

CKA-监控

讲师：老段 RHCE/RHCA/COA/CKA

kubernetes 集群监控

- 查看版本 `kubectl version`
`curl https://cloud.weave.works/k8s/scope.yaml?k8s-version=1.11.1 -sL -o scope.yaml`
- 查看yaml文件里所使用镜像的版本
- 在各个节点下载镜像
`docker pull docker.io/weaveworks/scope:1.9.1`
`kubectl apply --namespace weave -f scope.yaml`
- 修改
`kubectl edit service weave-scope-app -n weave --> type: NodePort`
`kubectl get svc weave-scope-app -n weave -o wide`



Search

Processes

Containers

Pods

Hosts

Graph

Table

Resources

Live

Pause

by name

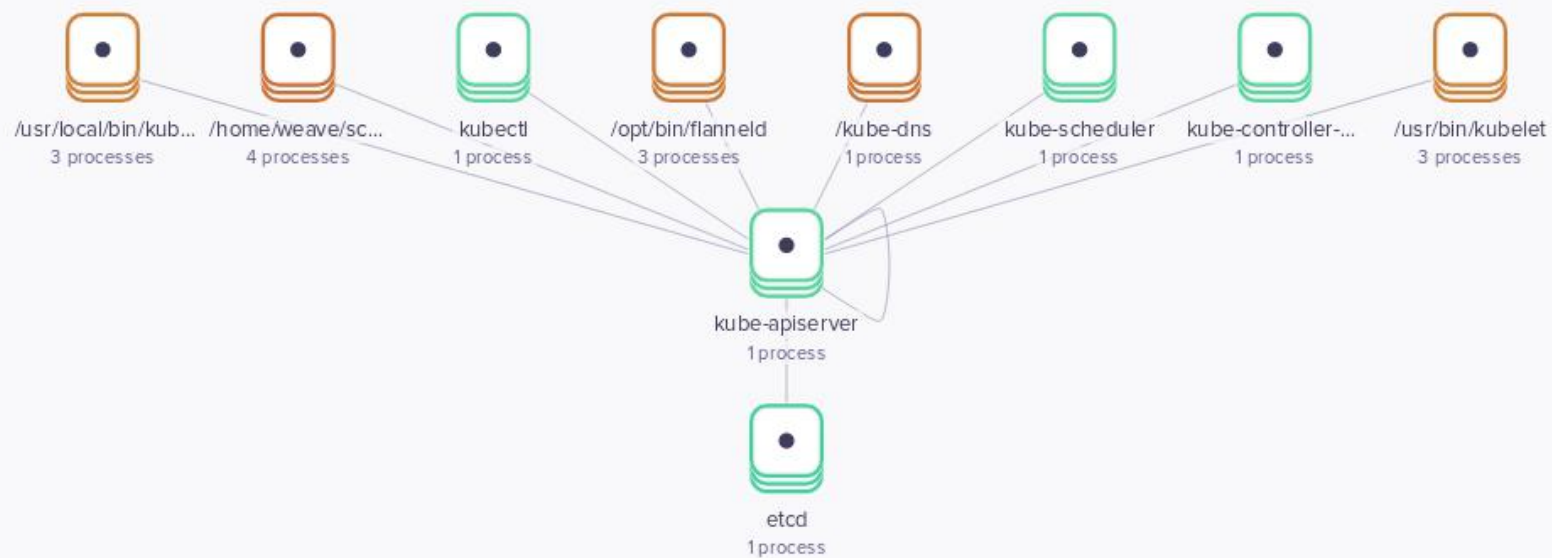
by DNS name

Controllers

Weave Net

by image

Services



10 nodes (166 filtered)

