04-replicaset

ReplicaSet What it is `ReplicaSet` ensures a stable number of Pod replicas are running. When to use Usually indirectly through `Deployment` Rare direct usage in special control scenarios Key fields `spec.replicas`: desired count `spec.selector`: target Pods `spec.template`: Pod blueprint if Pods need recreation Common commands `bash kubectl get rs kubectl describe rs web-rs kubectl scale rs web-rs --replicas=5 kubectl delete rs web-rs` YAML example `yaml apiVersion: apps/v1 kind: ReplicaSet metadata: name: web-rs spec: replicas: 2 selector: matchLabels: app: web-rs template: metadata: labels: app: web-rs spec: containers: - name: web image: nginx:1.27` Practical notes If both Deployment and direct ReplicaSet manage similar labels, they can conflict. Prefer Deployment for versioned rollouts and rollback history.