

What Is CodeDeploy?

Automated Deployment

EC2 instances, on-premises & Lambda.

Quickly release new features.

Avoid downtime during deployments.

Avoid the risks associated with manual processes.



CodeDeploy Deployment Approaches

1

In-Place

The application is stopped on each instance and the new release is installed. Also known as a Rolling Update.

2

Blue / Green

New instances are provisioned and the new release is installed on the new instances. Blue represents the active deployment, green is the new release.



Example In-Place Deployment



- The application is stopped on the first instance.
- The instance will be out of service during the deployment so capacity is reduced.
- You should configure your Elastic Load Balancer to stop sending requests to the instance!

Example In-Place Deployment



- CodeDeploy installs the new version, known as a **Revision**.
- The instance comes back into service.
- CodeDeploy continues to deploy to the next instance.

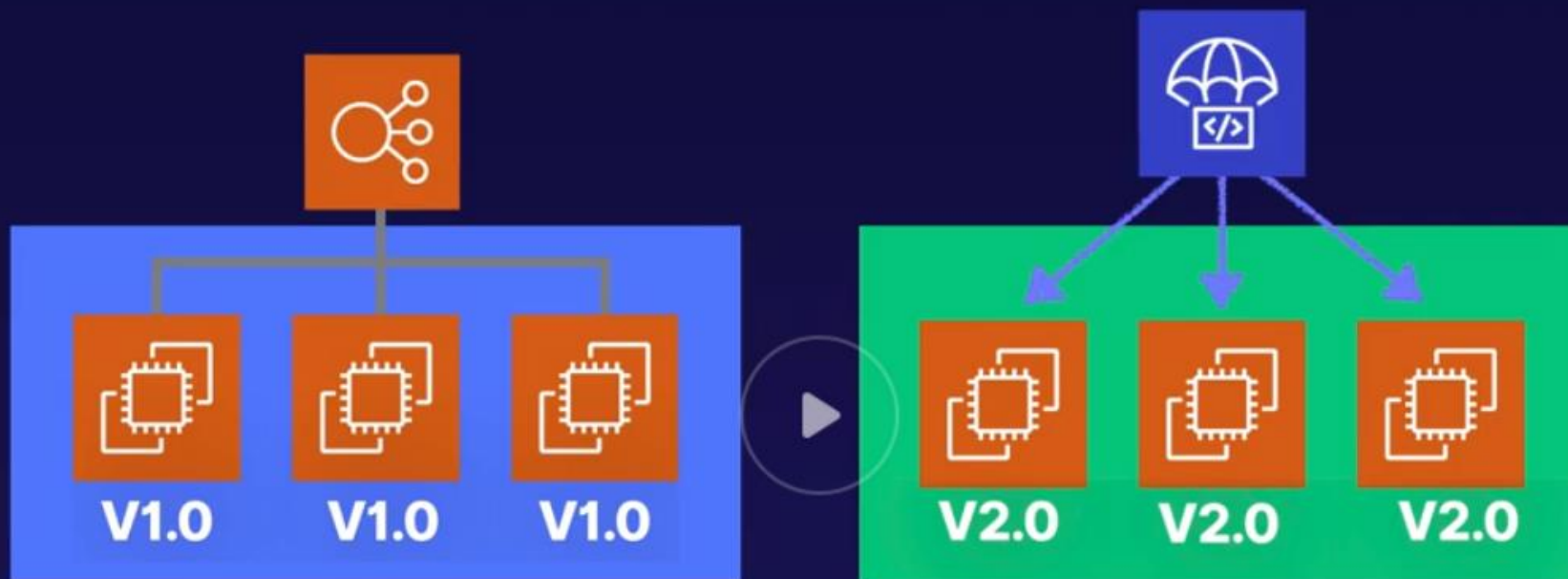


How To Roll Back?

▶ If you change your mind, there's no quick fix!

