

MCA DevOps Test Solution Outputs

Blue-Green Deployment

Description:

Blue-Green strategy switches traffic between two identical environments.

Steps

1. Deploy initial (Blue) version. (v1)
2. Deploy new (Green) version. (v2)
3. Switch traffic to Green by Manual/Automatic Promote.
4. Verify rollout.

```
helm upgrade -i frontend -f values.yaml -n default .
Release "frontend" does not exist. Installing it now.
NAME: frontend
LAST DEPLOYED: Sat Feb 14 00:34:09 2026
NAMESPACE: default
STATUS: deployed
REVISION: 1
TEST SUITE: None
NOTES:
1. Get the application URL by running these commands:
  http://mcadevopstest.bnpparibas.com/

~/Documents/mca-devops-test/frontend/helm/frontend main ?8
kubectl get all -n default |grep frontend
pod/frontend-79464f57b5-6zgrz      1/1      Running    0          2m39s
service/frontend                 ClusterIP 10.100.120.104 <none>      80/TCP      2m39s
service/frontend-preview         ClusterIP 10.100.115.116 <none>      80/TCP      2m39s
replicaset.apps/frontend-79464f57b5 1         1         1         2m39s
horizontalpodautoscaler.autoscaling/frontend Rollout/frontend 12m/80      1          10         1          2m39s

~/Documents/mca-devops-test/frontend/helm/frontend main ?8
kubectl get pods -n default -o yaml |grep frontend |grep image:
- image: nettur19/frontend:v1
  image: docker.io/nettur19/frontend:v1

~/Documents/mca-devops-test/frontend/helm/frontend main ?8
helm upgrade -i frontend -f values.yaml -n default .
Release "frontend" has been upgraded. Happy Helming!
NAME: frontend
LAST DEPLOYED: Sat Feb 14 00:38:15 2026
NAMESPACE: default
STATUS: deployed
REVISION: 2
TEST SUITE: None
NOTES:
1. Get the application URL by running these commands:
  http://mcadevopstest.bnpparibas.com/

~/Documents/mca-devops-test/frontend/helm/frontend main ?8
kubectl get all -n default |grep frontend
pod/frontend-79464f57b5-6zgrz      1/1      Running    0          5m12s
pod/frontend-84b4446b-tslgz       1/1      Running    0          67s
service/frontend                 ClusterIP 10.100.120.104 <none>      80/TCP      5m12s
service/frontend-preview         ClusterIP 10.100.115.116 <none>      80/TCP      5m12s
replicaset.apps/frontend-79464f57b5 1         1         1         5m12s
replicaset.apps/frontend-84b4446b 1         1         1         67s
