

exposure of these ports to the Internet is limited. This enables granular control over the data flow in and out of the server.

6. Next, the SSH keys were to be generated and stored on to the development system. Generally, for servers, passwords are used to access the server. But in this day and age, having only one layer of security makes any system vulnerable. Hence SSH keys are used to access the server from a remote terminal. This prevents anyone from accessing the server without the appropriate file containing the appropriate private key. This follows Asymmetric key cryptography as a security measure.
7. After the EC2 Instance is launched, the other aspects of the architecture also need to be setup.

The next step in setting up the architecture is the Load Balancers, Route 53 DNS Routing, and AWS's S3 Storage. They have been outlined below:

LOAD BALANCERS:

Load balancers are important as the spike of load or general increase in traffic needs to be handled uniformly across all the web-facing servers. This results in significantly improved stability. Following were the steps followed to setup Load Balancing in AWS

1. After logging into the AWS EC2 Console, the load balancer can be created by simply clicking the load balancer button.
2. Next, the security group, as previously mentioned needs to be configured and selected.
3. After the load balancer is created, the different EC2 instances need to be added behind the specific load balancer. This results in higher stability.

After setting up these resources, next step was to perform integration testing. This was simply done by uploading a dummy application and load testing.