**Sr. Devops/AWS Engineer**

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**Professional Summary**

* IT professional with around 8 years of experience as AWS DevOps Engineer with excellent experience in Software Integration, Configuration, packaging, building, automating, managing, and releasing code from one environment to another environment and deploying to servers.
* Experience in Configuration Management, Cloud Infrastructure, and Automation like Amazon Web Services (AWS), ANT, MAVEN, Jenkins, Chef, SVN, Git, GitHub, Clear Case, Tomcat, and Linux.
* Experience in architecting and managing AWS cloud infrastructure.
* Experience with AWS services EC2, VPC, ASG, EBS, ELB, S3, Route54, DynamoDB, RDS, EBS, SNS, CFT, CloudWatch and CloudFront on private, public and hybrid cloud infrastructure.
* Designed, configured and deployed Microsoft Azure for a multitude of application s utilizing the Azure stack includes Compute, Web & Mobile, Blobs, ADF, Resource Groups, Azure SQL DW, Cloud Services, and ARM, focusing on high-availability, Disaster Recovery, fault tolerance, and auto-scaling.
* Knowledge on configuration and management of vSphere product suite like vCenter, ESXi and vSphere client to perform Snapshot, VMware vMotion, HA and DRS including vSphere update manager and VMware Data Recovery.
* Having good exposure on Cloud technologies like launching EC2 instances, VPC, Route53, EBS, Cloud watch, IAM, S3, RDS, SES, ELB, AMI, Cloud Formation, Lambda, WAF, LightSail, SNS, AWS Import/ Export.
* Experience with Terraform or Cloud formation scripting including Infrastructure as code utilizing tools like Terraform, Cloud Formation, and Salt Stack. Created CI/CD pipelines using Jenkins, Bamboo to deploy containerized applications using Docker in the AWS cloud for Dynamic scaling.
* Experience in integrating Jenkins with various tools like Maven (Build tool), Git (Repository), SonarQube (code verification), Nexus (Artifactory), and implementing CI/CD automation for creating Jenkins pipelines programmatically architecting Jenkins Clusters.
* Designed, configured and managed public/private Cloud infrastructures utilizing Amazon Web Services (AWS) including EC2, Elastic Load-balancers, Elastic Container Service (Docker Containers), S3, Elastic Beanstalk, CloudFront, Elastic Filesystem, RDS, DynamoDB, DMS, VPC, DirectConnect, Route53, IAM, EMR, ElasticSearch.
* Experience using GIT for source code version control and integrated with Jenkins for CI/CD pipeline.
* Experience in Plugin Management, Performance issues, Analytics, Securing Jenkins, Scaling Jenkins, integrating Code Analysis, and Test Phases to complete the CI/CD pipelines within Jenkins.
* Hands-on experience in Azure Cloud Services (PaaS & IaaS), Storage, Web Apps, Active Directory, Azure Container Service, VPN Gateway, Content Delivery Management, Traffic Manager, Azure Monitoring, OMS, Key Vault, Visual Studio Online (VSO), Cognitive Services (LUIS) and SQL Azure.
* Experienced in designing Azure cloud models for establishing secure and cross-premise connectivity with Azure VPN gateway and Content Delivery Network.
* Hands-on experience in Azure Cloud Services (PaaS & IaaS), Storage, Web Apps, Active Directory, Azure Container Service, VPN Gateway, Content Delivery Management, Traffic Manager, Azure Monitoring, OMS, Key Vault, Visual Studio Online (VSO), Cognitive Services (LUIS) and SQL Azure.
* Experienced in designing Azure cloud models for establishing secure and cross-premise connectivity with Azure VPN gateway and Content Delivery Network.
* Worked on ELK (Elastic Search, Log Stash and Kibana). Creating indexes and loading the data into Elastic using Log Stash into Kibana (Real time).
* Implemented monitoring tools like Zabbix, Nagios, Stack Driver, etc., for monitoring transactions and other performance metrics.
* Expertise in Enterprise repository management tools like Nexus, Artifactory etc.
* Maintained local team repositories and Organization's central repositories for Maven.
* Designed and developed Shell scripts also wrote scripts for provision of infrastructure management using Terraform.
* Created multiple Terraform modules to manage configurations, applications, services and automate installation.
* Deployed and configured Chef-Server including bootstrapping of chef client nodes for provisioning and created roles, recipes, cookbooks and uploaded them to Chef-Server, managed on-site OS, applications, services, packages using Chef as well as AWS for EC2, S3, Route53 and ELB.
* Experience in Installing, configuring, upgrading and managing CI/CD tools like Jenkins, Maven, Ansible, Chef, Puppet, GIT, GitHub, SVN, Nexus and Artifactory to build and deploy.
* Experience in installing, configuring, upgrading and managing 3-tier architecture using different types and versions of servers like Apache Tomcat, Nginx, WebLogic and MySQL database through CI/ CD orchestration.

