

Continuous Monitoring on Docker with ELK Stack

Github link:

<https://github.com/ramani04/simplilern/tree/main/PHASE%205/Assignment/Continuous%20Monitoring%20on%20Docker%20with%20ELK%20Stack>

DESCRIPTION

Project Objective:

CM on Docker with ELK stack is the process that helps developers to monitor the application in real-time using Kibana.

Background of the problem statement:

XYZ Technology Solutions hired you as a DevOps Engineer. The company is undergoing an infrastructural change regarding the tools used in the organization. The company decides to implement DevOps to develop and deliver the products. Since XYZ is an agile organization, they follow Scrum methodology to develop the projects incrementally. They decide to dockerize their applications so that they can deploy them on Kubernetes. Each application when deployed and exposed, will have a unique URL and port, using which we can access that application.

During the requirement analysis phase, they mutually agreed on the following conditions:

The application should have the following features:

- The application and its versions should be available on GitHub
- Commit the code multiple times and track their versions on GitHub
- Build the application in Docker, and host it in Docker Hub
- Deploy ELK stack on Docker and push application logs to it
- Automate Docker build and deployment using Jenkins pipeline code

Following tools should be used:

- Docker
- Docker Compose
- Elasticsearch
- Logstash
- Kibana
- Spring Boot application