



Free Hands-On Instructor Led Training

A messaging app is being launched by your organization. You have been tasked to set-up a pipeline to managed Infrastructure and application deployment. Your approach must meet the following requirements:

1. Code and application deployment must be fully automated. Code must be nightly built and deployed to test/staging environment automatically and notification received on the status
2. It should be possible to tear down entire infrastructure and rebuild in less than 3 minutes
3. Infrastructure should be "self-healing"; it should be able to recover from common failures
4. Alerts and monitoring should be in place and must be robust. Zabbix and Cloud-watch should be used
5. Log aggregation should be done via ELK
6. Application should be containerized (use Docker or Amazon Container Service)
7. Auto service discovery and auto scaling should be in place
8. Coding measuring tool such as Sonar should be included as part of CICD
9. Environment must be immutable
10. Blue/Green deployment approach to should used to ensure no downtime during deployments
11. DNS switch and traffic redirect should be automated

Tools to use

1. Infrastructure should be entirely cloud based- AWS preferably
2. Deployment orchestration should be done via Jenkins
3. Terraform, Ansible, Bash should be used

Architectural diagram to be provided