**Professional Experience:**

**Role: Devops/AWS Engineer Dec 2021 to Present**

**Client- Nicor Gas, Naperville, Illinois**

**Responsibilities**:

* Performed design analysis, application development, debugging, testing, and documentation of the various phases in a software development life cycle.
* Developed Python script to cleanup old deployments in Kubernetes cluster by deploying specific pods into the cluster using Gitlab-CI and HELM charts.
* Created CI/CD Pipelines in Azure DevOps environments by providing their dependencies and tasks. Also have experience on implementing and managing continuous delivery systems and methodologies on AWS and created END-END Automation with CI Procedures using Jenkins & automated Maven builds by integrating them with Continuous Integration tools Jenkins
* Worked on AWS services like EC2, VPC, S3, ELB, Route53, SES, SNS, RDS, Cloud Front Elastic Cache Cloud Watch, etc.
* Deployed python-based web-applications into production environment using serverless architecture AWS Lambda with Zappa as wrapper around AWS Lambda for better integration of applications using Flask frameworks.
* Worked with AWS maintenance and management of AWS Cloud and its services likeEC2, ELB, S3, RDS, Route53, VPC, Auto Scaling, Lambda, IAM, Cloud watch as per requirement
* Experience in Automating, Configuring, and Deploying the Instances on Azure environments and in Datacenters also designing Azure Resource Manager (ARM) templates.
* Created a new Azure Active Directory (Azure AD) application and service principal that can be used with the role-based access control access to Azure Stack resources
* Using Terraform, created user specific cluster defining the node specifications for different user types in AWS which are then managed by Rancher UI. Provided support for rancher alerts which range from Ingress controller traffic to Control plane being down due to docker containers stopped in working in the admin nodes.
* Set up security groups, EBS volumes, and Automated AMI backup; launched EC2 instances, Mounted S3 bucket on instances enabling cross-region replication, static web hosting.
* Experience in Automation, Configuring, and Deploying Azure Resources like ASE, App Service Plan, App Services, Application Gateway, API Management, Event Hub, Azure Service Bus, App Insights, Key Vault, SQL Managed Instance, Storage Account, Virtual Machines, Subnets, Virtual Networks.
* Maintained Gitlab runner instances in AWS which help in running the Jenkins CI pipelines for developers and assisting them in deploying their applications in to the Kubernetes cluster.
* Wrote multiple Docker files that create deployments, manage secrets from Azure Key Vault and use them in CI/CD pipelines and to build the microservices.
* Wrote YAML Files to automate build and release steps in Azure DevOps.
* Worked on Azure DevOps Multi-Stage YAML pipeline to Build and Deploy .Net Core Applications into Azure APP Service Env.
* Worked in build release management in CI/CD environments using Jenkins, Maven, Artifactory to build and manage container based applications for Dev, UAT and Prod.
* Configured ELB to distribute incoming traffics across multiple EC2 instances and Routed traffic using Route 53.
* Involved in Infrastructure as code, execution plans, resource graph, and change automation using Terraform.
* Implemented a production ready, load balanced, highly available, fault tolerant Kubernetes infrastructure.
* Managed Kubernetes charts using Helm. Created reproducible builds of the Kubernetes applications, managed Kubernetes manifest files and Managed releases of Helm packages.
* Maintained CLI wrapper script and HELM charts which are used by developers to deploy the applications without inside information about the infrastructure.
* Provisioned Docker containers for different application teams to develop and test their code and application. Configured Docker containers to a persistent NFS mount point to protect from data loss in the event of accidental container termination.
* Developed Ansible playbook to trigger Jenkins pipeline to build Docker images from the Dockerfile and push the Docker images with newly build artifacts to the AWS ECR. Integrated Kubernetes cluster to perform rolling deployments of the Docker images.
* Designed and Developed Jenkins Builds deployments on Docker containers.
* Implemented a centralized logging system using log stash configured as ELK Stack (Elastic search, Log stash, and Kibana) to monitor system logs, AWS Cloud Watch, VPC Flow logs, changes in S3 etc.
* Provided assistances in helping developers to push their docker images and Artifactory in to the Jfrog artifactory by creating user groups and generating api tokens for the group.
* Managed local deployments in Kubernetes, creating local cluster and deploying application containers.
* Building/Maintaining Docker container clusters managed by Kubernetes, Linux, Bash, GIT, Docker, on GCP. Utilized Kubernetes and Docker for the runtime environment of the CI/CD system to build, test deploy.
* Managed Ansible Playbooks to automate system operations and AWS Cloud management
* Worked on building Jenkins pipeline for automating build, deploy, test, and release of applications while using the Nexus repository for versioning.
* Created a continuous integration system using SVN, Ant, Jenkins, and Ansible full automation.

