

#Kubernetes In 30 Days challenge:-

#Day 28:-

Kubernetes Interview Questions

1) Your team is adopting microservices and services need to communicate with each other. How would you ensure secure communication between microservices.

sol:- I would Implement mutual TLS for secure communication between microservices. Each micro service has its own unique certificate and access would be controlled through proper authentication and authorization mechanisms. Additionally, utilizing API Gateways and service meshes can provide an additional layer of security and control.

2) You need to ensure that a critical application can recover quickly from Node failures. How would you configure high availability for the application in Kubernetes.

sol:- I would use K8s features like Deployment

NOTES

with multiple replicas, setting up anti-affinity rules to ensure that replicas are distributed across the Nodes. Additionally, utilizing Node pools and having a robust monitoring & Alert system in place will aid in detecting and responding to Node failures promptly.

3) You are tasked with implementing a canary deployment strategy in k8. How will you do this.

Sol:- canary deployments involve rolling out a new version to a small subset of users to minimize the impact of potential issues. I would implement this by creating separate Deployment with the new version, directing a percentage of traffic to it using service mesh features / Ingress controllers. Monitoring and metrics play a crucial role in assessing the success of the canary and automated rollback mechanism should be in place.

4) Your organization is adopting a hybrid cloud strategy and you need to manage the cluster across on-premises Data centres and public cloud. How would you implement multi-cluster kubernetes Architecture

sol:- Implementing multi-cluster K8s Architecture involves using tools like federated clusters or management platforms like Rancher or Argo CD. You would setup clusters in each Environment, ensuring the connectivity and security. Implement GitOps practices and a centralised management plane helps streamline the management of Multiple clusters.

Thats All for Today!

Thanks for Reading!!!