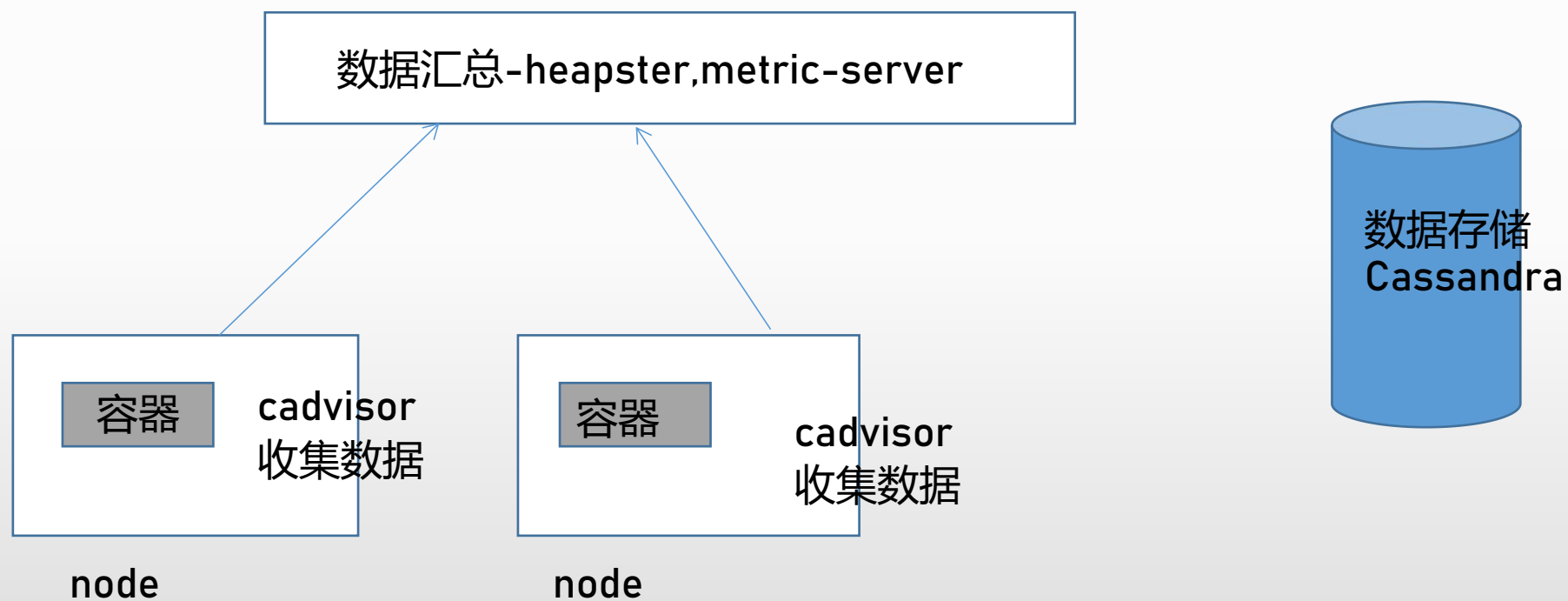
Show unconnected

Hide unconnected

