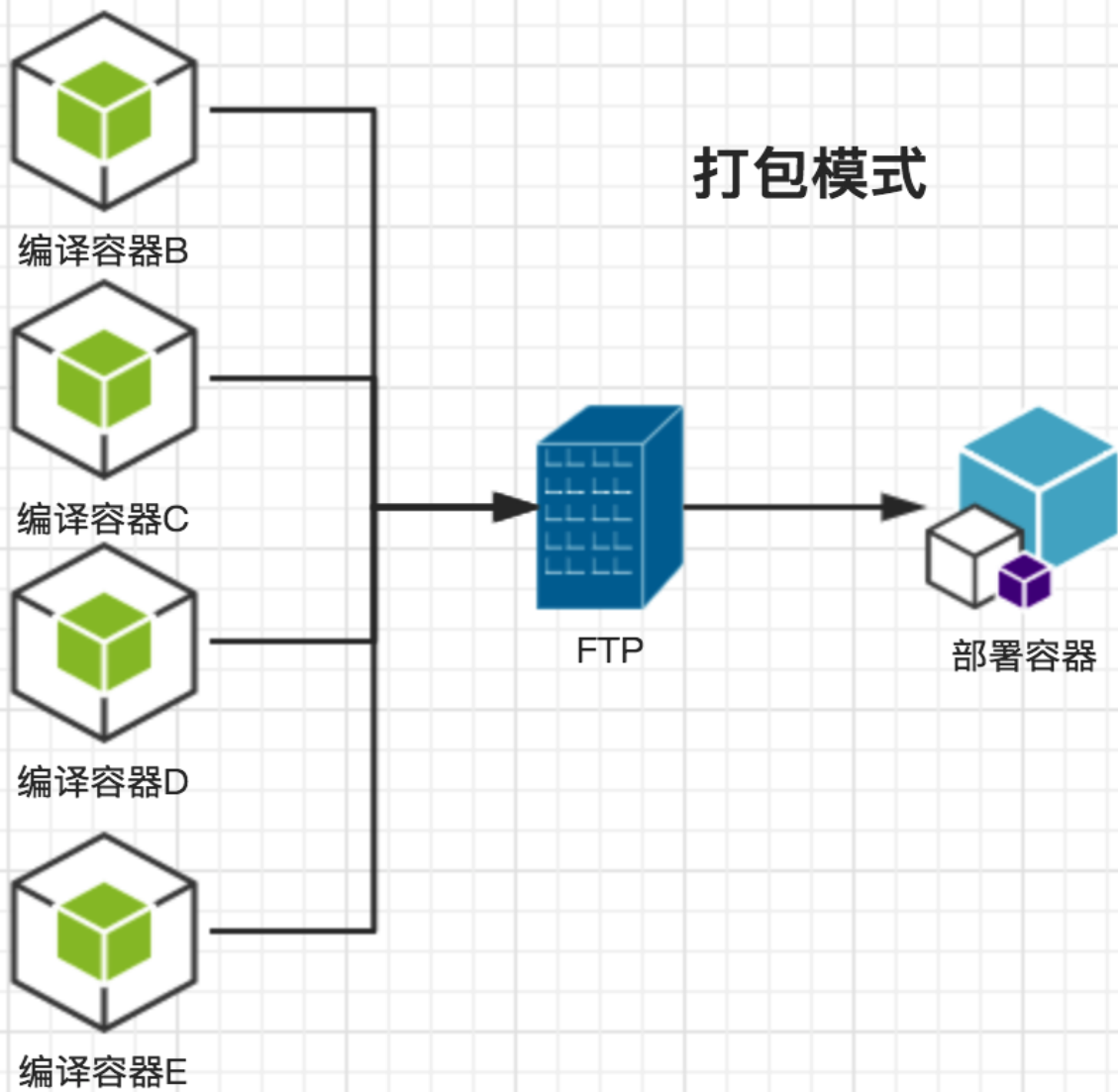


模块E

