

corewire

Kubernetes

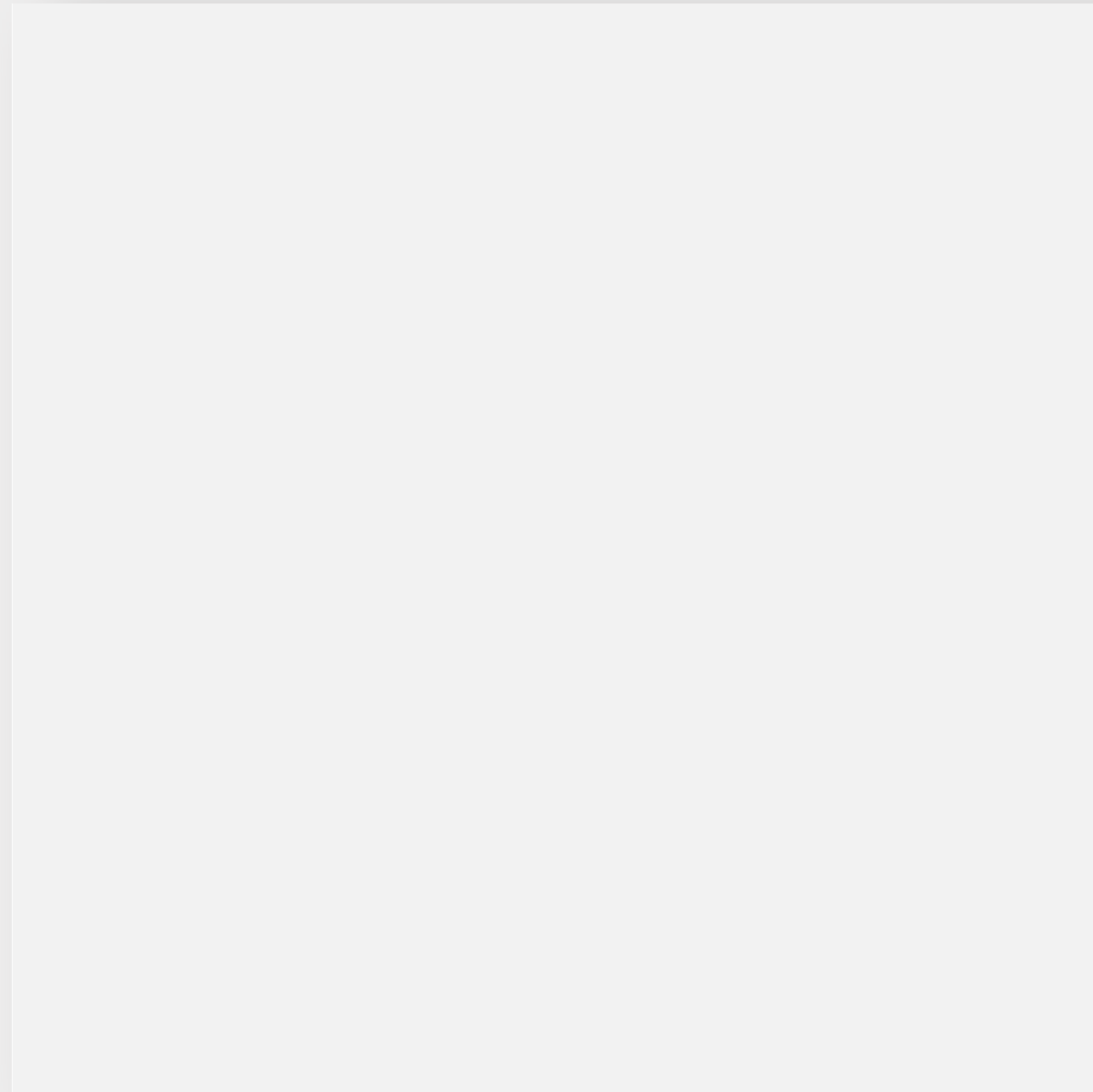
Pod Management

Folien-Hinweis

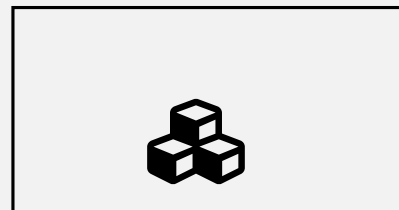
- `Space`, `Page down`: Nächste Folie
- `Page up`: Vorherige Folie
- `ESC`, `o`: Übersicht

[Zur Kapitelübersicht](#)

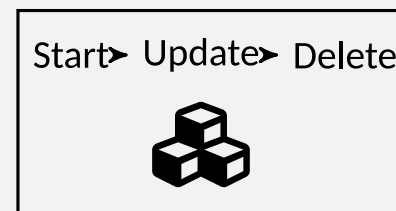
Skalierung



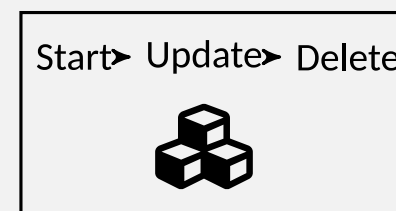
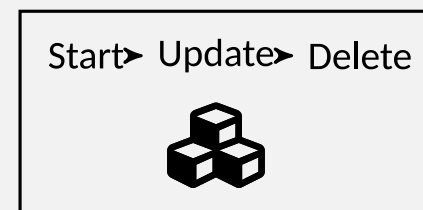
Skalierung