horizontalpodautoscaler.autoscaling/frontend Rollout/frontend 10m/80      1          10         1

~/Documents/mca-devops-test/frontend/helm/frontend main ?8
kubectl get pods -n default -o yaml |grep frontend |grep image:
- image: nettur19/frontend:v1
  image: docker.io/nettur19/frontend:v1
- image: nettur19/frontend:v2
  image: docker.io/nettur19/frontend:v2
```

```
kubectl argo rollouts get rollout frontend

Name:      frontend
Namespace: default
Status:    II Paused
Message:    BlueGreenPause
Strategy:   BlueGreen
Images:     nettur19/frontend:v1 (stable, active)
            nettur19/frontend:v2 (preview)

Replicas:
  Desired: 1
  Current: 2
  Updated: 1
  Ready: 1
  Available: 1

NAME          KIND      STATUS      AGE      INFO
o frontend    Rollout    II Paused    44m
  # revision:2
  - frontend-84b4446b    ReplicaSet    ✓ Healthy    40m    preview
    frontend-84b4446b-tslgz    Pod          ✓ Running    40m    ready:1/1
  # revision:1
  - frontend-79464f57b5    ReplicaSet    ✓ Healthy    44m    stable,active
    frontend-79464f57b5-6zgrz    Pod          ✓ Running    44m    ready:1/1

~/Documents/mca-devops-test/frontend/helm/frontend main ?8
kubectl argo rollouts promote frontend

rollout 'frontend' promoted

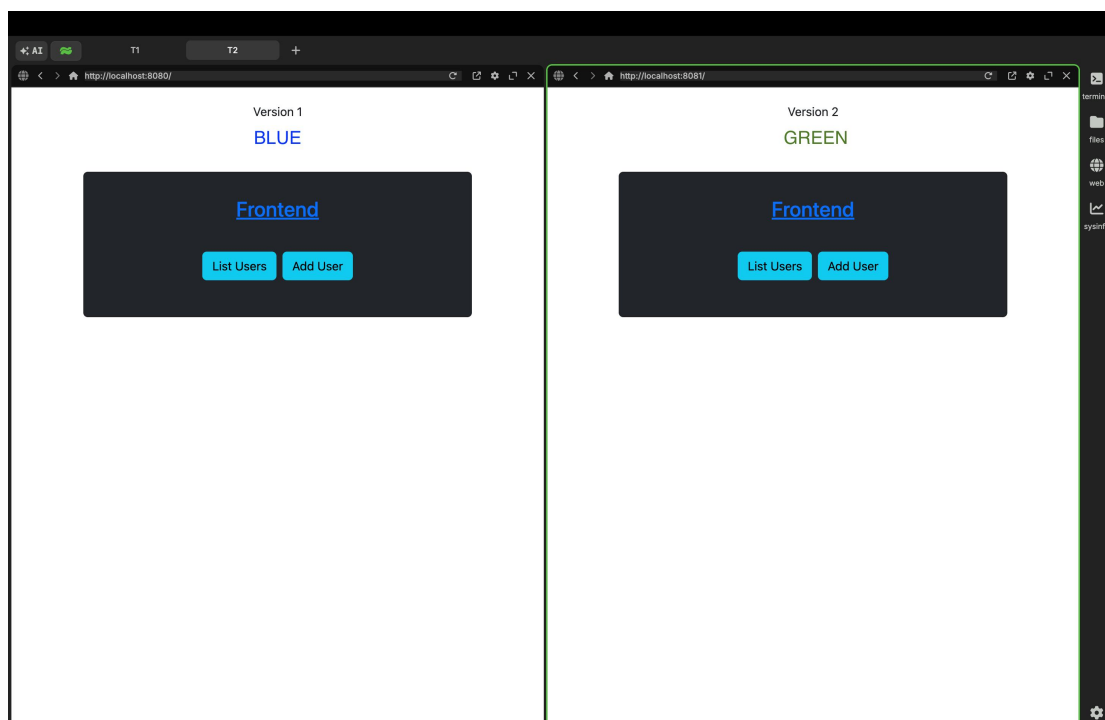
~/Documents/mca-devops-test/frontend/helm/frontend main ?8
kubectl argo rollouts get rollout frontend

Name:      frontend
Namespace: default
Status:    ✓ Healthy
Strategy:   BlueGreen
Images:     nettur19/frontend:v1
            nettur19/frontend:v2 (stable, active)

Replicas:
  Desired: 1
  Current: 2
  Updated: 1
  Ready: 1
  Available: 1

NAME          KIND      STATUS      AGE      INFO
o frontend    Rollout    ✓ Healthy    45m
  # revision:2
  - frontend-84b4446b    ReplicaSet    ✓ Healthy    40m    stable,active
    frontend-84b4446b-tslgz    Pod          ✓ Running    40m    ready:1/1
  # revision:1
  - frontend-79464f57b5    ReplicaSet    ✓ Healthy    45m    delay:17s
    frontend-79464f57b5-6zgrz    Pod          ✓ Running    45m    ready:1/1

~/Documents/mca-devops-test/frontend/helm/frontend main ?8
kubectl get pods -n default -o yaml | grep frontend | grep image:
- image: nettur19/frontend:v2
  image: docker.io/nettur19/frontend:v2
```



Canary Deployment

Description:

Canary strategy gradually shifts traffic to the new version.