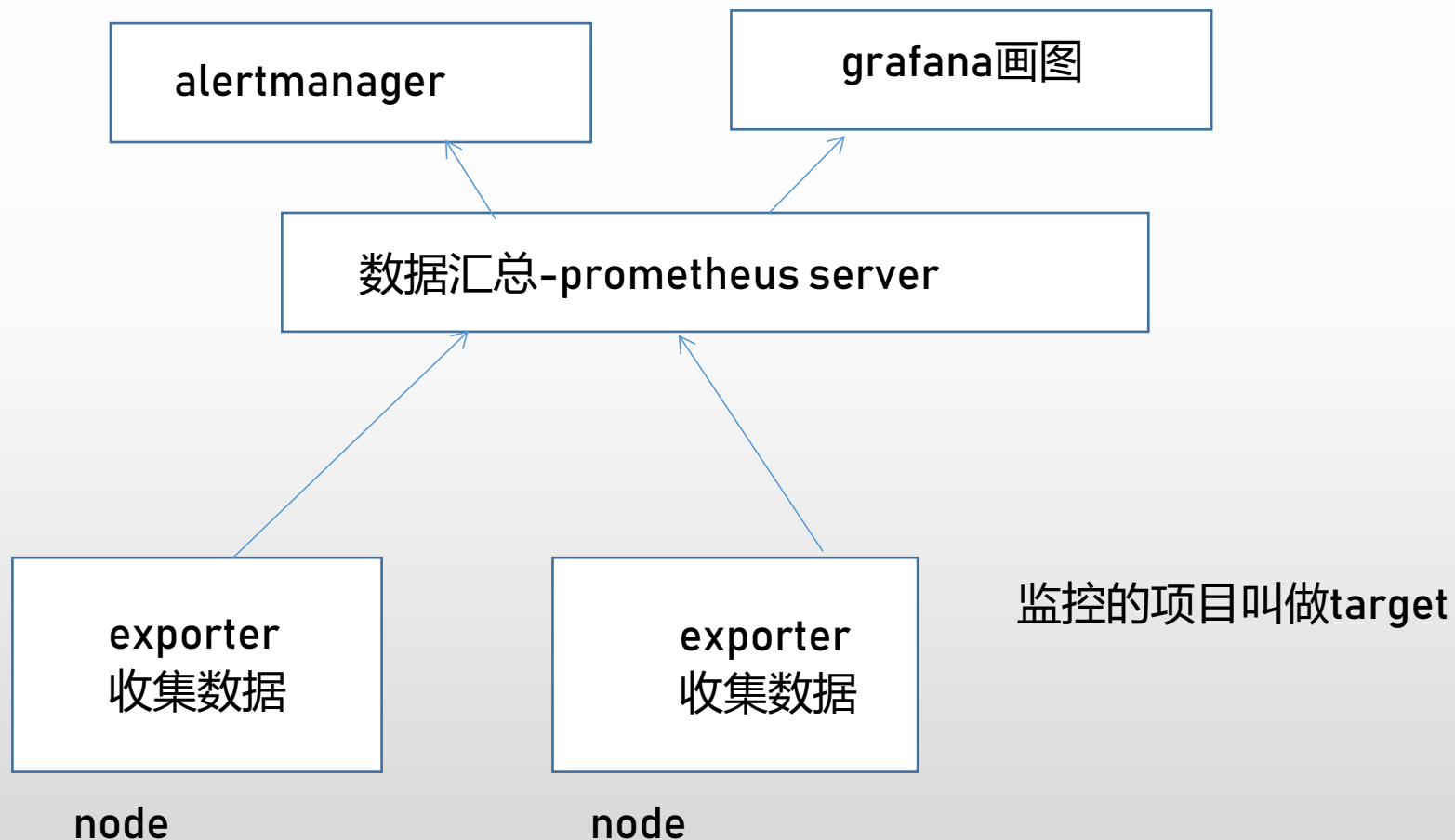
Version 1.9.1 on weave-scope-app-545ffb956d-pwwxn Plugins: n/a