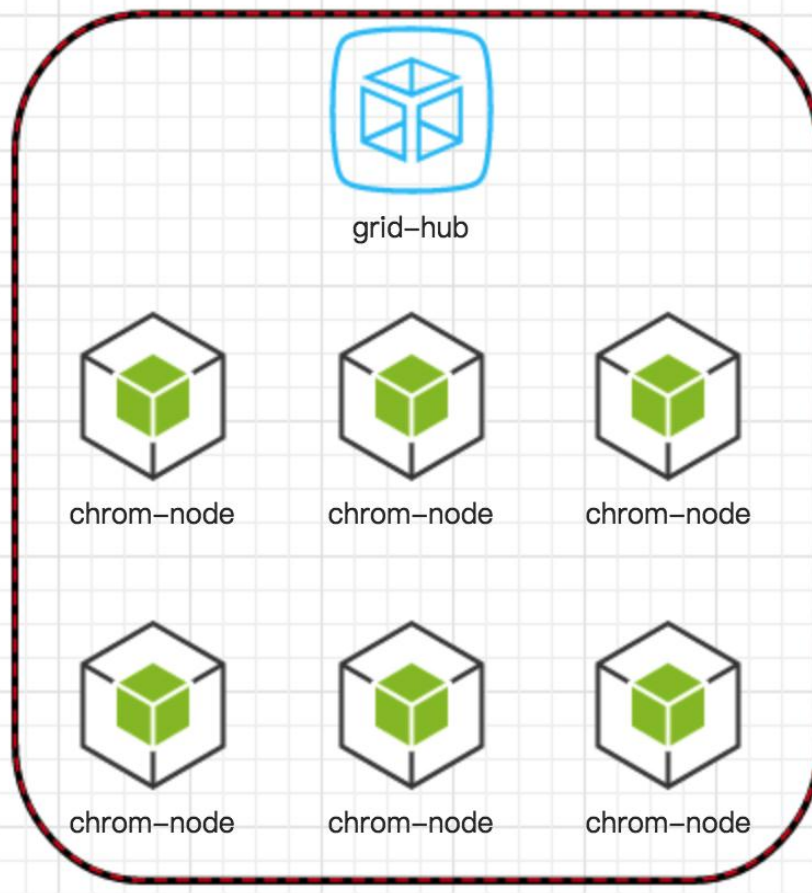
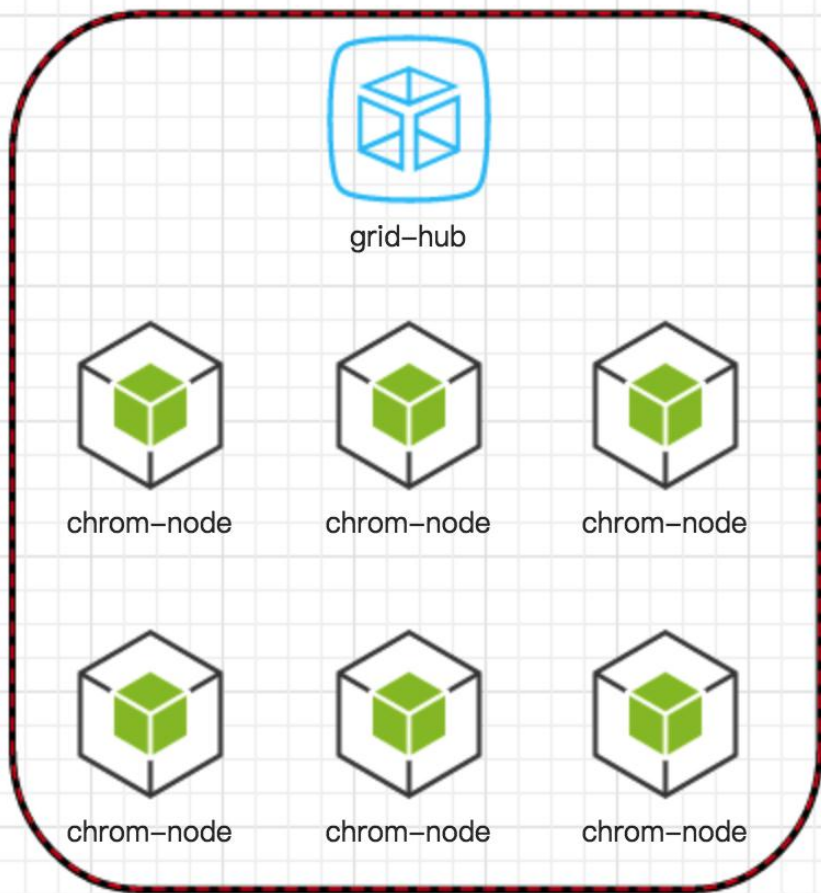


