NOTES

#KubernetesIn30Days challenge :-

#Day27 :-

1) what tools would you recommend for kubernetes cluster provisioning and lifecycle management.

Ans :- For Automated K8s cluster provisioning and Management :

→ consider using Infra as Code (IaC) Tools such as Terraform / AWS CF / ARM Templates.

→ Explore managed K8s services like AWS EKS, Google GKE or Azure AKS for cluster Mgmt.

→ Implement GitOps practices to automate cluster configurations and updates

→ Helm charts can be used for application deployment and management.

2) How can you manage secrets in kubernetes.

Ans :- → Use K8s secrets to store sensitive information like passwords and API keys

→ Encrypt secrets at rest and in transit.

→ Limit access to secrets using RBAC and namespace segmentation.

→ Implement tools like HashiCorp Vault or Kubernetes native solutions like sealed secrets for enhanced secret management & rotation.

3) How can you make Disaster Recovery for Kubernetes cluster deployed in a cloud Env.

Ans:- → Establish regular backups of cluster state, including etcd data and configuration.

→ stores backups in a different region/csp for resilience.

→ Implement a plan for cluster reconstruction and restoration in the event of disaster

→ Regular test disaster recovery procedures to ensure they work as expected.

4) What are the CI/CD Tools would you recommend to setup CICD pipelines.

Ans:- → Use container registries to store and version container images.

→ Implement a CI/CD tool like Jenkins for automated building, testing and deployment.

NOTES

→ Use Helm charts or K8s manifests to define application configuration.

→ Automate the promotion of applications through different environments (eg. dev, QA, staging, prod) with proper testing and approval gates

→ Ensure proper versioning and rollback mechanisms for application updates.

Thats ~~for~~ All Today!

Thanks for Reading!