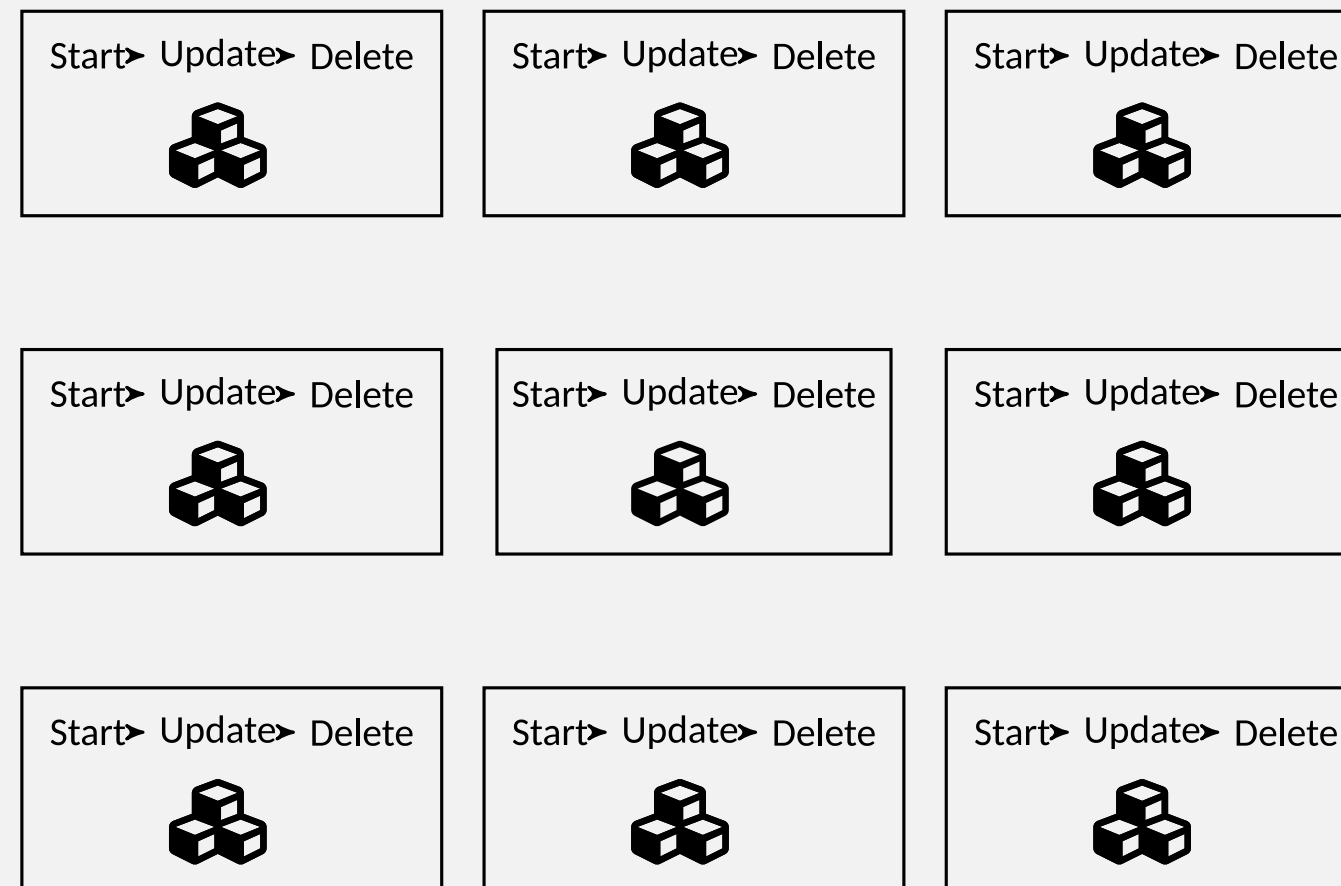
Skalierung



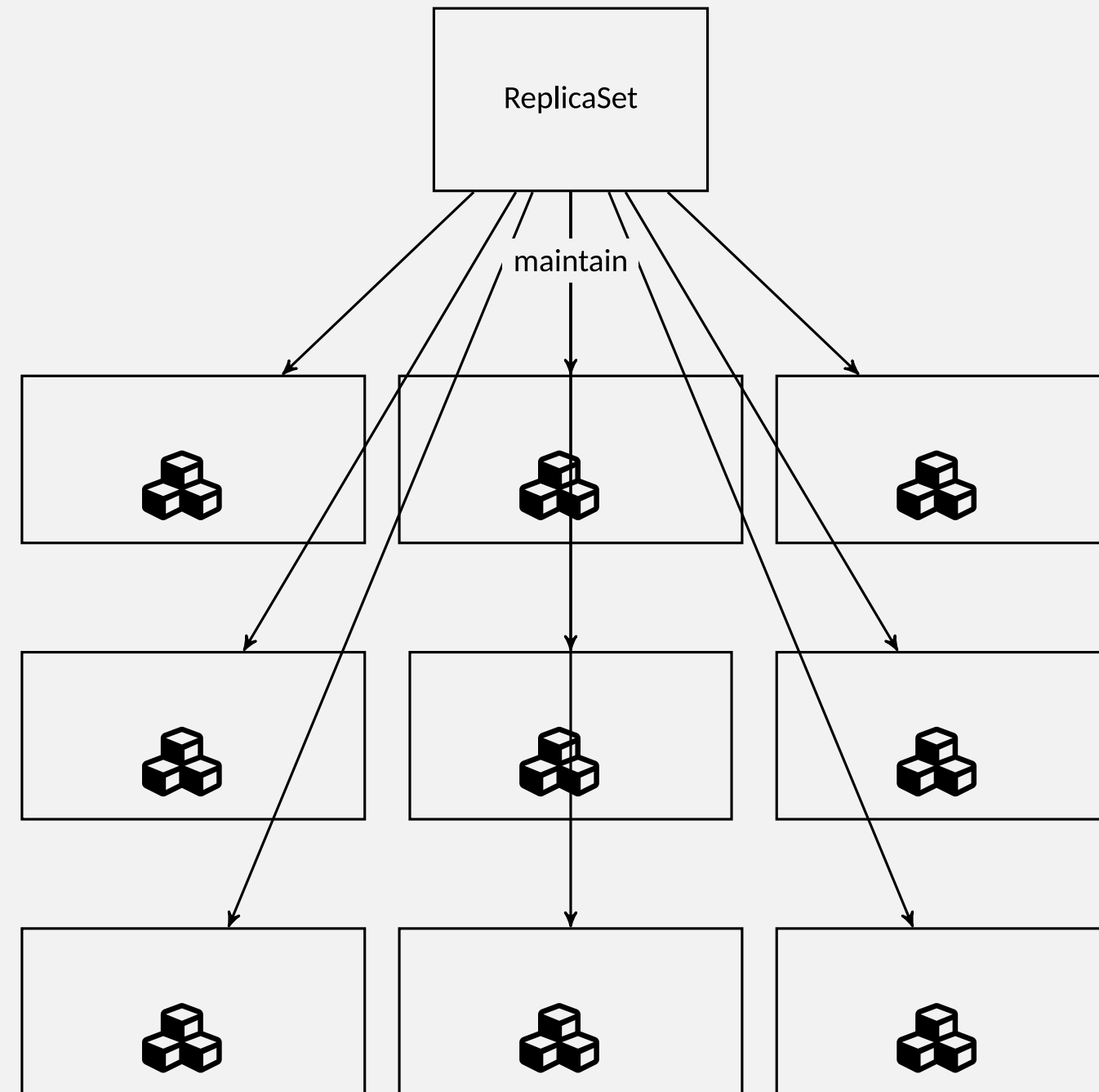
Skalierung



Skalierung



Skalierung



ReplicaSets

- Erstellen Pods anhand eines Templates
- Einfache Skalierung über `replicas: <Anzahl>`
- Kontinuierliche Überwachung

ReplicaSets

```
apiVersion: apps/v1
kind: ReplicaSet
metadata:
  name: my-replicaset
spec:
  replicas: 3
  selector:
    <...>
  template:
    <...>
```

ReplicaSets

```
<...>
spec:
  replicas: 3
  selector:
    matchLabels:
      my-label: my-app
  template:
    metadata:
      labels:
        my-label: my-app
    spec:
      containers:
      - name: my-container
        image: nginx:latest
```

ReplicaSets

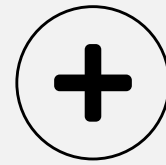
```
apiVersion: apps/v1
kind: ReplicaSet
metadata:
  name: my-replicaset
spec:
  replicas: 3
  selector:
    matchLabels:
      my-label: my-app
  template:
    metadata:
      labels:
        my-label: my-app
    spec:
      containers:
      - name: my-container
        image: nginx:latest
```

Funktionsweise

- Template Änderungen werden nur auf neue Pods angewendet
- **Reihenfolge** beim Downscaling
- Matching Pods kann es auch außerhalb geben

