DevOps Engineer

APOORV HARSH

Contact No.: (+91)8073045538

Email: apoorvharshnitk@gmail.com | LinkedIn: https://www.linkedin.com/in/apoorv-harsh-aa8671126/

WebPage: https://aprvh1.github.io/

About

Skills to solve business challenges, deployment of applications, migrating and managing applications and infrastructure in Data Center or in Public/Private Cloud, with attention to documentation, standardization, procedures and policies.

Technical Skills

Cloud Technologies	Amazon Web Services, Azure Cloud, OpenStack(Ussuri and Newton)	
Operating Systems	CentOS, RHEL, Ubuntu, Windows	
Scripting Languages	Bash Shell, Python	
CI Tools	Jenkins	
CD Tools	Ansible, ArgoCD	
Containers and Clusters	Docker, Kubernetes, OpenShift(3.11 and 4.x), HELM Charts	
Databases	MySQL, ClickHouseDB, SQL, MariaDB(Galera Cluster), Mongo	
laaC Tools	ARM Template, Terraform	
Monitoring Tools	Grafana-AlertManager-Prometheus, Sensu	

Academic Qualification

Qualification	University / Institute / Board	Year of Completion
B.Tech	NITK Surathkal	2019
AISSCE / 12	KV, Hebbal Bangalore Karnataka / CBSE	2015
AISSE / 10	KV, Hebbal Bangalore Karnataka / CBSE	2013

Work Experience

Microland Limited - Associate Architect (8Jul2019 - 24Sep2021)

1. OpenShift Design and Deployment (Oct2019-Mar2020)

- Design and deploy OpenShift OKDv3.11(container orchestration solution) on Azure, build and manage bootstrapping automation using Ansible, automate VM and host provisioning using ARM templates.
- Perform cluster install, manage infrastructure services, manage platform scale. Platform authentication and authorization using AzureAD. Adding users and teams to the Platform, Design and manage quotas, Design and implement RBAC.
- Develop image change workflow, Develop standard base images, deployment of Spring Boot(Java) based application.
- Responding to application outages. Monitoring and Managing Application Operational Behavior.
 Scale applications (or autoscale), Manage application availability, Request quotas and manage resource limits, Performance and capacity testing.
- POC: Deployment of OCPv4.x on Azure using Installer Provisioned Infrastructure(IPI) on trial license by RedHat. POC Platform authentication and authorization using HTPasswd identity provider.

2. OpenShift Application Deployment (Sep2020-Nov2020)

- Design and deploy OpenShift OCPv4.x(container orchestration solution) on Azure, automate cluster install, VM and host provisioning using IPI and terraform. Platform authentication and authorization.
- Deployment of OpenDataHub operator, KubeFlow, Rook(CEPH) operator and Kafka-Zookeeper on OpenShift.
- Deployment of CronJob, Angular and Spring Boot based applications.

3. OpenStack Design, Deployment and Migration (Sept2020-May2021)

- Identify and discover existing OpenStack Newton environments and associated metadata and applications running on it for migration.
- Configure parameters and hosts for OpenStack(Ussuri) Ansible deployment. Design and Deploy new OpenStack Ussuri environment on two geographical locations. Geographically Distributed Open-Source Cloud Solution OpenStack(Ussuri).
- Testing of OpenStack environment and supported services on both geographies, identifying bugs and stabilizing both clusters. Offerings of the platform deployed: Keystone, Nova, Neutron, Cinder, Glance, Heat, Ceilometer, Aodh, Horizon, Gnocchi, Trove, Octavia.
- Planning migration, identifying OpenStack projects as move-groups and scripting for automation of the migration process. Pilot project migrated successfully with 100% efficiency.
- Kubernetes deployment (3Master in HA) on VMs on OpenStack and configuring CinderCSI plugin for dynamic provisioning of PVs on k8s. MetalLB for exposing services.
- Configuring GAP(Grafana, Alert manager and Prometheus) Stack and rules for monitoring hosts and services of OpenStack. Email alerts are sent in case of an outage.

4. Kubernetes Framework (May2021-Sep2021)

- Purpose of this project is to automate deployment of cloud managed kubernetes cluster and associated ops application. EKS is used.
- Helm chart is used to package applications(all kubernetes objects).
- CRD of ArgoCD and Application of Application architecture is used for one click deployment of all applications.
- CasC for application if possible.

Sprinklr - DevOps Engineer (27Sep2021 - Present)

1. SB1 Team (Sep2021-Present)

- Deployment on k8s using HELM and Jenkins on multiple environments.
- MongoDB Migration of ReplSet to new instances offered by cloud providers and reducing cost.
 Rebalancing data distribution between Mongo clusters deployed to increase performance using mongomirror. Creating new indexes.
- Developing Sensu Custom Plugins in Python to suit needs and alert appropriate point of contact.
- Upgraded logstash on servers provisioned on multiple cloud providers, to remove log4j vulnerability from Sprinklr environment.
- Deployment of GrayLog4.2 on k8s on multiple cloud platforms as part upgrade from ES5 to ES7
 in all environments. Worked on user-creation script which syncs users from google groups to
 GrayLog application.
- Working on Ansible roles and playbooks for configuration. All roles are executed by Jenkins jobs.

Certifications

- 1. CERTIFIED KUBERNETES ADMINISTRATOR (CKA) (Dec 2021)
- 2. HashiCorp Certified: Terraform Associate (Aug 2021)
- 3. AZ-104 Azure Administrator Associate (Feb2021)
- 4. TensorFlow Developer Certificate (Jan2021)
- 5. AWS Certified Solutions Architect Associate (AWS-SAA-C02) (Oct2020)
- 6. IBM Data Science- Professional Certificate (Apr2020)
- 7. AZ-900 Azure Cloud Fundamentals (Jan2020)