Steps

- Deploy base version.
- Release canary version.
- Increase traffic weight.
- Complete rollout.

```
~/Documents/mca-devops-test/frontend/helm/frontend main ?8
└─ helm upgrade -i frontend -f values.yaml -n default .
Release "frontend" does not exist. Installing it now.
NAME: frontend
LAST DEPLOYED: Sat Feb 14 01:26:55 2026
NAMESPACE: default
STATUS: deployed
REVISION: 1
TEST SUITE: None
NOTES:
1. Get the application URL by running these commands:
  http://mcadevopstest.bnpparibas.com/

~/Documents/mca-devops-test/frontend/helm/frontend main ?8
└─ kubectl get all -n default |grep frontend
pod/frontend-79464f57b5-5wxmz          1/1      Running    0          101s
pod/frontend-79464f57b5-k2tlc         1/1      Running    0          101s
pod/frontend-79464f57b5-lp9c6         1/1      Running    0          101s
pod/frontend-79464f57b5-zhcvn         1/1      Running    0          116s
pod/frontend-79464f57b5-zrmvx         1/1      Running    0          101s
service/frontend                      ClusterIP 10.100.42.244 <none> 80/TCP 117s
service/frontend-canary              ClusterIP 10.100.233.85 <none> 80/TCP 117s
replicaset.apps/frontend-79464f57b5   5         5          5         116s
horizontalpodautoscaler.autoscaling/frontend Rollout/frontend 80m/80 5         10         5         116s

~/Documents/mca-devops-test/frontend/helm/frontend main ?8
└─ kubectl get pods -n default -o yaml |grep frontend |grep image:
- image: nettur19/frontend:v1
  image: docker.io/nettur19/frontend:v1
- image: nettur19/frontend:v1
  image: docker.io/nettur19/frontend:v1
- image: nettur19/frontend:v1
  image: docker.io/nettur19/frontend:v1
- image: nettur19/frontend:v1
  image: docker.io/nettur19/frontend:v1
- image: nettur19/frontend:v1
  image: docker.io/nettur19/frontend:v1
- image: nettur19/frontend:v1
  image: docker.io/nettur19/frontend:v1
- image: nettur19/frontend:v1
  image: docker.io/nettur19/frontend:v1

~/Documents/mca-devops-test/frontend/helm/frontend main ?8
└─ helm upgrade -i frontend -f values.yaml -n default .
Release "frontend" has been upgraded. Happy Helming!
NAME: frontend
LAST DEPLOYED: Sat Feb 14 01:29:31 2026
NAMESPACE: default
STATUS: deployed
REVISION: 2
TEST SUITE: None
NOTES:
1. Get the application URL by running these commands:
  http://mcadevopstest.bnpparibas.com/

~/Documents/mca-devops-test/frontend/helm/frontend main ?8
```

```
~/Documents/mca-devops-test/frontend/helm/frontend main 78
kubectll get pods -n default -o vaml|grep frontend |grep image:
- image: nettur19/frontend:v1
  image: docker.io/nettur19/frontend:v1
- image: nettur19/frontend:v1
  image: docker.io/nettur19/frontend:v1
- image: nettur19/frontend:v1
  image: docker.io/nettur19/frontend:v1
- image: nettur19/frontend:v2
  image: docker.io/nettur19/frontend:v2
- image: nettur19/frontend:v2
  image: docker.io/nettur19/frontend:v2
- image: nettur19/frontend:v2
  image: docker.io/nettur19/frontend:v2
- image: nettur19/frontend:v2
  image: docker.io/nettur19/frontend:v2
- image: nettur19/frontend:v2
  image: docker.io/nettur19/frontend:v2