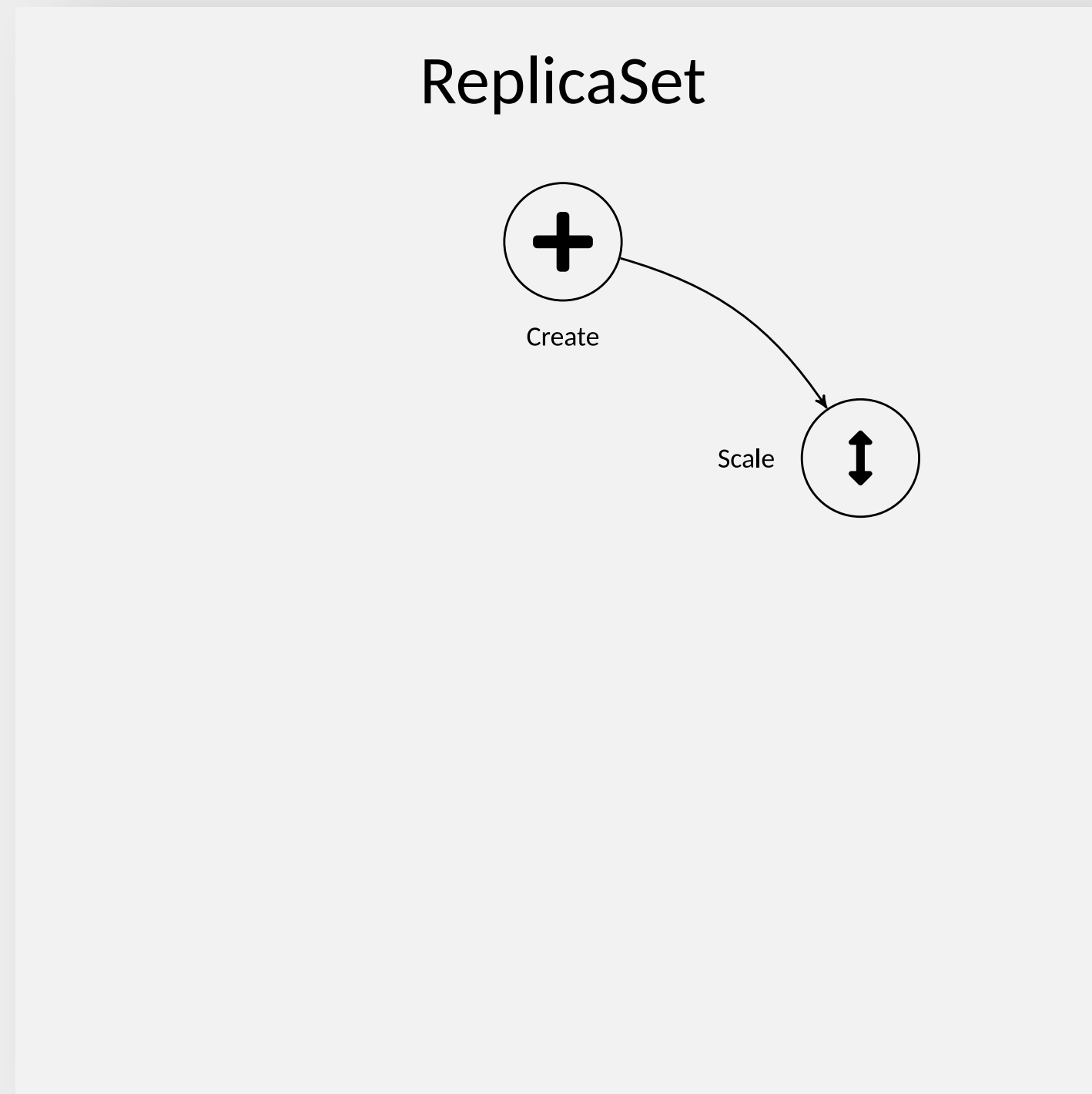
Lifecycle Management

ReplicaSet

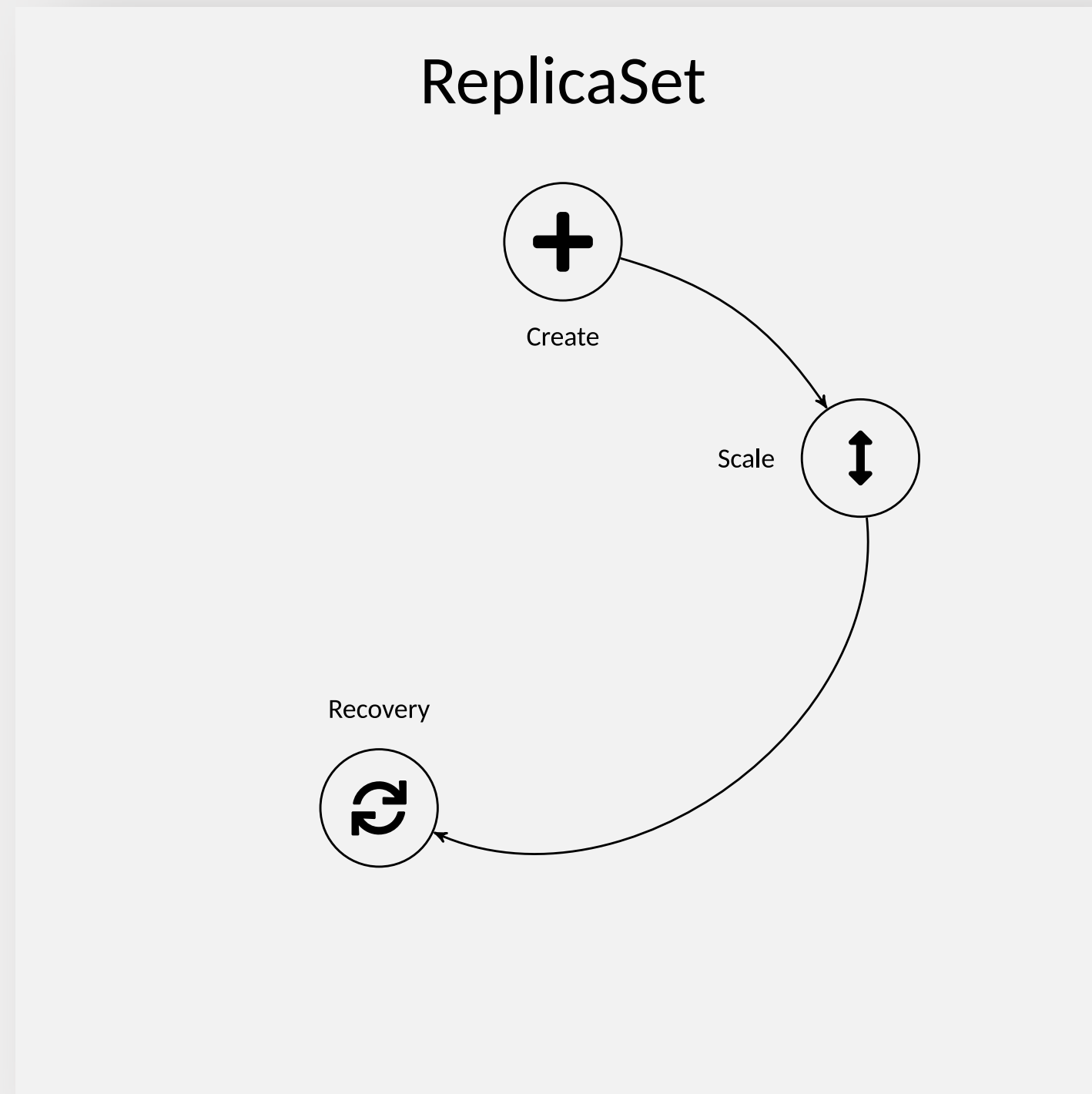


Create

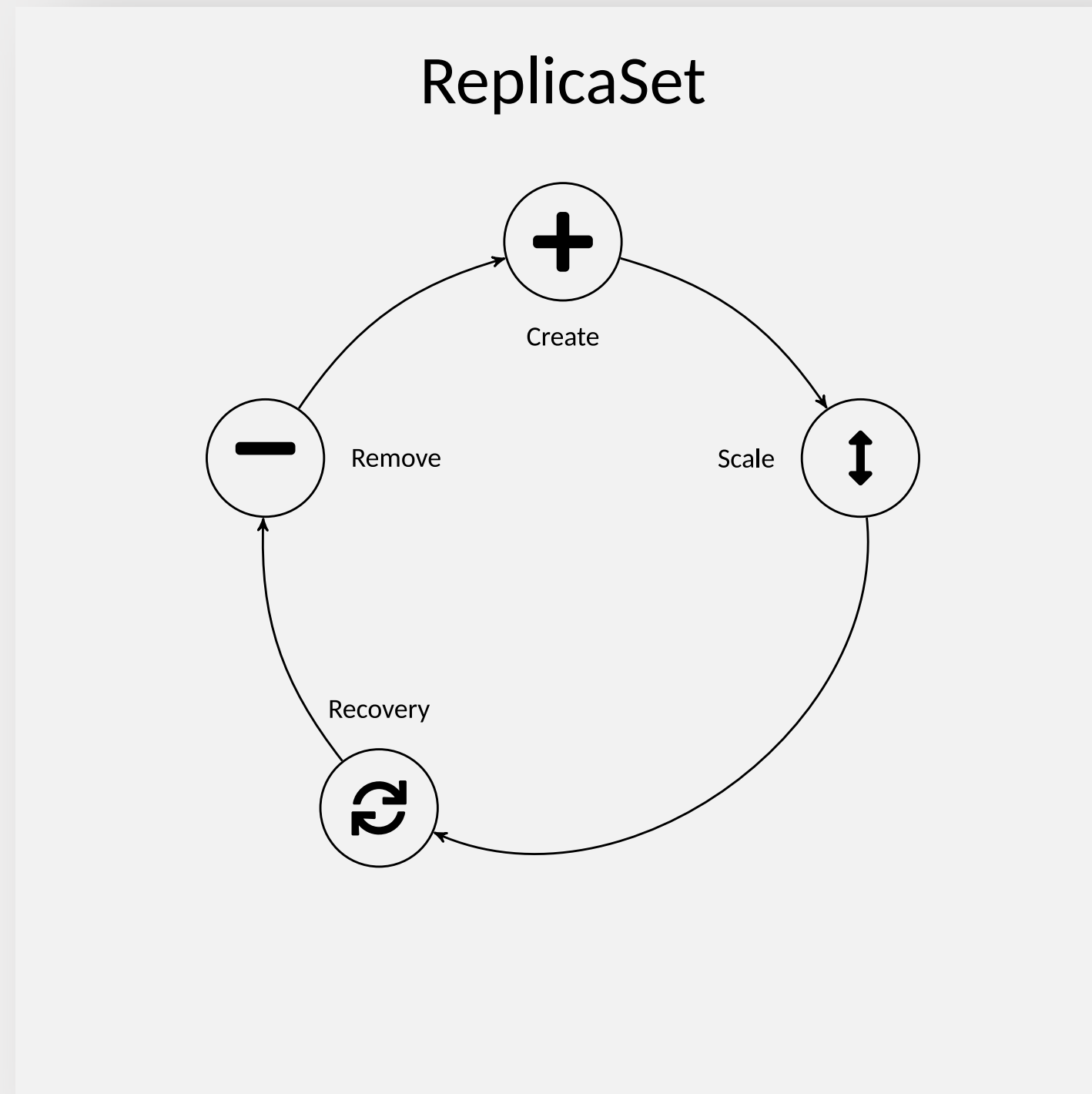
Lifecycle Management



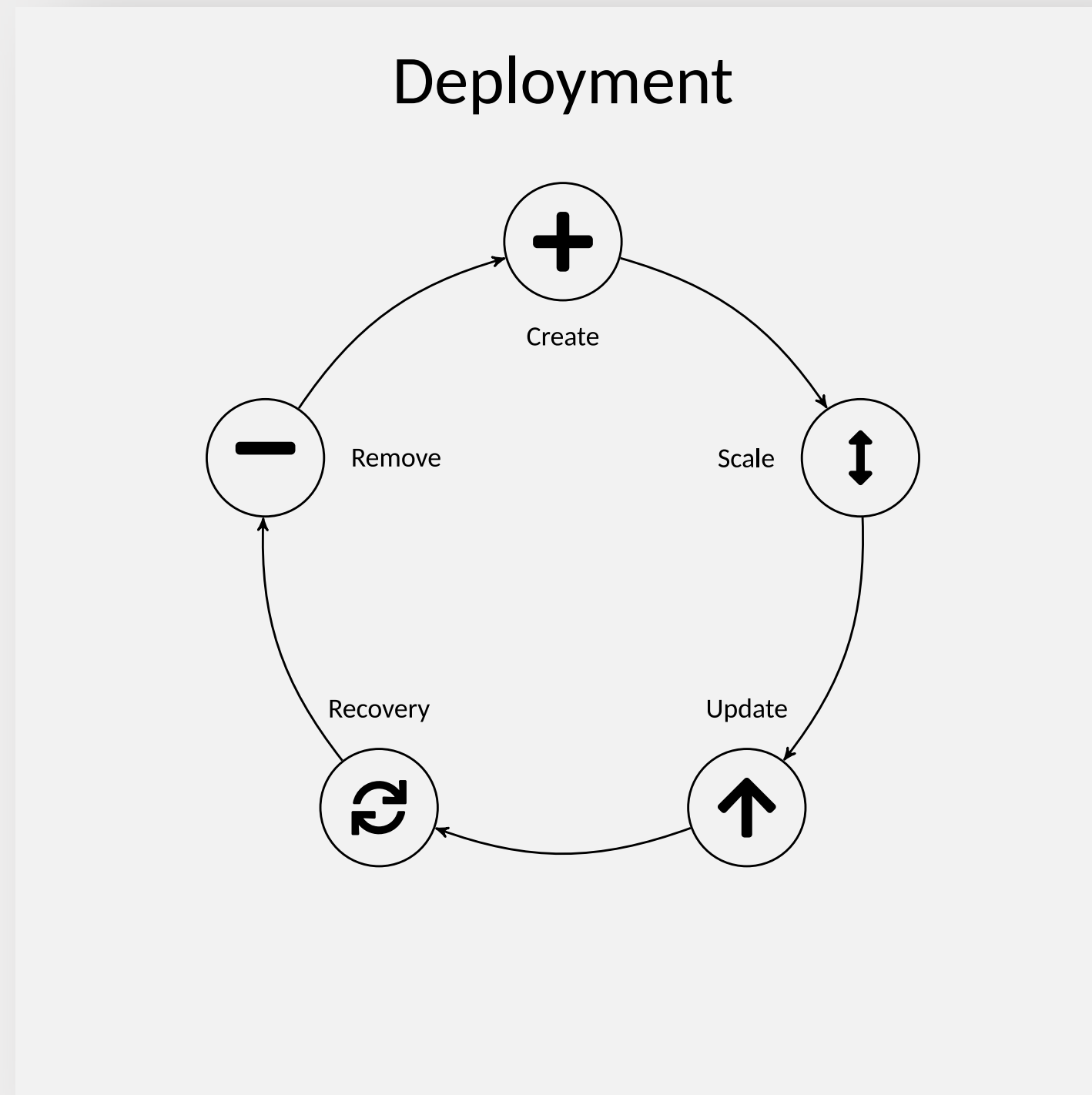
