# **Deployment Type Documentation**

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## **Ramped Deployment:**

1. Create a instance with version-1 of application

2. Create a AMI for this (version-1 application) instance

3. Create a target group and add version-1 application instance and then attach it to ALB

4. Now create Launch configuration using version-1 application AMI

5. Using version-1 application launch configuration create ASG

6. Now create R53 hosted domain and record, using alias to ALB with simple routing policy.

7. Again create a instance with version-2 of application

8. Create a AMI for this (version-2 application) instance

9. Now create Launch configuration using version-2 application AMI

10. Using version-2 application launch configuration create ASG

11. Now gradually remove IPs of version-1 instance from target group and simultaneously add IPs of version-2 instance in target group. Adding and removing the IP one by one . At last target group will have only version-2 instance IP.

# Blue-Green Deployment

1. Create two ec2 to instances with user data given below one named green and other named blue

============= blue deployment

!/bin/bash

sudo apt update

sudo apt install apache2 -y

cd /var/www/html

rm index.html

echo " <html><body><h1>Blue deployment</h1>body></html>" > index.html

=========== green deployment

!/bin/bash

sudo apt update

sudo apt install apache2 -y

cd /var/www/html

rm index.html

echo " <html><body><h1>Green deployment</h1></body></html>" > index.html

2. Create two target groups on port 80 using one for each instance blue BLUETG and green GREEENTG.

3. Create a load balancer using BLUETG with 100% weight and when we browse DNS of Load balancer we can see the html page for blue instance.

4. Now select the load balancer on console and go to listener section and select the listener and edit option.

5. In the edit window add one more listener i.e. GREENTG and give weight of 20 % to it and remaining 80% to previous BLUETG.

6. Again browse the DNS and now we can see 20% of the load going to Green instance html page.

7. Similarly we need to change the weights on both target groups as follows

8. BLUETG : 100%  GREENTG :0%

   BLUETG : 0%  GREENTG :100%

   In the above manner we can deploy Blue – Green Deployment

# **A/B TESTING:**

1. Create a instance with version-A of application

2. Create a AMI for this (version-A application) instance

3. Create a target group "targetA" and add version-A application instance and then attach it to ALB- "ALB-vA"

4. Now create Launch configuration using version-A application AMI

5. Using version-A application launch configuration create ASG

6. Now create R53 hosted domain and record, using alias to ALB with geolocation routing policy and mark region as Asia

7. Follow step 1 to 6 to create version B and mark region as Australia in route 53 record.

8. Now browse the domains , after successful testing of version-B route the traffic of version A to version B , by changing record of version-A and edit the load balancer as ALB-B in that record.

Another way using application load balancer ,using query string feature of target groups under ALB by inserting rule into the listener.