**Provisioning VPC Network and its components**

We had a situation where we needed to migrate Jenkins server and 3 Jenkins agent servers from on-premise to AWS cloud. The client wanted to do this to take advantage of the many resources available on AWS, such as monitoring of the servers through detailed instance monitoring through Cloudwatch and Cloudwatch Alarms. Scalability was an issue on premise, and the client wanted to eliminate this and achieve a dynamic and a scalable Jenkins pipeline that would increase the productivity of DevOps team and allow progressive growth of the company's ability to increase integration, delivery, and deployment key parameter indicators (KPI's).

Tasks 1: We had a team meeting to discuss how the project will look , and make plans on how to provision the project successfully. During the meeting, I was tasked with provisioning a VPC network and its components.

Task 2: Assist the team provision the Jenkins control and agents instances to connect with the VPC network I created.

Task 3: Create detailed monitoring for the instances using Cloudwatch.

Task 4: Create Cloudwatch Alarm to monitor the CPU utilization

Task 5: Create launch configuration and use it to create an auto-scaling group to horizontally scale the instances incase CPU utilization reaches the threshold of 80%