Lifecycle Management



Lifecycle Management



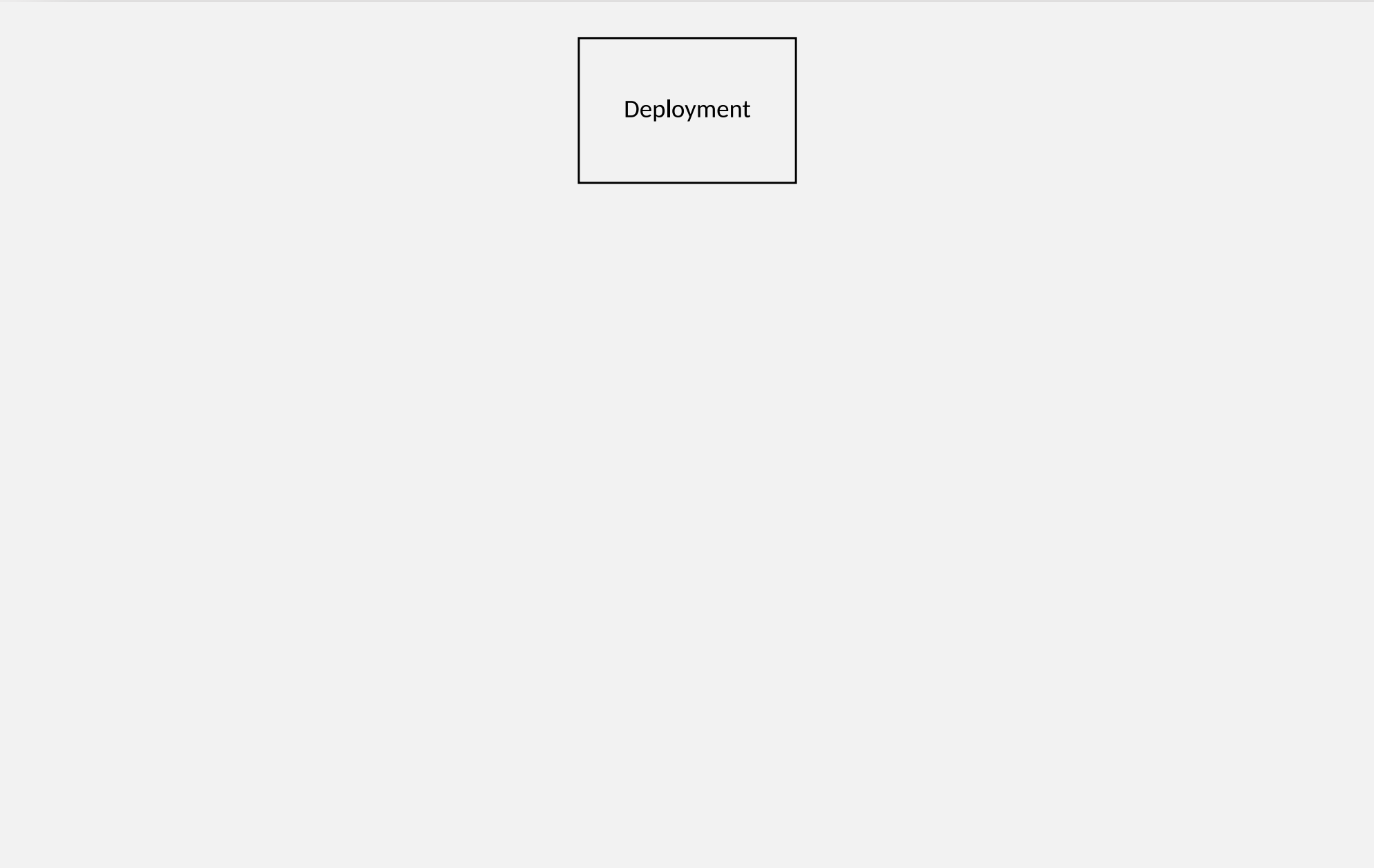
Lifecycle Management



Deployments

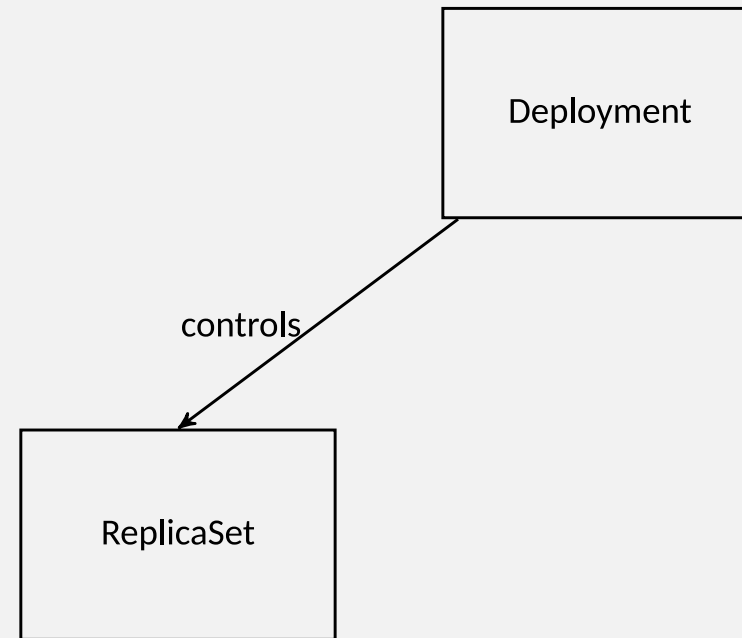
```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: my-deployment
spec:
  replicas: 3
  selector:
    matchLabels:
      my-label: my-app
  template:
    metadata:
      labels:
        my-label: my-app
    spec:
      containers:
        - name: my-container
          image: nginx:latest
```