Refresh, Info, Settings, Help icons

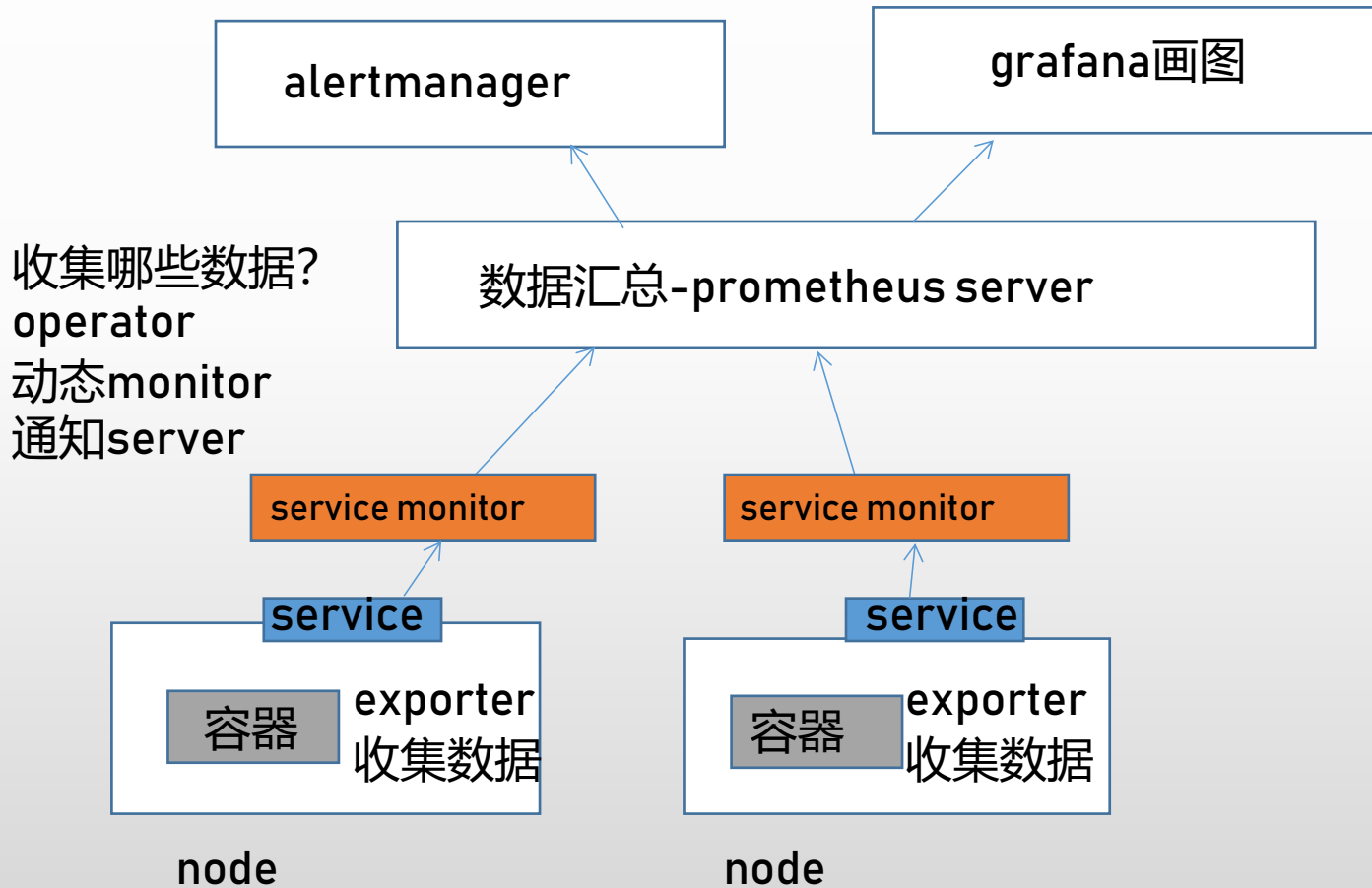
监控框架



prometheus框架



prometheus operator框架



prometheus operator
由coreOS基于
prometheus开发专用于
kubernetes监控

监测每个附件，都要为此
监控创建一个service

部署prometheus

```
git clone https://github.com/coreos/prometheus-operator.git
```

```
kubectl create ns monitoring
```

准备镜像

```
docker pull quay.io/coreos/prometheus-config-reloader:v0.20.0
```

```
docker pull quay.io/coreos/hyperkube:v1.7.6_coreos.0
```

```
docker pull quay.io/coreos/configmap-reload:v0.0.1
```

```
docker pull quay.io/coreos/prometheus-operator:v0.20.0
```

```
docker pull quay.io/prometheus/prometheus:v2.2.1
```

```
docker pull quay.io/prometheus/alertmanager:v0.15.1
```

```
docker pull quay.io/coreos/grafana-watcher:v0.0.8
```

```
docker tag docker.io/grafana/grafana:5.0.0 grafana/grafana:5.0.0
```

```
docker pull registry.cn-hangzhou.aliyuncs.com/google_containers/kube-state-metrics:v1.2.0
```

```
docker tag registry.cn-hangzhou.aliyuncs.com/google_containers/kube-state-metrics:v1.2.0
```

```
gcr.io/google_containers/kube-state-metrics:v1.2.0
```

```
docker pull quay.io/prometheus/node-exporter:v0.15.2
```

部署prometheus

```
docker pull registry.cn-hangzhou.aliyuncs.com/google_containers/addon-resizer:1.7  
docker tag registry.cn-hangzhou.aliyuncs.com/google_containers/addon-resizer:1.7  
gcr.io/google_containers/addon-resizer:1.7
```


部署prometheus

以下所有操作均在monitoring命名空间里做

```
helm install --name prometheus-operator prometheus-operator/
```

```
mkdir -p kube-prometheus/charts
```

```
helm package -d helm/kube-prometheus/charts helm/alertmanager helm/grafana
```

```
helm/prometheus helm/exporter-kube-dns helm/exporter-kube-scheduler helm/exporter-  
kubelets helm/exporter-node helm/exporter-kube-controller-manager helm/exporter-kube-etcd  
helm/exporter-kube-state helm/exporter-coredns helm/exporter-kubernetes
```

```
helm install helm/kube-prometheus --name kube-prometheus
```

```
helm install --name alertmanager alertmanager/
```

```
helm install --name grafana grafana/
```

把svc--alertmanager grafana-grafana **kube-prometheus**类型设置为NodePort
访问服务prometheus

192.168.26.51:30995/datasources/edit/1

Settings Dashboards

Name prometheus ⓘ Default ☐

Type Prometheus ▾

HTTP

URL http://192.168.26.51:32567 ⓘ

Access direct ▾ ⓘ

Auth

Basic Auth ☐ With Credentials ⓘ ☐

Scrape interval 15s ⓘ

✓ Data source is working

Save & Test Delete Back

模板的使用

<https://grafana.com/dashboards/315>