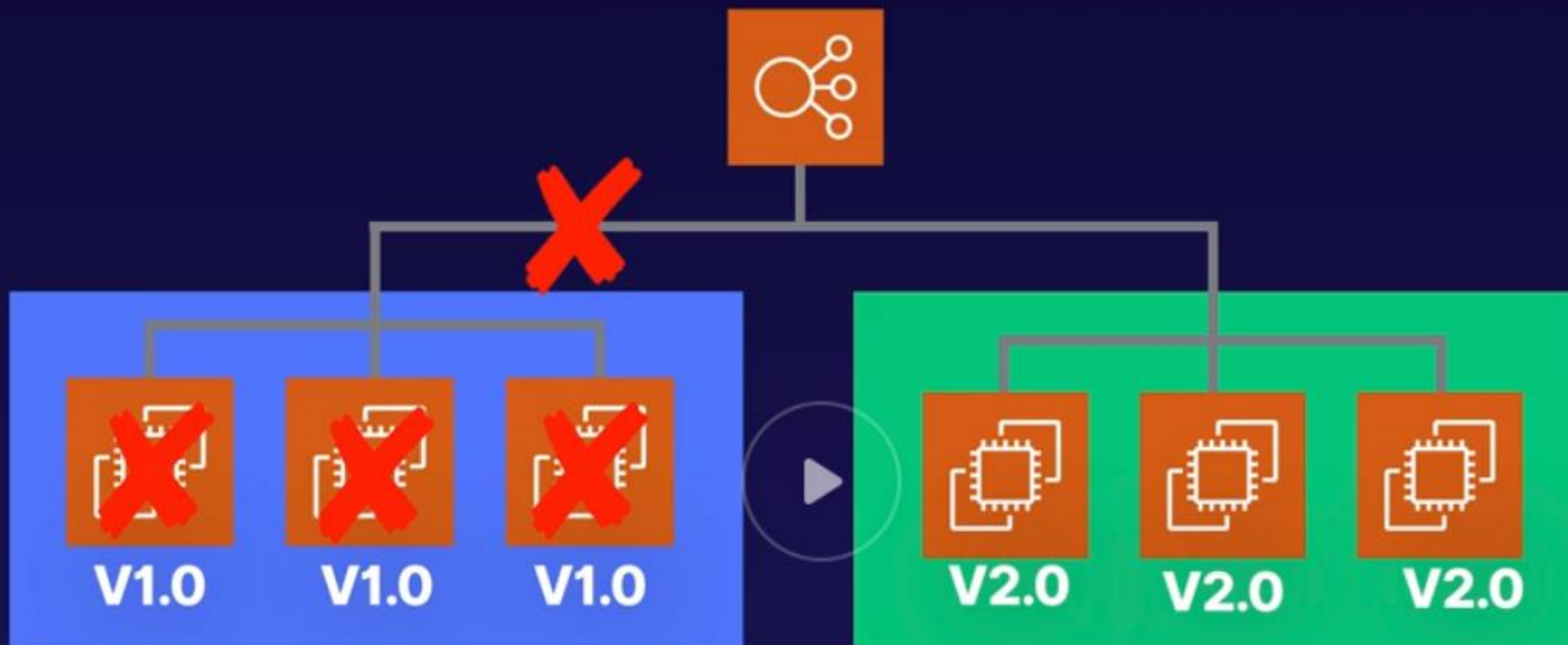
With an In-Place deployment you'll need to re-deploy the previous version which can be time consuming.

What About Blue/Green Deployments?



- **Blue** represents the current version of our application.
- CodeDeploy provisions new instances.
- The new **Revision** is deployed to the **Green** environment.

What About Blue/Green Deployments?



- The **Green** instances are registered with the Elastic Load Balancer.
- Traffic is routed away from the old environment.
- The **Blue** environment is eventually terminated.



You Want To Roll Back?

▶ With Blue/Green, it's easy!

Just set the Load Balancer to direct the traffic back to the original environment.

Rolling Back A Blue/Green Deployment



- Easy to switch between the old and new releases.
- Only works if you didn't already terminate your old environment!

Know The Difference!

In-Place

- Capacity is reduced during the deployment.
- Lambda is not supported.
- Rolling back involves a re-deploy.
- Great when deploying the first time.

VS

Blue/Green

- No capacity reduction.
- Green instances can be created ahead of time.
- Easy to switch between old and new.
- You pay for 2 environments until you terminate the old servers.