Deployment, ReplicaSet, Service

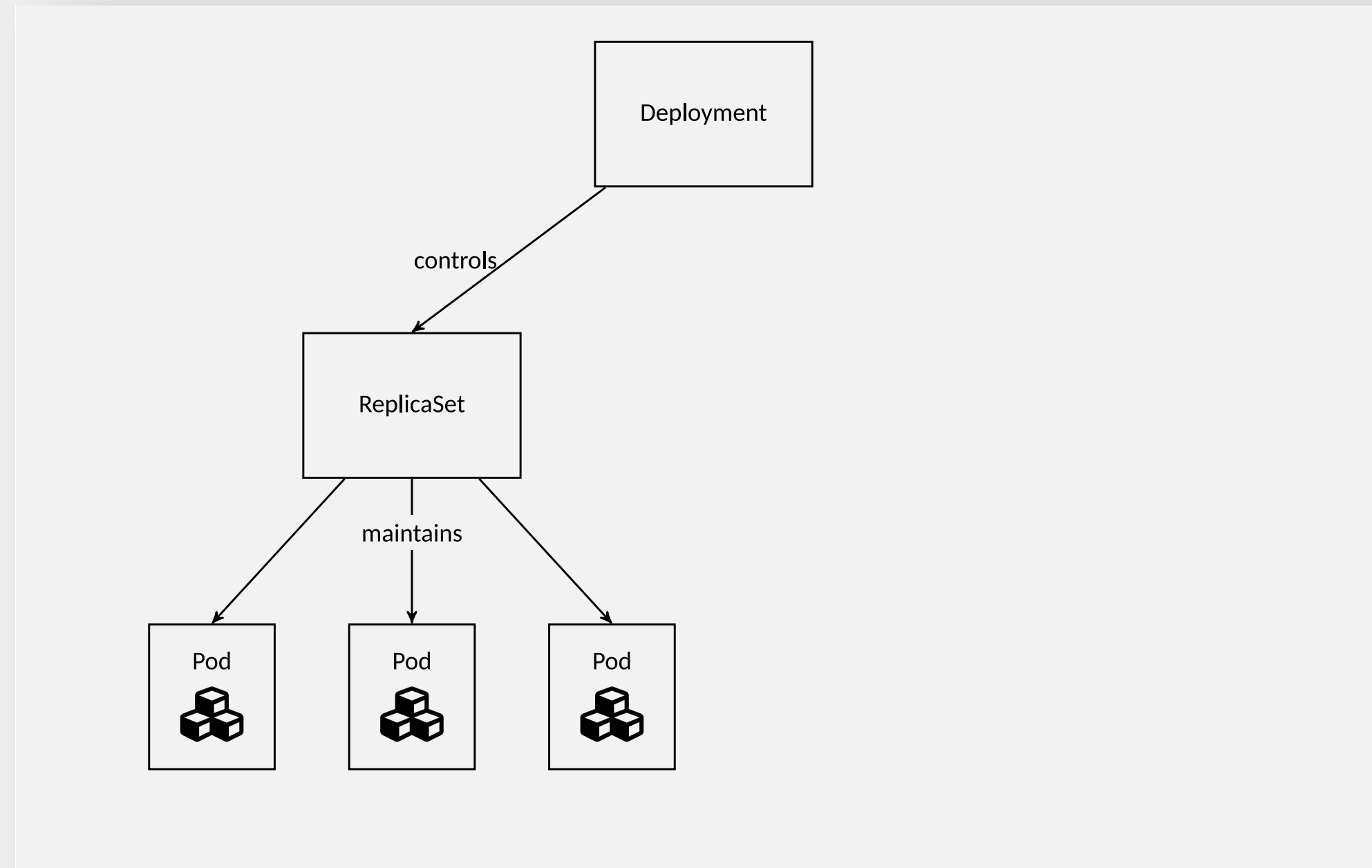


Deployment

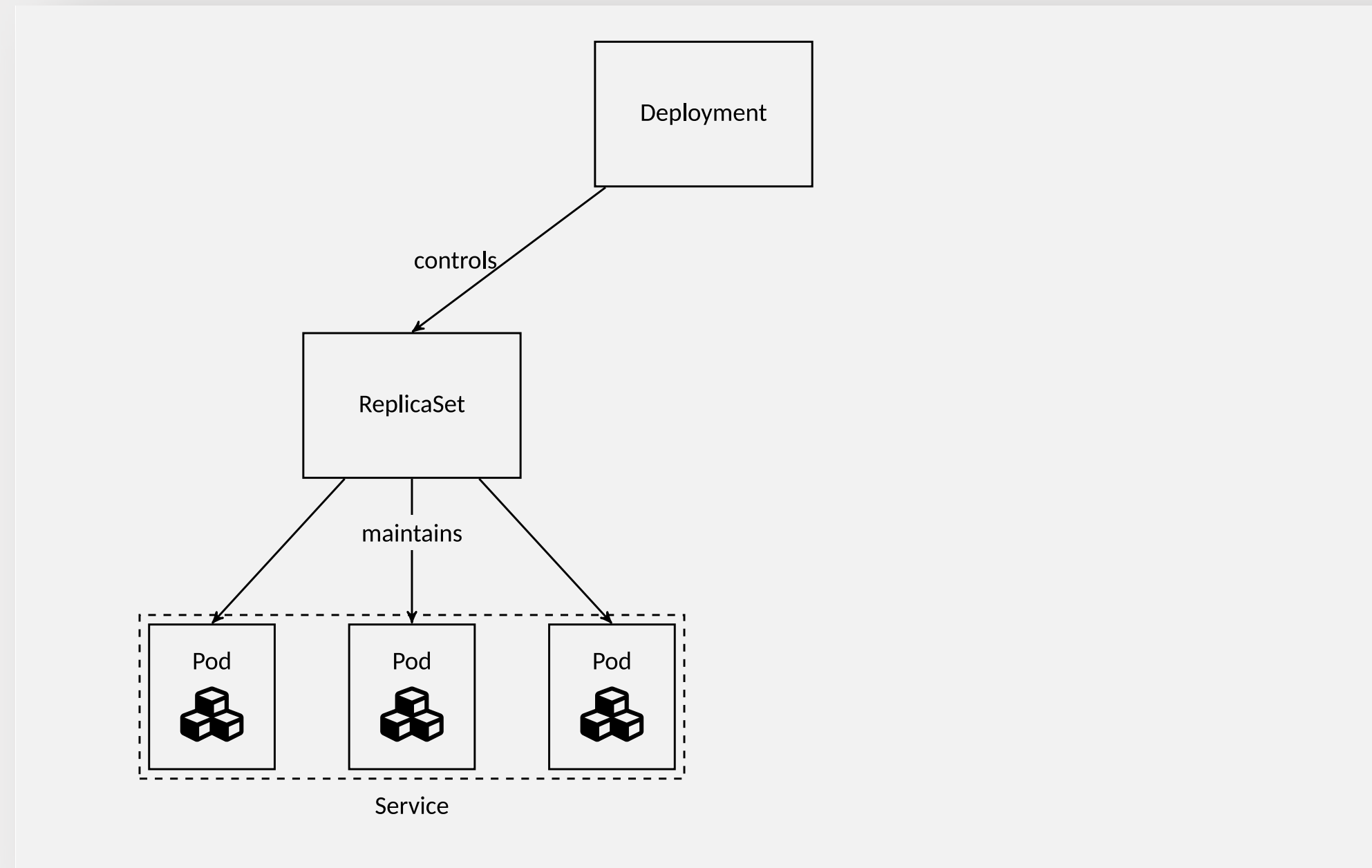
Deployment, ReplicaSet, Service



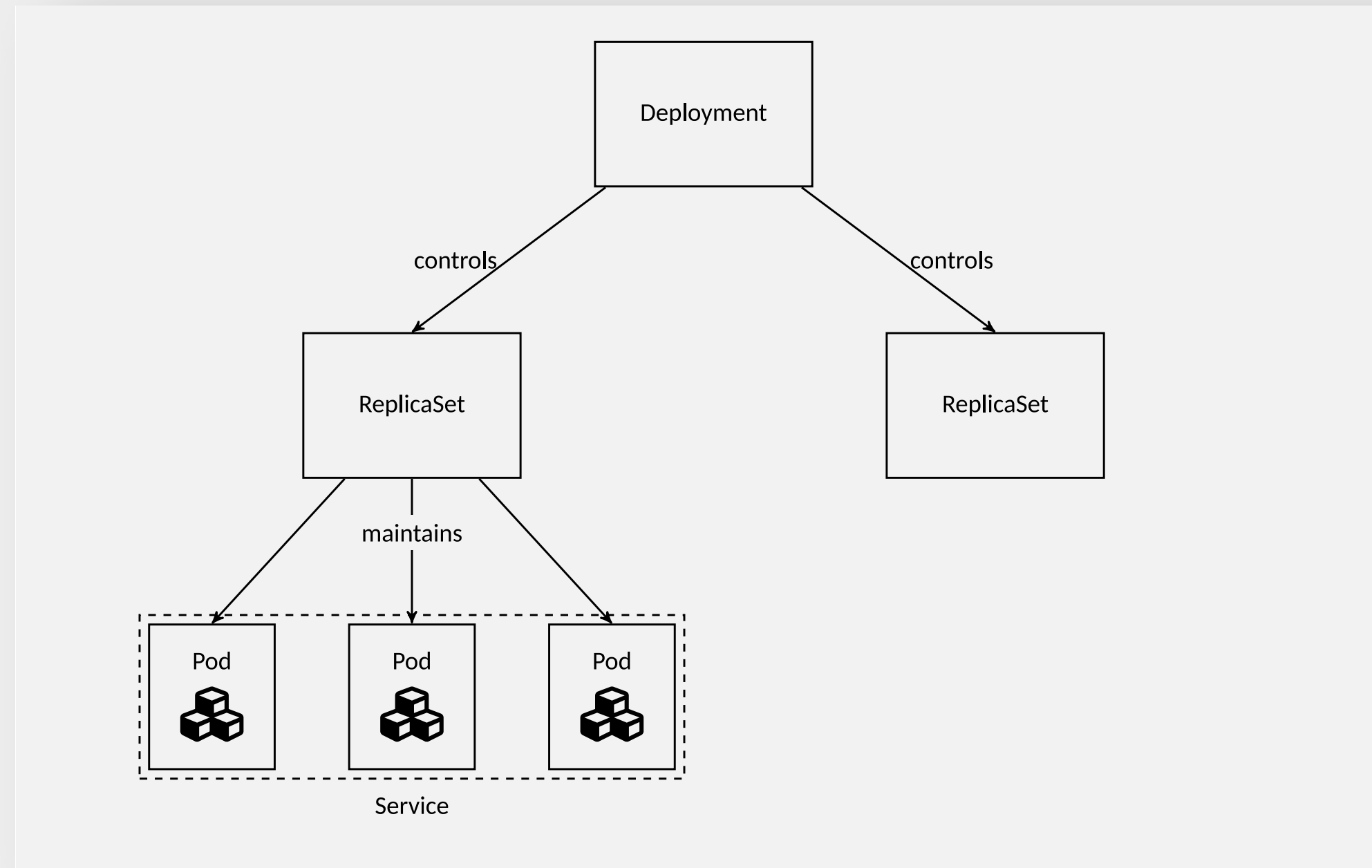
Deployment, ReplicaSet, Service



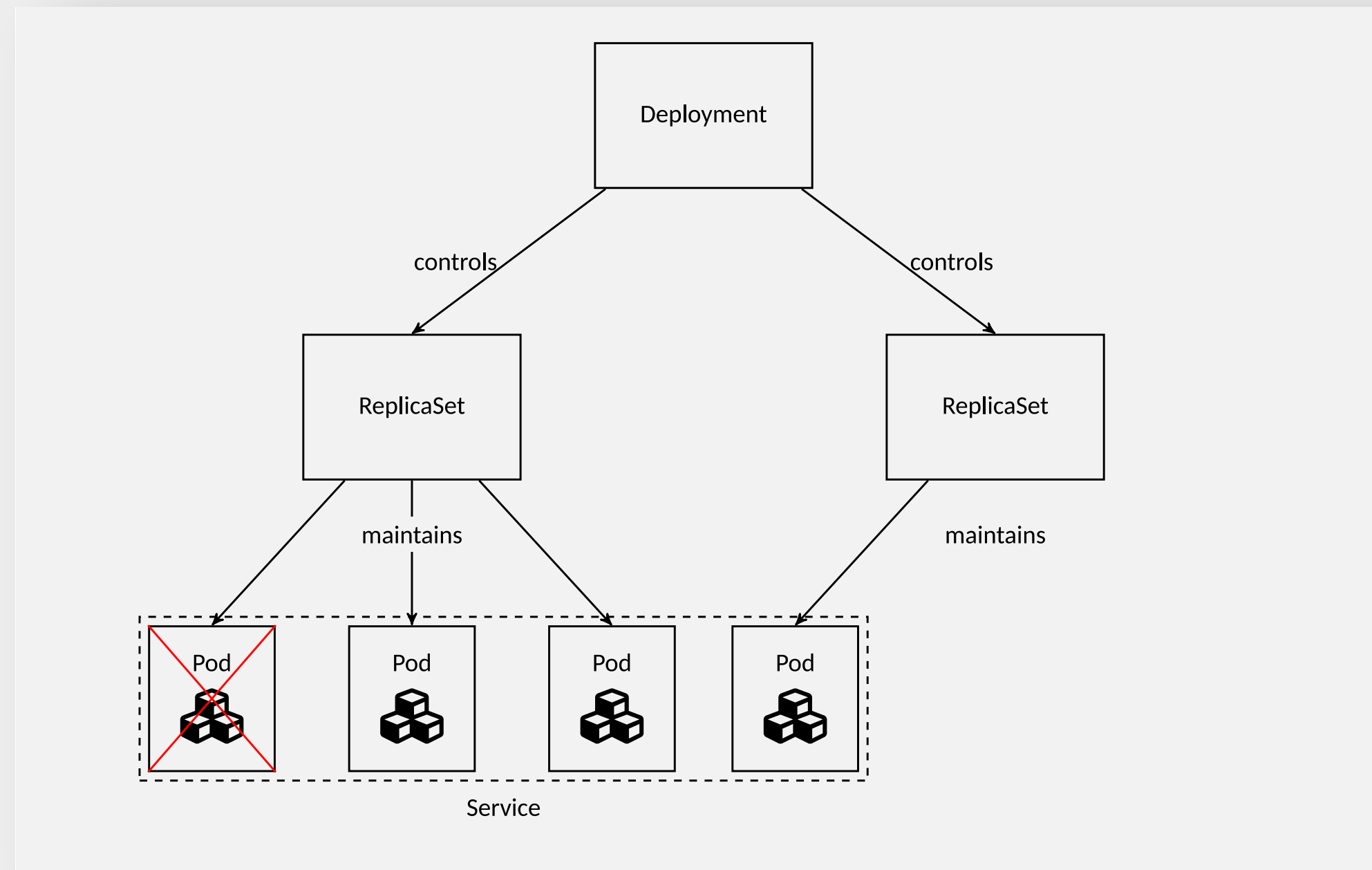
Deployment, ReplicaSet, Service