模块F

打包模式



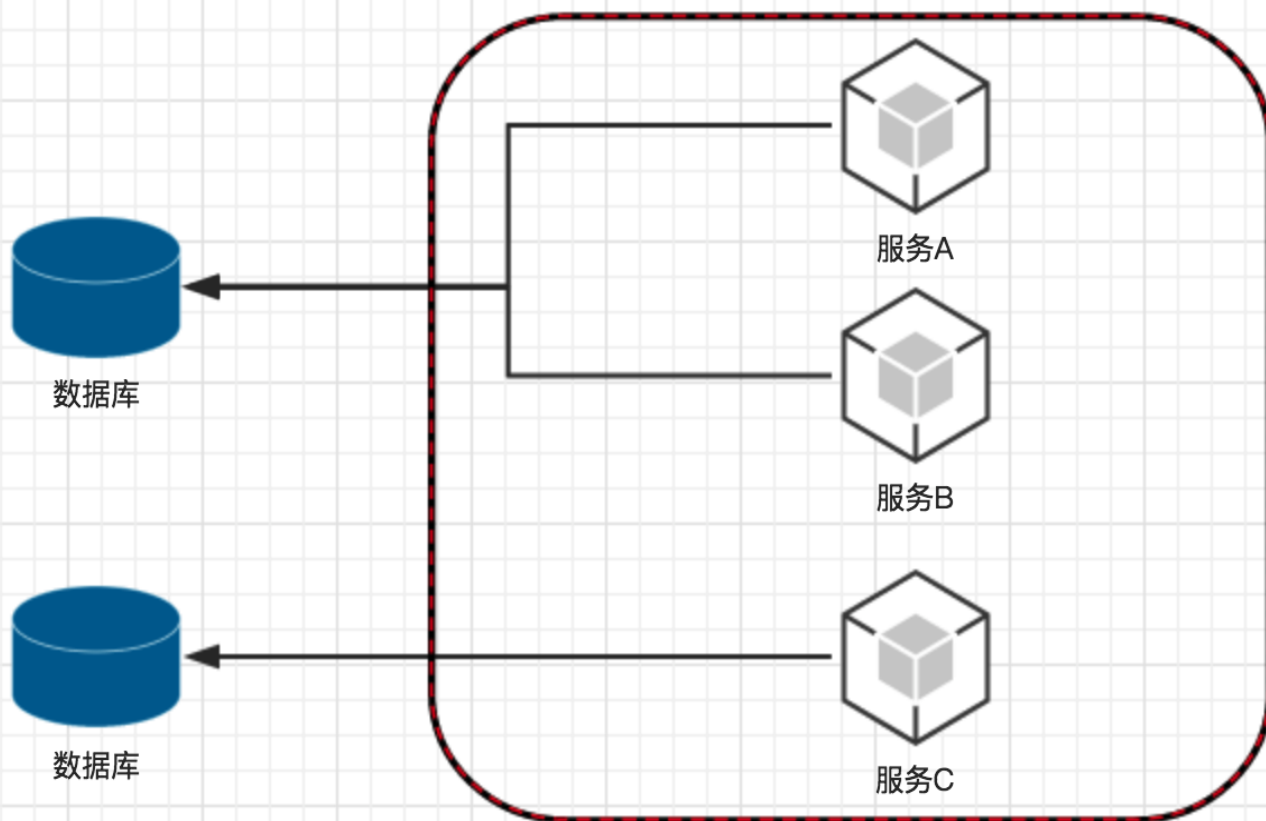
测试执行机器的玩法



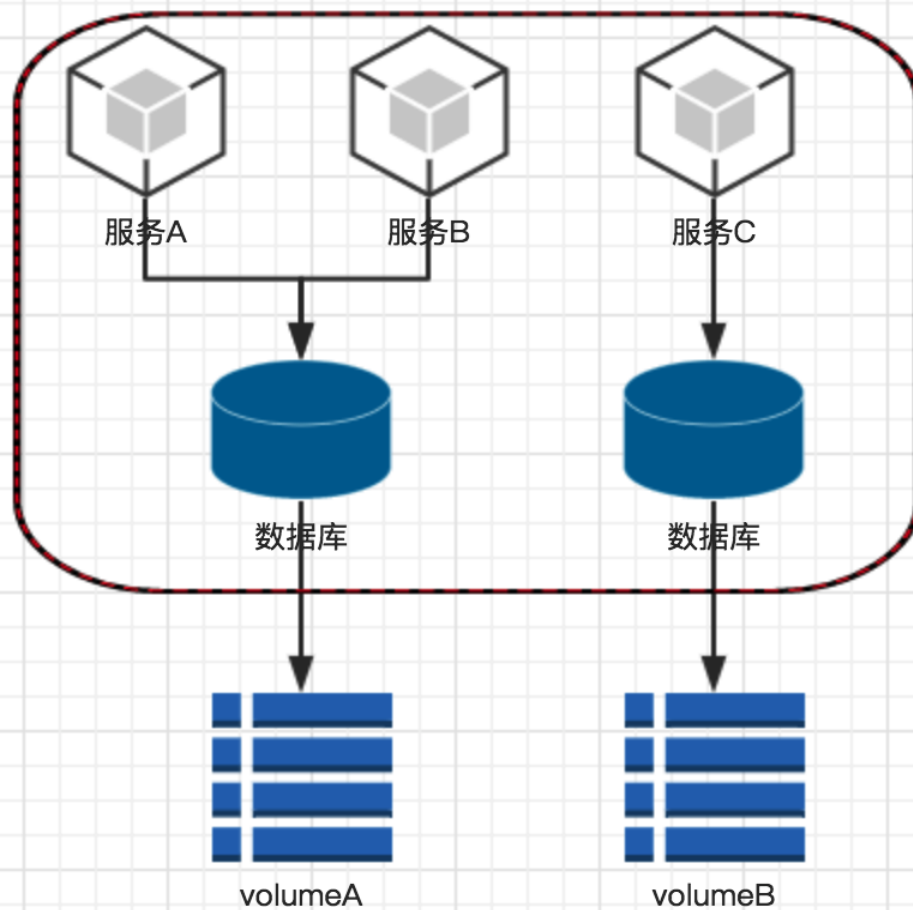
存储的玩法 STORAGE

- 外部存储
- Volumes

外部存储



volume存储



集群 CLUSTER

