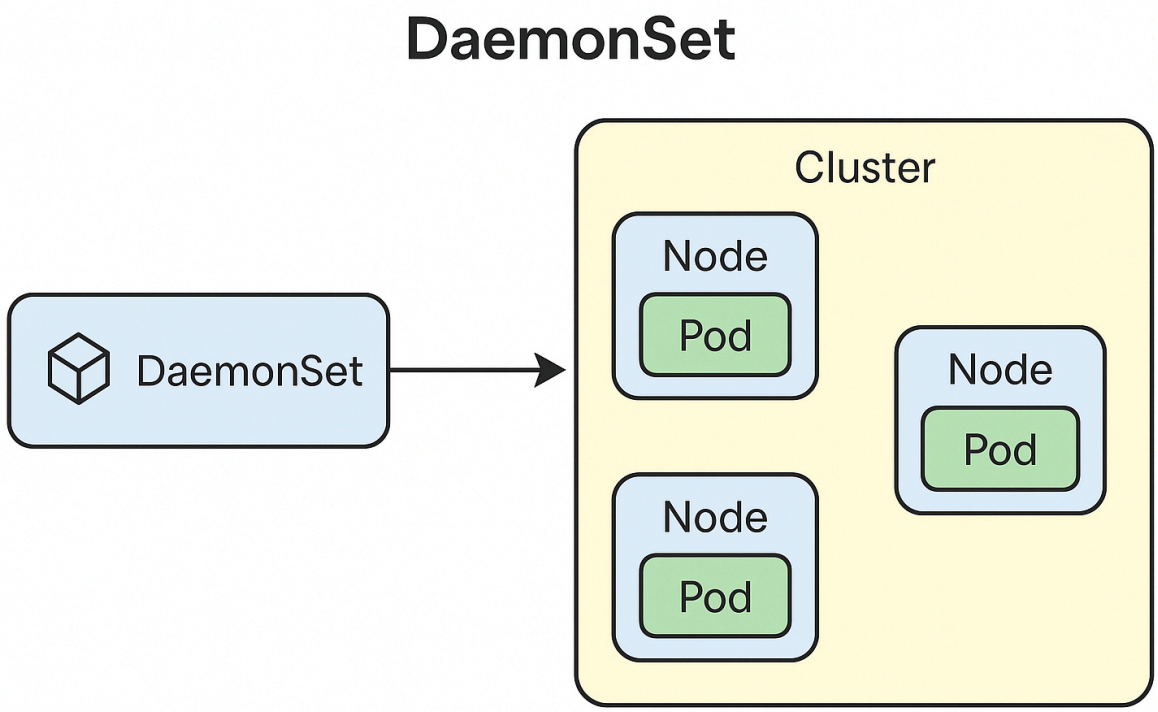

What is a DaemonSet?

A DaemonSet ensures a pod runs on **every node** in the cluster. Use it for **node-level monitoring/logging agents** like Fluentd, Prometheus node-exporter, etc.

Step1: Create a DaemonSet

```
controlplane ~ ➜ vi daemonset.yaml
```

```yaml
apiVersion: apps/v1
kind: DaemonSet
metadata:
  name: busybox-daemon
  labels:
    app: busybox-daemon
spec:
  selector:
    matchLabels:
      app: busybox-daemon
  template:
    metadata:
      labels:
        app: busybox-daemon
    spec:
      containers:
      - name: busybox
        image: busybox
        command: ["/bin/sh", "-c"]
        args: ["while true; do echo Daemon running on $(hostname); sleep 30; done"]
```

```
controlplane ~ ➜ kubectl apply -f daemonset.yaml
```

```
controlplane ~ ➜ kubectl get pods -o wide
NAME                   READY   STATUS    RESTARTS   AGE   IP           NODE     NOMINATED NOD
E   READINESS GATES
busybox-daemon-l9p75   1/1     Running   0          17s   172.17.1.2   node01   <none>
    <none>
busybox-daemon-vhqsf   1/1     Running   0          17s   172.17.2.2   node02   <none>
    <none>
```

What is a CronJob?

A CronJob schedules Jobs based on time, like traditional cron. Use cases include **backups**, **email reports**, **log rotation**, etc.

Step1: Create a Cronjob

```
apiVersion: batch/v1
kind: CronJob
metadata:
  name: print-cronjob
spec:
  schedule: "*/1 * * * *"
  jobTemplate:
    spec:
      template:
        spec:
          containers:
          - name: busybox
            image: busybox
            args:
            - /bin/sh
            - -c
            - echo "cronjob kubernetes"
          restartPolicy: OnFailure
```

```
controlplane ~ ➜ kubectl apply -f cronjob.yaml
```

```
controlplane ~ ➜ kubectl get jobs --watch
NAME                     STATUS     COMPLETIONS   DURATION   AGE
print-cronjob-29228100   Complete   1/1           4s         2m59s
print-cronjob-29228101   Complete   1/1           4s         119s
print-cronjob-29228102   Complete   1/1           3s         59s
print-cronjob-29228103   Running    0/1                      0s
print-cronjob-29228103   Running    0/1           0s         0s
print-cronjob-29228103   Running    0/1           3s         3s
print-cronjob-29228103   Complete   1/1           3s         3s
print-cronjob-29228100   Complete   1/1           4s         3m3s
```

```
controlplane ~ ➜ kubectl get pods --selector=job-name=print-cronjob-29228103
NAME                           READY   STATUS      RESTARTS   AGE
print-cronjob-29228103-g97g6   0/1     Completed   0          28s

controlplane ~ ➜ kubectl logs print-cronjob-29228103-g97g6
cronjob kubernetes
```