- image: nettur19/frontend:v2
  image: docker.io/nettur19/frontend:v2
- image: nettur19/frontend:v2
  image: docker.io/nettur19/frontend:v2
- image: nettur19/frontend:v2
  image: docker.io/nettur19/frontend:v2
- image: nettur19/frontend:v2
  image: docker.io/nettur19/frontend:v2

~/Documents/mca-devops-test/frontend/helm/frontend main 78
kubectll get pods -n default -o vaml|grep frontend |grep image:
- image: nettur19/frontend:v1
  image: docker.io/nettur19/frontend:v1
- image: nettur19/frontend:v2
  image: docker.io/nettur19/frontend:v2
- image: nettur19/frontend:v2
  image: docker.io/nettur19/frontend:v2
- image: nettur19/frontend:v2
  image: docker.io/nettur19/frontend:v2
- image: nettur19/frontend:v2
  image: docker.io/nettur19/frontend:v2
- image: nettur19/frontend:v2
  image: docker.io/nettur19/frontend:v2
- image: nettur19/frontend:v2
  image: docker.io/nettur19/frontend:v2
- image: nettur19/frontend:v2
  image: docker.io/nettur19/frontend:v2
- image: nettur19/frontend:v2
  image: docker.io/nettur19/frontend:v2
- image: nettur19/frontend:v2
  image: docker.io/nettur19/frontend:v2
- image: nettur19/frontend:v2
  image: docker.io/nettur19/frontend:v2
- image: nettur19/frontend:v2
  image: docker.io/nettur19/frontend:v2

~/Documents/mca-devops-test/frontend/helm/frontend main 78
kubectll get pods -n default -o vaml|grep frontend |grep image:
- image: nettur19/frontend:v2
  image: docker.io/nettur19/frontend:v2
- image: nettur19/frontend:v2
  image: docker.io/nettur19/frontend:v2
- image: nettur19/frontend:v2
  image: docker.io/nettur19/frontend:v2
- image: nettur19/frontend:v2
  image: docker.io/nettur19/frontend:v2
- image: nettur19/frontend:v2
  image: docker.io/nettur19/frontend:v2
- image: nettur19/frontend:v2
  image: docker.io/nettur19/frontend:v2
- image: nettur19/frontend:v2
  image: docker.io/nettur19/frontend:v2
- image: nettur19/frontend:v2
  image: docker.io/nettur19/frontend:v2
- image: nettur19/frontend:v2
  image: docker.io/nettur19/frontend:v2
- image: nettur19/frontend:v2
  image: docker.io/nettur19/frontend:v2
- image: nettur19/frontend:v2
  image: docker.io/nettur19/frontend:v2
- image: nettur19/frontend:v2
  image: docker.io/nettur19/frontend:v2

~/Documents/mca-devops-test/frontend/helm/frontend main 78
kubectll argo rollouts get rollout frontend

Name: frontend
Namespace: default
Status: ✓ Healthy
Strategy: Canary
Step: 5/5
SetWeight: 100
ActualWeight: 100
Images: nettur19/frontend:v2 (stable)
Replicas:
Desired: 5
Current: 5
Updated: 5
Ready: 5
Available: 5

NAME          KIND    STATUS    AGE    INFO
frontend      Rollout ✓ Healthy  5m5s
# revision:2
- frontend-84b4446b-kqkf6  ReplicaSet ✓ Healthy  2m28s  stable
  - frontend-84b4446b-vkjfx  Pod        ✓ Running  2m28s  ready:1/1
  - frontend-84b4446b-fkrhb  Pod        ✓ Running  116s   ready:1/1
  - frontend-84b4446b-zf2lb  Pod        ✓ Running  114s   ready:1/1
  - frontend-84b4446b-zf2lb  Pod        ✓ Running  81s    ready:1/1
  - frontend-84b4446b-n6g9g  Pod        ✓ Running  78s    ready:1/1
# revision:1
- frontend-79464f57b5  ReplicaSet • ScaledDown  5m5s
```