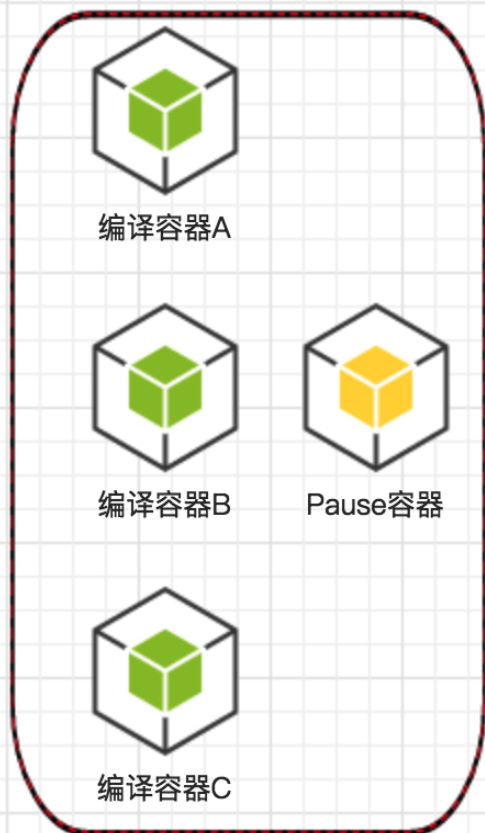
- Mesos
- Kubernetes
- Swarm mode

K8S基本概念

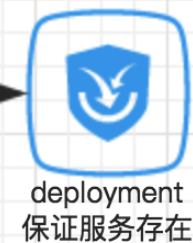
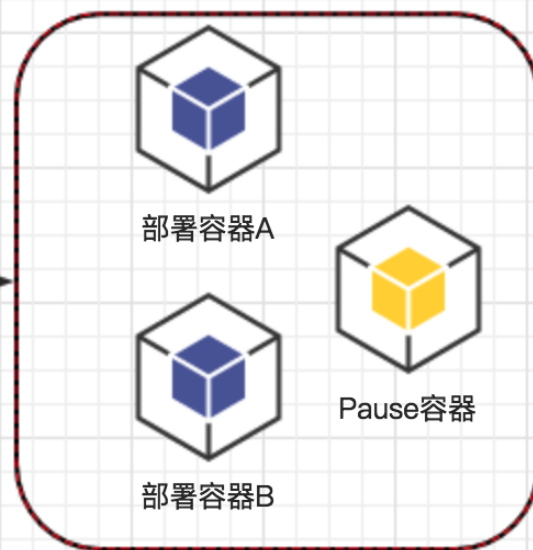
- Pod
- Deployment
- service

