

One single brokerage and cloud management platform where you can manage, provision, consume and account for every workload on your multi cloud

## Objective

To design, architect and setup CI/CD process with docker based environment, log analytics, monitoring dashboards, custom reports

## Scope

- Assist in micro-service architecture
- Design containerized setups
- Design and setup CI/CD Pipeline
- Make developer self-sufficient by providing automated jobs with limited access
- Assist developer for usage of various docker tools
- Set up host and container monitoring
- Setup centralized log server with analytics
- Setup CI/CD event alerts/notification
- Setup Production environment
- Generate Production Nginx statistics

## Challenges

- Assist in micro-service architecture from Ops point of view
- Set up docker echo system
- Educate Dev team for docker based environments
- Assist Dev team for troubleshooting in docker based setups
- Explore docker monitoring tools
- Create production Nginx statistics
- Setup centralized log server for docker
- Provide log analytics
- Make Dev and QA team self-sufficient
- Setup CI/CD Pipeline with notifications
- Create custom environment dashboards and Git reports

## Technology

- Docker ecosystem (Swarm Cluster, Portainer, Registry, Compose/Stack)
- ELK Stack (Centralized Log collection, Analytics)
- Zabbix ● Jenkins ● Jira ● GitHub
- Nginx ● HipChat ● vSphere, ●

## Benefits

- Docker made resilient and scalable setup for platform
- Dev and QA Team became self-sufficient
- Log analytics helped to understand platform usage in production
- Log analytics helped to quickly address and resolve environment issues.
- Zabbix provided performance statistics of environment with alarming notifications
- To ensure standard development practice, various policies are implemented through Github, Jenkins and HipChat integration

## Key features

- Implementing Docker ecosystem from scratch
- Explored tools for Docker monitoring
- Leveraged ELK stack for centralized logging and analytics
- Provided real time statistics of public facing Nginx server to understand
- Standard development practices are enforced through policies.