**Role: Azure Devops Engineer Sep 2020 to Nov 2021**

**Client: Interpublic Group of Companies, Third Avenue, New York City**

**Responsibilities**

* Created recommendations on how to duplicate a subset of on-premise machines to the Azure Infrastructure as a Service (IAAS) offering which will be used for disaster recovery. This analysis included the specifics to synchronize on-premise data with SQL Server and SharePoint instances hosted in VMs.
* Worked on Azure Site Recovery and Azure Backup- Deployed Instances on Azure environments and in Data centers and migrating to Azure using Azure Site Recovery and collecting data from all Azure Resources using Log Analytics and analyzed the data to resolve issues.
* Created Azure Automation Assets, Graphical runbook, PowerShell runbook that will automate specific tasks, deployed Azure AD Connect, configuring Active Directory Federation Service (AD FS) authentication flow, ADFS installation using Azure AD Connect, and involved in administrative tasks that include Build, Design, Deploy of Azure environment.
* Configured Azure Multi-Factor Authentication (MFA) as a part of Azure AD Premium to securely authenticate users and worked on creating custom Azure templates for quick deployments and advanced PowerShell scripting. Deployed Azure SQL DB with GEO Replication, Azure SQL DB Sync to standby database in another region & Fail over configuration.
* Worked on Serverless services, created and configured HTTP Triggers in the Azure Functions with application insights for monitoring and performing load testing on the applications using the Visual Studio Team Services (VSTS) also called as Azure DevOps Services.
* Implemented a CI/CD pipeline with Docker, Jenkins (TFS Plugin installed), Team Foundation Server (TFS), GitHub and Azure Container Service, whenever a new TFS/GitHub branch gets started, Jenkins, our Continuous Integration (CI) server, automatically attempts to build a new Docker container from it.
* Configure Continuous Integration from source control, setting up build definition within Visual Studio Team Services (VSTS) and configure continuous delivery to automate the deployment of ASP.NET MVC applications to Azure web apps and managed Azure Active Directory, Office 365 and applied upgrades on a regular basis.
* Designed, wrote and maintained systems in Python scripting for administering GIT, by using Jenkins as a full cycle continuous delivery tool involving package creation, distribution, and deployment onto Tomcat application servers via shell scripts embedded into Jenkins jobs.
* Involved in creating Virtual Machines in Azure and managing Azure storage, Azure active directory and Azure Service Bus.
* Configured VMs availability sets using Azure portal to provide resiliency for IaaS based solution and scale sets using Azure Resource Manager to manage network traffic.
* Created and managed Azure AD tenants, and configured application integration with Azure AD.
* Experienced in writing Power Shell scripts to automate the Azure cloud system creation including end-to-end infrastructure, VMs, storage, firewall rules etc.
* Selected the appropriate Azure service based on compute, data, or security requirements and leveraging Azure SDKs to interact with Azure services from the application.
* Involved in setting up a continuous build process in Visual Studio Team Services to automatically build on new check-in of code and further deploy the new build to the Azure Web application