为PM定制产品环境

编译Pod

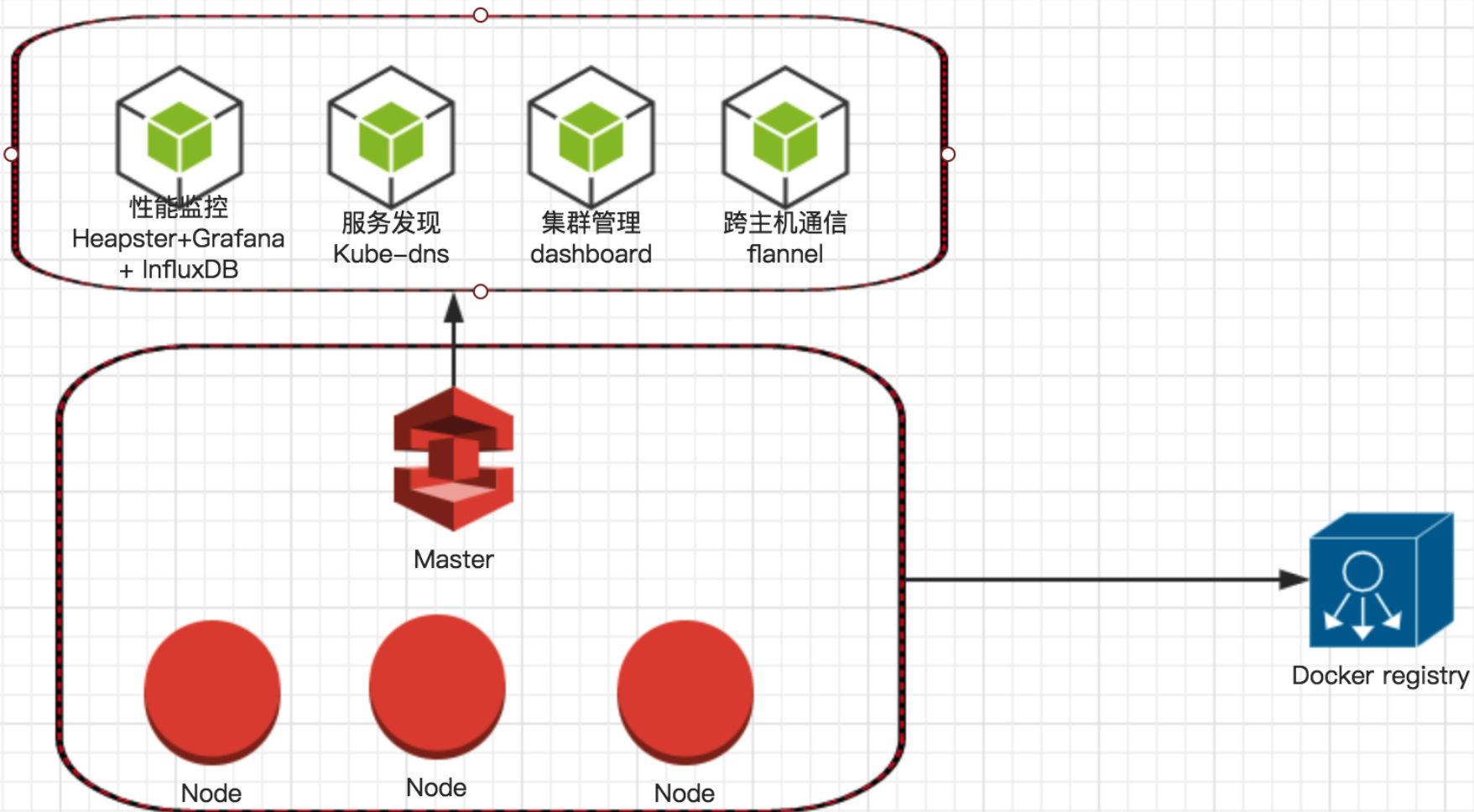


部署Pod



安装服务

- 夸主机通信
- 服务发现
- 集群管理
- 容器级监控
- 镜像仓库



Admin

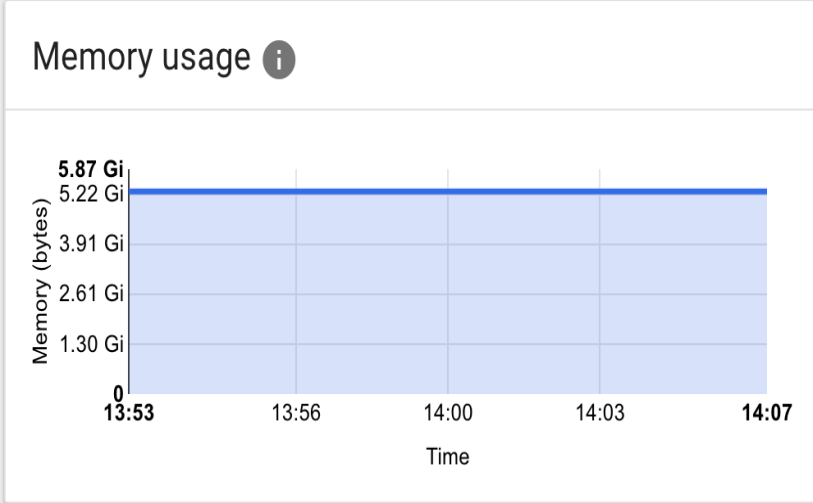
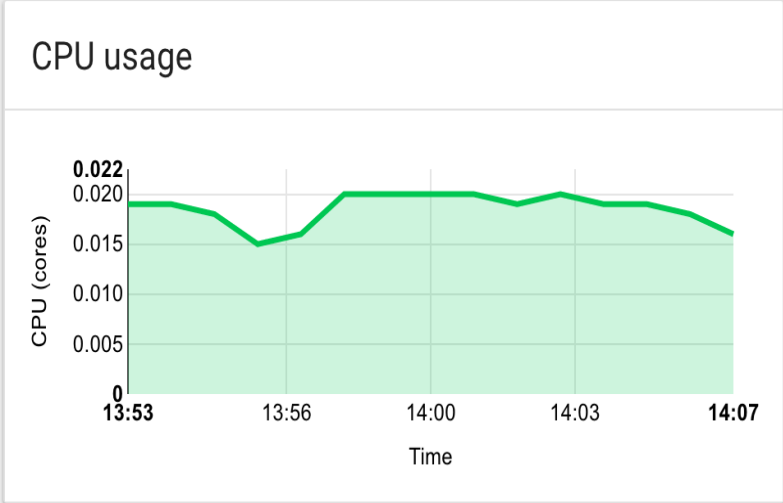
- Namespaces
- Nodes
- Persistent Volumes
- Storage Classes

Namespace

default ▾

Workloads

- Deployments
- Replica Sets
- Replication Controllers
- Daemon Sets
- Stateful Sets
- Jobs

