

DAEMONSET

Daemonset mostly will use for monitoring purpose or common task, across the cluster node pods will be created, even not required to specify how many pods required like replicaset.

not supposed to use daemonset for application deployment. In deployment autoscaling will be enabled with min & max, so whenever load increase then new pod will be deployed, however daemonset is not in that concept, while creating daemonset, it will create pods on all nodes in cluster.

DaemonSet we cannot update pods, only recreate after deleting! whereas in deployment we can update the pod while running. It's a direct rule, not depended with scheduler while creating pod.

Additional tool used in prod:-

Serviceness.

<https://istio.io/>

<https://anchore.com/>

##Kindly create 3 or 5 nodes cluster##

kubectl get nodes

```
[root@anskube manifest]# kubectl get nodes
NAME                                STATUS    ROLES    AGE    VERSION
gke-robo-default-pool-682616c4-ldd4 Ready     <none>    17h    v1.13.11-gke.9
gke-robo-default-pool-682616c4-ml55 Ready     <none>    17h    v1.13.11-gke.9
gke-robo-default-pool-682616c4-pd48 Ready     <none>    17h    v1.13.11-gke.9
[root@anskube manifest]#
```

##Create a daemonset rule##

cat daemonset.yml

```
apiVersion: extensions/v1beta1
kind: DaemonSet
metadata:
  name: nginx
  labels:
    k8s-app: nginx
spec:
  selector:
    matchLabels:
      name: nginx
  template:
    metadata:
      labels:
        name: nginx
    spec:
      containers:
        - name: nginx
          image: nginx
```

kubectl get ds -o wide

```
[root@anskube manifest]# kubectl get ds -o wide
NAME    DESIRED    CURRENT    READY    UP-TO-DATE    AVAILABLE    NODE SELECTOR    AGE    CONTAINERS    IMAGES    SELECTOR
nginx   3          3          3        3             3            <none>           64s    nginx        nginx    name=nginx
[root@anskube manifest]#
```

```
[root@ansible manifest]# kubectl get pods -o wide
```

NAME	READY	STATUS	RESTARTS	AGE	IP	NODE	NOMINATED NODE	READINESS GATES
nginx-fsq7z	1/1	Running	0	3m52s	10.32.1.6	gke-robo-default-pool-682616c4-ldd4	<none>	<none>
nginx-p7lkc	1/1	Running	0	3m52s	10.32.0.138	gke-robo-default-pool-682616c4-m155	<none>	<none>
nginx-wc9sd	1/1	Running	0	3m52s	10.32.2.5	gke-robo-default-pool-682616c4-pd48	<none>	<none>

```
[root@ansible manifest]#
```

```
[root@anskube manifest]# kubectl describe ds nginx
Name:          nginx
Selector:      name=nginx
Node-Selector: <none>
Labels:        k8s-app=nginx
Annotations:    deprecated.daemonset.template.generation: 1
                kubectl.kubernetes.io/last-applied-configuration:
                  {"apiVersion":"extensions/v1beta1","kind":"DaemonSet","metadata":{
espace"...
Desired Number of Nodes Scheduled: 3
Current Number of Nodes Scheduled: 3
Number of Nodes Scheduled with Up-to-date Pods: 3
Number of Nodes Scheduled with Available Pods: 3
Number of Nodes Misscheduled: 0
Pods Status:  3 Running / 0 Waiting / 0 Succeeded / 0 Failed
Pod Template:
  Labels:  name=nginx
  Containers:
    nginx:
      Image:          nginx
      Port:           <none>
      Host Port:      <none>
      Environment:    <none>
      Mounts:         <none>
      Volumes:        <none>
Events:
  Type     Reason                  Age    From                      Message
  ----     -
  Normal   SuccessfulCreate        4m48s  daemonset-controller      Created pod: nginx-wc9sd
  Normal   SuccessfulCreate        4m48s  daemonset-controller      Created pod: nginx-fsq7z
  Normal   SuccessfulCreate        4m48s  daemonset-controller      Created pod: nginx-p7lkc
[root@anskube manifest]#
```

Note:- So daemonset will create pods on all nodes, basically for monitoring or logging purpose can be used.