

Material utilizado no webinar da Zabbix e apresentado pela JLCP.

Pre-requisitos:

1. Ambiente Zabbix;
2. Cluster Kubernetes;
3. Helm Client;
4. Kubectl.

Não tem um ambiente com kubernetes e quer testar?

Utilize o kilercoda.

<https://killercode.com/playgrounds/scenario/kubernetes>

Caso necessite:

Instalação Helm:

```
curl -ssl https://raw.githubusercontent.com/helm/helm/master/scripts/get-helm-3 |  
bash  
helm version --short
```

Instalação kubectl:

```
curl -LO "https://dl.k8s.io/release/${curl -L -s  
https://dl.k8s.io/release/stable.txt)/bin/linux/amd64/kubectl"  
  
sudo install -o root -g root -m 0755 kubectl /usr/local/bin/kubectl  
kubectl version --client
```

Laboratório:

1. Chart

Podemos realizar o download do repositório inteiro.

```
git clone https://git.zabbix.com/scm/zt/kubernetes-helm.git
```

Ou Download do Chart.

```
helm repo add zabbix-chart-7.0  
https://cdn.zabbix.com/zabbix/integrations/kubernetes-helm/7.0
```

navegue até o diretório:

```
cd zabbix-helm-chrt
```

2. Helm Chart

Verifique a estrutura do chart, arquivos do helm:

```
└─ zabbix-helm-chrt
   └─ Chart.lock
   └─ charts
      └─ kube-state-metrics
         └─ Chart.yaml
         └─ README.md
         └─ templates
            └─ ciliumnetworkpolicy.yaml
            └─ clusterrolebinding.yaml
            └─ deployment.yaml
            └─ _helpers.tpl
            └─ kubeconfig-secret.yaml
            └─ networkpolicy.yaml
            └─ NOTES.txt
            └─ pdb.yaml
            └─ podsecuritypolicy.yaml
            └─ psp-clusterrolebinding.yaml
            └─ psp-clusterrole.yaml
            └─ rbac-configmap.yaml
            └─ rolebinding.yaml
            └─ role.yaml
            └─ serviceaccount.yaml
            └─ servicemonitor.yaml
            └─ service.yaml
            └─ stsdiscovery-rolebinding.yaml
            └─ stsdiscovery-role.yaml
            └─ verticalpodautoscaler.yaml
         └─ values.yaml
   └─ Chart.yaml
   └─ images
      └─ architecture.png
   └─ LICENSE
   └─ README.md
   └─ templates
      └─ agent-bsp-clusterrolebinding.yaml
      └─ agent-bsp-clusterrole.yaml
      └─ agent-bsp.yaml
      └─ agent-service-account.yaml
      └─ agent-service.yaml
      └─ clusterrole-binding.yaml
      └─ cluster-role.yaml
      └─ _helpers.tpl
```

```
| | NOTES.txt
| | secret.yaml
| | service-account.yaml
| | service.yaml
| | zabbix-agent.yaml
| | zabbix-java-gateway.yaml
| | zabbix-proxy.yaml
| values.yaml
```

```
6 directories, 45 files
```

3. Conhecendo arquivo de Values

Verifique o values e identifique o necessita de alteração.

values.yaml

4. Values

Alterar Valores.

values.yaml

5. Helm tempalte:

Simular gerando os yaml com template:

```
helm template zabbix . -f .\values.yaml --debug
```

6. Instalar Creando Namespace:

```
kubectl create ns monitoring
```

Instalando:

```
helm upgrade --install zabbix . --dependency-update -f values.yaml -n monitoring
```

7. Namespace

Verificar tudo que foi criado no namespace.

```
helm template horus-frontend-staging . -f .\values-staging.yaml --debug
```

8. Secret

Capturando a secret para ser utilizada no ambiente.

```
kubectl get secret zabbix-service-account -n monitoring -o jsonpath={.data.token}  
| base64 -d
```

9. Troubleshooting

Verificar todos os resources criados.

```
kubectl get all -n monitoring
```

Executar comandos no container.

```
kubectl exec -it pod/zabbix-proxy-64cfbbcbd8-f28d5 -- bash
```

Verificando logs

```
kubectl logs pod/zabbix-proxy-64cfbbcbd8-zq2dc
```

Verificando componentes:

```
kubectl get componentstatus
```

10. Cadastro de proxy no Zabbix.

Cadastre o proxy o frontend do Zabbix.

Filter

Name

Mode

Any Active Passive

Version

Any Current Outdated

Apply

Reset

<input type="checkbox"/>	Name ▲	Mode	Encryption	State	Version	Last seen (age)	Item count	Required vps	Hosts
<input type="checkbox"/>	zabbix-proxy	Active	None	Online	7.0.4	3s	2569	43.27	3 aks-monitoring, Kubelet aks-aksnodepool-40494644-vmss000020, Kubelet aks-aksnodepool-40494644-vmss000023

Displaying 1 of 1 found

11. Criação do host do Kubernetes.

Cadastro do host. Template: Kubernetes cluster state by HTTP Monitored by Proxy: Criado no passo anterior.

Host ? ×

Host IPMI Tags Macros 1 Inventory Encryption Value mapping

* Host name

aks-monitoring

Visible name

aks-monitoring

Templates

Name

Kubernetes cluster state by HTTP

type here to search

Select

Action

[Unlink](#) [Unlink and clear](#)

* Host groups

jlcp ×

type here to search

Select

Interfaces

No interfaces are defined.

[Add](#)

Description

Monitored by

Server Proxy Proxy group

zabbix-proxy ×

Select

Enabled

☒

Update Clone Delete Cancel

Inclusão da Secret para monitoria, esta chave é a que foi capturada no passo 8.

[illegible]

Dados Coletados:

<input type="checkbox"/> Name ▴	Items	Triggers	Graphs	Discovery	Web	Interface	Proxy	Templates
<input type="checkbox"/> aks-monitoring	Items 1567	Triggers 244	Graphs	Discovery 23	Web		zabbix-proxy	Kubernetes cluster state by HTTP
<input type="checkbox"/> Kubelet discovery: Kubelet aks-aksnodepool-04094644-vms0000023	Items 1002	Triggers	Graphs 19	Discovery 4	Web	10.224.0.5:10050	zabbix-proxy	Kubernetes Kubelet by HTTP