

Kubernetes

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Tanzu

Tanzu

Workload Management

Management

management vlan 99
management subnet /24 (255.255.255.0)
management tanzu starting address 10.0.99.48
management proxy 10.0.99.10 (api plane)
management gateway 10.0.99.1
supervisor node range 10.0.99.64/29

Workload

workload vlan 101
loadbalance range (aka VIP range) 10.0.101.16/28
workload range (cluster node range) 10.0.101.128/25 10.0.101.128-10.0.101.254
workload gateway 10.0.101.1
workload subnet /24 (255.255.255.0)

Haproxy

hostname: haproxy
management ip: 10.0.99.10/24
management gateway: 10.0.99.1

workload ip (haproxy vip): 10.0.101.15/24

Commands and Bindings

Tanzu Login

```
kubectl-vsphere login --server=https://10.105.0.1 --insecure-skip-tls-verify --tanzu-kubernetes-cluster-namespace production --vsphere-username administrator@vsphere.snowlab.tech --tanzu-kubernetes-cluster-name tkgs-cl01
```

Privileged Rolebinding

```
kubectl create clusterrolebinding default-tkg-admin-privileged-binding --clusterrole=psp:vmware-system-privileged --group=system:authenticated
```

```
kind: RoleBinding
apiVersion: rbac.authorization.k8s.io/v1
metadata:
  name: rolebinding-cluster-user-administrator
  namespace: default
roleRef:
  kind: ClusterRole
  name: psp:vmware-system-privileged #Default ClusterRole
  apiGroup: rbac.authorization.k8s.io
subjects:
- kind: User
  name: sso:administrator@vsphere.snowlab.tech #sso<username>@<domain>
  apiGroup: rbac.authorization.k8s.io
```

Harbor Deploy

```
helm install harbor bitnami/harbor \
--set harborAdminPassword='CHANGEME' \
--set global.storageClass=tanzu-default \
--set service.type=LoadBalancer \
--set externalURL=harbor.corp.snowlab.tech \
--set service.tls.commonName=harbor.corp.snowlab.tech \
-n harbor
```

Supervisor Cluster Admin

```
kubectl get secret TKGS-CLUSTER-NAME-kubeconfig -o jsonpath='{.data.value}' | base64 -d >
tkgs-cluster-kubeconfig-admin
```

Storage Policies

vsan-default-storage-policy (dont use)

tanzu-default (default)

Password Var

export KUBECTL_VSPHERE_PASSWORD=CHANGEME

Permissions Manager

apiVersion: v1

kind: Secret

metadata:

name: permission-manager

namespace: permission-manager

type: Opaque

stringData:

PORT: "4000" # port where server is exposed

CLUSTER_NAME: "tkgs-cl01" # name of the cluster to use in the generated kubeconfig file

CONTROL_PLANE_ADDRESS: "https://10.0.101.16:6443" # full address of the control plane to use in the generated kubeconfig file

BASIC_AUTH_PASSWORD: "CHANGEME" # password used by basic auth (username is `admin`)

Services

Services

AWX Operator

```
kubectl apply -f https://raw.githubusercontent.com/ansible/awx-operator/0.13.0/deploy/awx-operator.yaml
```