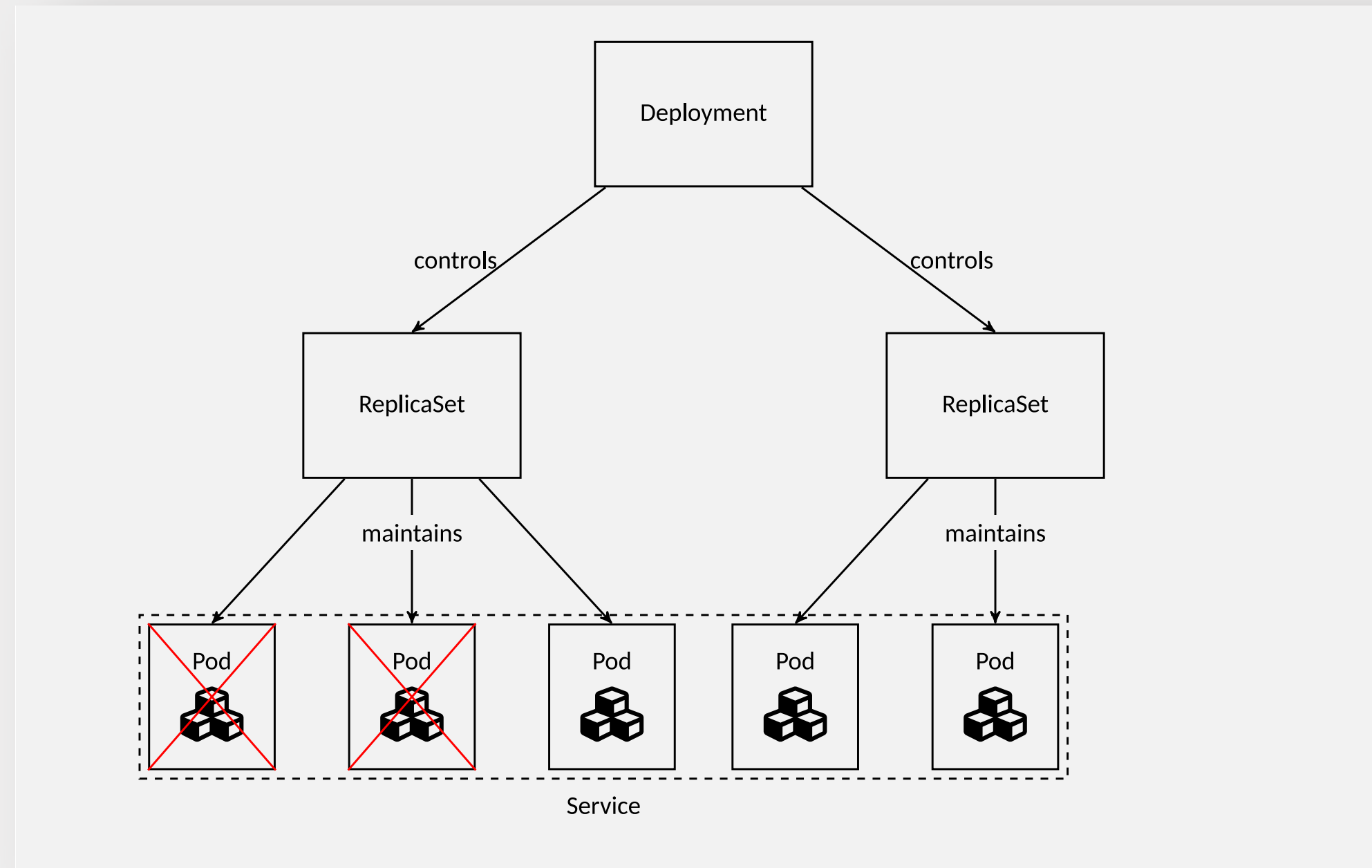
Deployment, ReplicaSet, Service



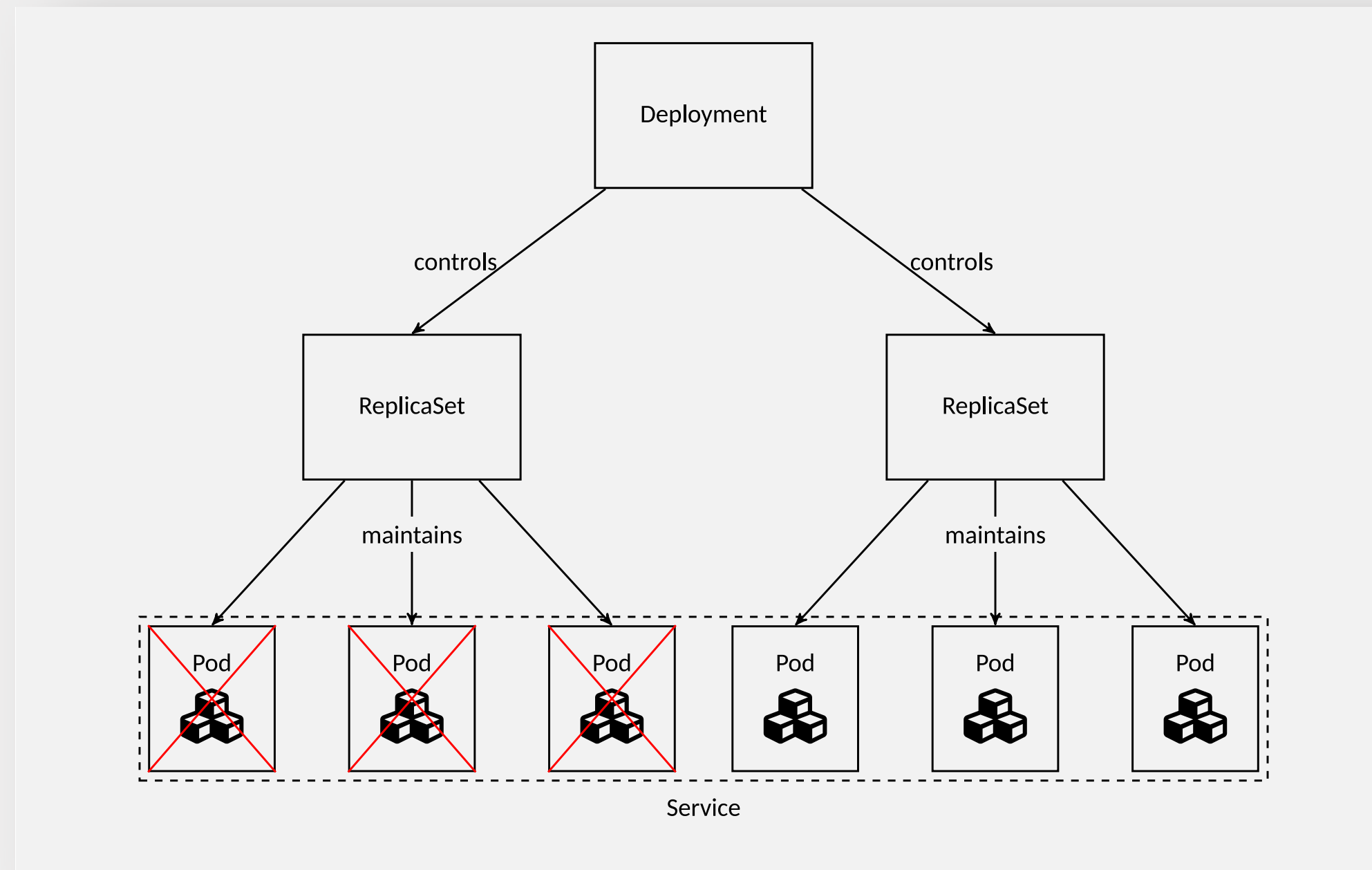
Deployment, ReplicaSet, Service



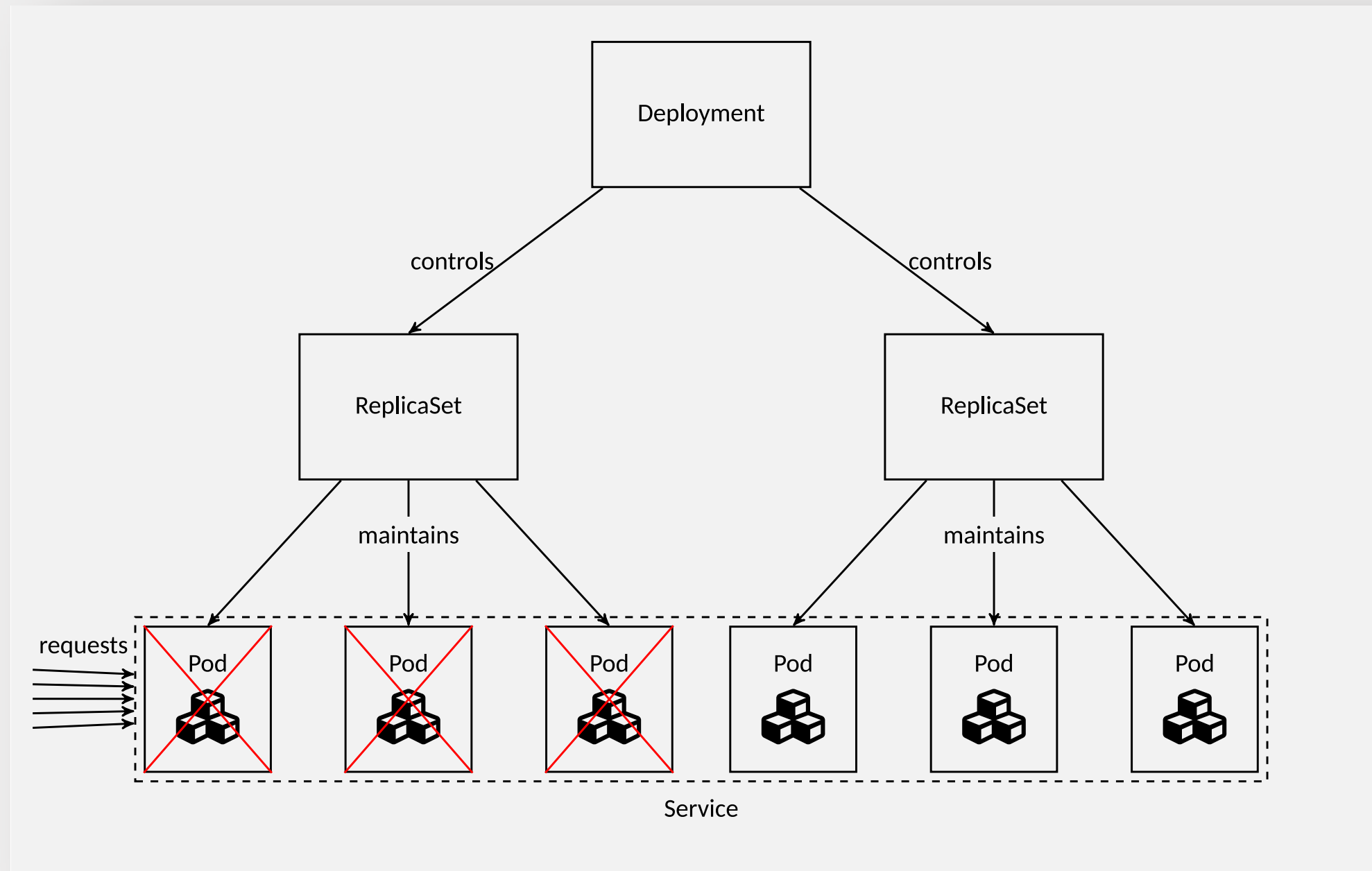
Deployment, ReplicaSet, Service



Deployment, ReplicaSet, Service



Deployment, ReplicaSet, Service



Deployments

- Erstellt und verwaltet ReplicaSet(s)
- Definiertes Update-Verhalten
 - Default: rolling update

Demo: Deployments

Lab

- Gehen Sie auf: <https://learn.corewire.de>
- Navigieren Sie nach:
 - Helm
 - Aufgaben
 - Pod Management

Zur Kapitelübersicht

- Vorheriges Kapitel: [Erste Schritte](#)
- Nächstes Kapitel: [Helm Grundlagen](#)