

CKA/CKAD : Complete Certification Guide

Upgrade Strategies - Recreate |
Rolling Update



Application Upgrade - Old Version

Application Upgrade

ShutDown Running
Application

Install New Version

Maintenance Window | Application Downtime

Restart
App/Server

Deployment Strategy

Recreate

Rolling Upgrade

Canary

Blue / Green

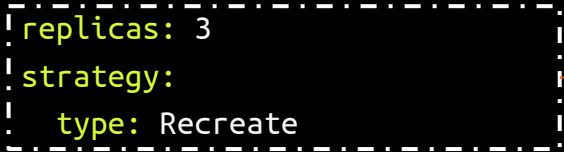
Deployment Strategy

- **Recreate** : All of the old pods are killed all at once and get replaced all at once with the new ones.
- **Pros** :
 - Application state entirely renewed.
- **Cons** :
 - Downtime that depends on both shutdown and boot duration of the application.

Deployment Strategy

➤ **Recreate** : Syntax

```
spec:  
  replicas: 3  
  strategy:  
    type: Recreate
```

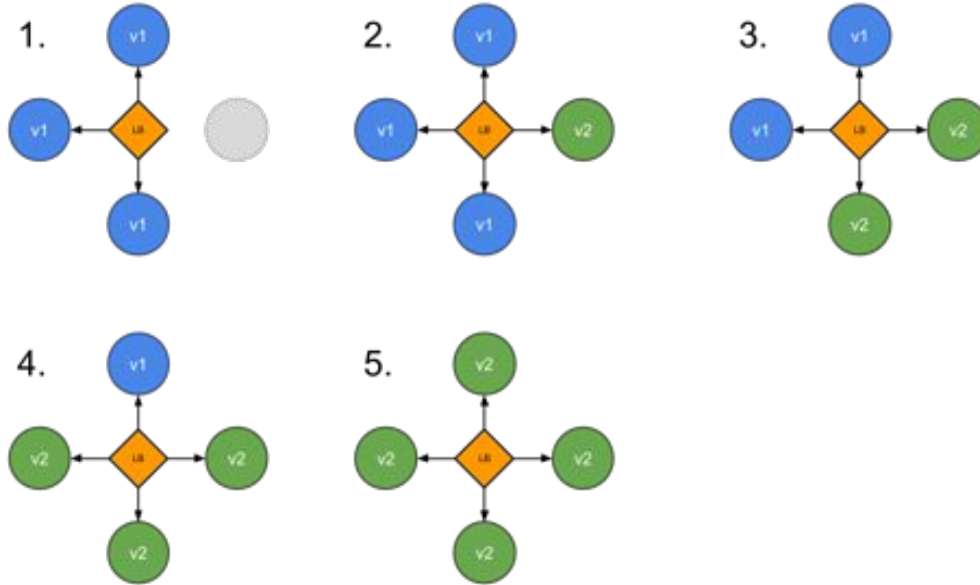


Type : Define the Type of Strategy for Upgrade.

Deployment Strategy

- **Rolling Update** : Release a new version on a rolling update fashion, one after the other.
- Pros :
 - No Downtime, new version is slowly released across instances
 - Convenient for stateful applications that can handle rebalancing of the data
- Cons :
 - Rollout/rollback can take time.
 - Supporting multiple API version is hard.
 - No Control over Traffic.

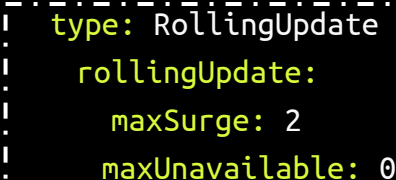
Deployment Strategy



Deployment Strategy

➤ Rolling Update : Syntax

```
spec:
  replicas: 3
  strategy:
    type: RollingUpdate
    rollingUpdate:
      maxSurge: 2
      maxUnavailable: 0
```



Type : Define the Type of Strategy for Upgrade.

maxSurge : How many Pods can add at a time.

maxUnavailable : How many Pods can be unavailable during the Upgrade.

Thank You...

Don't be the Same! Be Better!!!
