1 Kubernetes Yaml Templates

KUBERNETES

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• PDF Link: kubernetes-yaml-templates.pdf, Category: kubernetes

• Blog URL: https://cheatsheet.dennyzhang.com/kubernetes-yaml-templates

• Related posts: Kubectl CheatSheet, Prometheus CheatSheet

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Note: for each yaml in below, you can find a related URL at the top.

e.g, here is an example

1.1 Pod

Yaml	Summary
pod/pod-dummy.yaml	Start a dummy pod with a dead sleep loop
$\operatorname{pod/pod-nginx.yaml}$	Start a pod of sample app(nginx)
${\it pod/pod-init} container-sysctl.yaml$	Use initContainer to run sysctl, when starting a Pod
${\it pod/pod-healthcheck-nginx.yaml}$	Start pod with tcp and http healthcheck
$\operatorname{pod/pod-secrets.yaml}$	Pod use secrets as either volumes or environment variables
$\operatorname{pod/pod-gitclone.yaml}$	Pod: use initContainer as sidecar to web host a git repo
pod/pod-hostaliases.yaml	Pod: add alias to /etc/hosts
$\operatorname{pod/pod-handlers.yaml}$	Pod's events whenever it get started or stoppped
Links	Link: kubectl cheatsheet

1.2 Configmap/Envs

Yaml	Summary
config/pod-environment-var.yaml	Start a pod passing environment variables
$\operatorname{config/pod-env-metada.yaml}$	Expose metadata to pods

1.3 Volume

Yaml	Summary
volume/volume-manual-pv.yaml	Create pv first, then pvc
volume/volume-mount-local path.yaml	Mount a local folder to pods
${\rm volume/volume\text{-}emptydir.yaml}$	Create a empty folder, then mount to pods
volume/volume-ebs.yaml	Mount EBS volume to pod running in amazon instance with the same AZ
Links	Link: kubectl cheatsheet, Link: volumes examples

1.4 Security - RBAC

Yaml	Summary
rbac/serviceaccount-default.yaml	Serviceaccount: basic usage
Links	Link: kubectl cheatsheet

1.5 Security - PodSecurityPolicy

Yaml	Summary
podsecurity/securitycontext-user.yaml	Configure userid, at both pod and container levels
podsecurity/podsecurity-privileged.yaml	Create pod security with privileged access
podsecurity/podsecurity-restricted.yaml	Create pod security with restricted access, then apply it later
podsecurity/podsecurity-enforce.yaml	Enforce policy security by defining role and cluster role
podsecurity/podsecurity-advanced.yaml	A more complicated definition of pod security policy
Links	Link: kubectl cheatsheet

1.6 Security - NetworkPolicy

Yaml	Summary
networksecurity/networksecurity-denyall-ingress.yaml	Allow all ingress
network security/network security-allowall-ingress. yaml	Deny all ingress
networksecurity/networksecurity-denyall.yaml	Deny all ingress and egress
networksecurity/networksecurity-pod.yaml	Whitelist traffic control
network security/network security-complicated.yaml	A comprehensive network policy example
networksecurity/networksecurity-port.yaml	Allow TCP 443 from one namespace
network security/network security-deny-other name spaces. yaml	Deny all ingress traffic from other namespaces
network security/network security-denyegress-except dns. yaml	Deny all egress traffic except DNS
Links	Link: kubectl cheatsheet
Links	GitHub: kubernetes-network-policy-recipes

1.7 Quota & Limits

Yaml	Summary
quota/limitrange-pvc-size.yaml	LimitRange: PVC size
quota/limitrange-pvc-cumulative-size.yaml	ResourceQuota: pvc count and storage size
quota/limitrange-mem-size.yaml	LimitRange: Pod ram usage. Then apply it to namespace
Links	Link: kubectl cheatsheet

1.8 Deployment

Yaml	Summary
deployment/deployment-nginx.yaml	Deploy nginx with 2 replicas
deployment/deployment-mysql.yaml	Deploy mysql
Links	Link: kubectl cheatsheet

1.9 Statefulset

Yaml	Summary
statefulset/statefulset-nginx.yaml	Statefulset: nginx
statefulset/statefulset-single-mysql	Statefulset: mysql
statefulset/statefulset-replicated-cassandra.yaml	Statefulset: single cassandra
statefulset/statefulset-replicated-mysql	Statefulset: cassandra with replicas
Links	Link: kubectl cheatsheet

1.10 Service

Yaml	Summary
service/service-clusterip-nginx.yaml	Service: nginx with clusterip
service/service-nodeport.yaml	Service: nodeport
service/service-ingress.yaml	Service: ingress
service/service-cassandra.yaml	Service: cassandra
Links	Link: kubectl cheatsheet

1.11 Jobs & CronJob

Yaml	Summary
job/job-affinity.yaml	Deploy a job with node affinity

1.12 More Resources

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