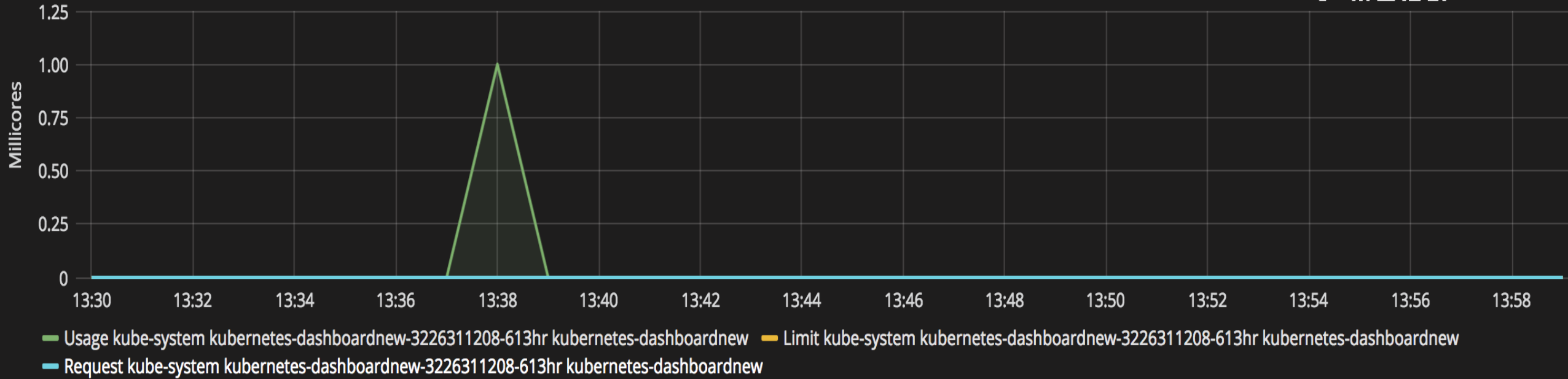


Pods

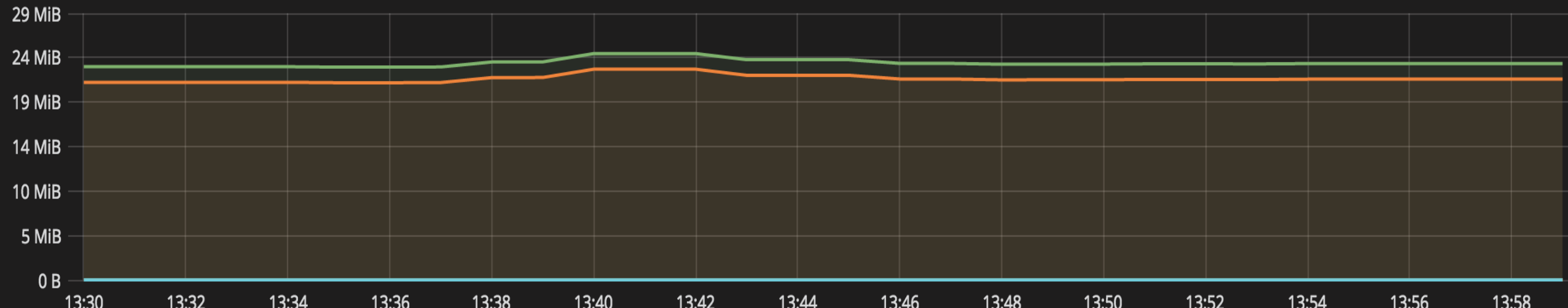
Name	Status	Restarts	Age	CPU (cores)	Memory (bytes)
✓ gaofei02-deploy	Running	0	a day	0	461.797 Mi
✓ gaofei02-pma1	Running	0	a day	0	34.758 Mi
✓ gaofei03-deploy	Running	0	4 days	0.016	4.790 Gi



Individual CPU Usage: kube-system kubernetes-dashboardnew-3226311208-613hr



Individual Memory Usage: kube-system kubernetes-dashboardnew-3226311208-613hr



THANK YOU