**Role: Cloud & Devops Engineer Jun 2019 to Aug 2020**

**Client: Suncoast Credit Union, Tampa, Florida**

**Responsibilities**:

* Involved in designing and deploying multitude applications utilizing almost all AWS stack (Including EC2, S3, AMI, Route53, RDS, SNS, SQS, IAM) focusing on high-availability, fault tolerance, and Auto-Scaling in AWS Cloud Formation.
* Designed and implemented Central repository (Cloud: AWS S3) to consume Assets for entire applications.
* Designed/Automated cloud deployment using CloudFormation template and YAML files to reusable modules for easier infrastructure creation/deployment
* Maintained the user accounts IAM Roles, Route 53(CNAME), VPC, RDB, MongoDB, SQS & SNS services in AWS cloud.
* Created Python scripts to totally automate AWS services which includes web servers, ELB, Cloud Front distribution, database, EC2 and database security groups and application configuration, this script creates stacks, single servers, or joins web servers to stacks.
* Designed scalable and highly available Domain Name System (DNS) within AWS Cloud to route traffic to AWS Cloud from users connected using AWS Direct Connect for larger deployments.
* Implemented highly responsive multi-channel enhanced customer experience, with Microservices deployed on Pivotal Cloud Foundry (PCF) for highly scalable and agile backend infrastructure.
* Created Cloud Formation templates using AWS's Server less Application Model and swagger to create and deploy RESTful API's using API Gateway and Lambda.
* Deployed MongoDB using Docker image and setting up Mongo DB cluster using MongoDB Atlas.
* Used AWS Beanstalk for deploying and scaling web applications and services developed with java, PHP, Node.js, Python, Ruby and Docker on server such as Apache.
* Created Docker file for each microservice and also changed some of the Tomcat configuration file which are required to deploy Java based application to the Docker container.
* Architected and developed fault-tolerant, multi region, high availability AWS cloud infrastructure with EBS, EC2 snapshot, and RDS snapshot backups
* Involved in creating the company's DevOps strategy in a mixed environment of Linux (Ubuntu, CentOS, RHEL) servers.
* Experience in writing Ansible playbooks by using YAML script to launch AWS instances and used to manage web applications, configuration files, used mount points and packages.
* Developed and designed CI/CD pipelines in Jenkins, bitbucket to deploy AWS infrastructure for web applications
* Wrote Ansible playbooks, inventories created custom playbooks written in YAML language, encrypted the data using Ansible Vault & maintained role-based access control by using Ansible Tower & Implemented IT orchestration using Ansible to run tasks in a sequence which can work on different servers.

**Role:** **Linux Build Engineer Jul 2016 to May 2019**

**Client: MercyOne, Des moines,Iowa**

**Responsibilities:**

* Developed build and deployment scripts using ANT and MAVEN as build tools in Jenkins to move from one environment to other environments.
* Created Branches, Labels and performed Merges in Stash and SVN.
* Installation, configuration and maintenance of DNS server, Mail server, FTP, NFS, RPM and Samba servers on Red hat Linux OS, using datacenter automation tools like Puppet and Ansible.
* Implemented Maven builds for creating JAR'S, WAR'S and WAR'S managed the artifacts generated by Maven in the Nexus repository.
* Involved in editing the existing Ant/Maven files in case of errors or changes in the project requirements.
* Maintain computer networks for networked devices in physical, virtual and cloud environments including computer hardware, systems software, applications software, and all configurations.
* Set up Linux server for LAMP (Linux, Apache, MySQL, php My Admin) implementation and readiness.
* Applying security policies hardening the server based on the company policies.
* Making Documentations and updating company wiki.
* Administered and supported Unix Servers including SUSE, IBM AIX & Red Hat Linux and CentOS.
* Created VMs for SUSE, Solaris x86 and Red Hat Linux on VMWare ESX 3.5 and administering them with VI Client.
* Install and configure DHCP, DNS (BIND, MS), web (Apache, IIS), mail (SMTP, IMAP, POP3), and file servers on Linux servers.
* Set up Open Stack for a private cloud infrastructure.
* Experienced in Bash and Python scripting on Linux.
* Responsible for resolving network issues using network tools like ping, dig, nslookup, TCP trace route and TCP dump and Managing security of servers.
* Managing services, maintaining and monitoring event logs and troubleshooting system problems and resolve any reported issues.