**NARASIMHA**

**SUMMARY:**

* **Having 10+ years of experience in designing, automating, and optimizing cloud infrastructures across AWS, Azure, and GCP. I leverage Terraform, Ansible, Jenkins, and Docker to automate workflows, drive operational efficiency, and ensure scalability. Known for delivering high-performance, cost-effective cloud solutions, I streamline complex deployments, enhance security, and reduce manual efforts. My expertise in both Linux and Windows environments allows me to create robust, reliable systems that support business growth and innovation.**
* Designed and implemented cost-efficient, high-performance cloud architectures on Google Cloud Platform, utilizing **GCP** services like **Compute Engine, Kubernetes Engine, and BigQuery** to drive operational excellence and scalability.
* Experienced on **Cloud/DevOps**, **Continuous Integration and Continuous Delivery** (CI/CD pipeline), **SDLC, Site Reliability**, **Build and Release management**, **Windows /Linux** administration.
* Skilled in streamlining the deployment, scaling, and management of infrastructure and applications by harnessing the power of **AWS** tools. Expertise spans **CloudFormation, Terraform, Ansible**, and **Chef**, enabling the automation of complex workflows for seamless, scalable operations.
* Good Experienced in using **SCM** tools like **GIT, GITLAB (Gitlab Runner), TFS, BIT BUCKET, CVS, Subversion (SVN),** and **Perforce,** and distributed **VC** on **Linux** platforms.
* Engineered and automated robust infrastructure solutions using **Terraform, Ansible, and Docker**, excelling in provisioning cloud resources, streamlining configuration management, and implementing efficient containerization strategies for scalable environments.
* Expertise in software build tools like **Apache Maven**, **Ant** to write **Pom.xml** and **Build.xml** respectively and expertise in building of deployment artifacts such as **jar, war & ear** from source code using **Apache ANT and MAVEN**.
* Utilized AWS Command Line Interface (CLI) and Management Console to manage and interact with various AWS resources and APIs.
* Created and configured EC2 instances using custom and standard AMIs, including Amazon Linux 2, Ubuntu, RHEL, and Windows. Implemented bootstrapping, secured instances using AWS KMS keys, security groups, and other best practices.
* Expertise in working on **Jenkins, Bamboo and TeamCity** for **CI (Continuous Integration) and CD (Continuous Deployment)** methodologies and for **End to End** automation for all build and deployments.
* Expertise in **Jenkins** build/unit test results and Static Code Analysis results are supplied to **SonarQube.**
* Implemented Infrastructure automation through **Ansible** for auto provisioning, code deployments, software installation and configuration updates.
* Proficient in utilizing cloud services and APIs across AWS, including EC2, S3, Auto Scaling, IAM, Route 53, CloudWatch, EBS, Security Groups, AWS Shield, Edge Locations, CloudFormation, Lambda, EKS, CloudFront, and infrastructure automation using Terraform.
* Managed system and application performance monitoring using tools like **CloudWatch** and **Datadog**. created custom alerts and coordinated with application teams based on the defined escalation matrix to ensure timely issue resolution.
* Maintained and managed **Ansible playbooks** responsible for deploying Framework and other cloud tools.
* Experienced in developing automation scripting in **Python** using **Puppet** to deploy and manage **Java** applications across **Linux** servers.
* Expertise in using **Ansible** to manage **Web Applications**, **Config Files, Data Base, Commands, Users Mount Points,** and **Packages**. Implemented **Ansible** to manage all existing servers and automate the build/configuration of new servers.
* Hands on experience in creating EC2 instances using AMIs including Amazon Linux 2, Ubuntu, RHEL, and Windows and bootstrap instances, secure instances using AWS KMS keys, security groups, etc.
* Used Docker in Source Code Management Workflows. Experienced in Installing, Configuring and Managing **Docker** **Containers, Docker Swarm, Docker Images** for **Web Servers** and **Application Servers** such as **Apache Tomcat** using **Docker** and integrated with **Amazon** **MYSQL** **RDS** databases.
* Develop an understanding of TCP/IP **Networking concepts, Routing and Firewalls**.
* Expertise in Virtualization technologies like **VMWare**, **Vagrant** and worked with containerizing applications such as **Docker**, **Kubernetes, etc.**

**TECHNICAL SKILLS:**

|  |  |
| --- | --- |
| **Cloud Platforms** | **AWS, Azure, Google Cloud Platform (GCP)** |
| **Cloud Services (GCP)** | **Compute Engine, Kubernetes Engine, BigQuery** |
| **Cloud/DevOps** | **Cloud/DevOps, Continuous Integration (CI), Continuous Delivery (CD), SDLC, Site Reliability, Build and Release management** |
| **Infrastructure Management** | **CloudFormation, Terraform, Ansible, Chef** |
| **SCM Tools** | **GIT, GITLAB, TFS, BIT BUCKET, CVS, Subversion (SVN), Perforce** |
| **Containerization** | **Docker, Docker Swarm, Kubernetes** |
| **Automation** | **Terraform, Ansible, Docker, Puppet** |
| **Build & Release Tools** | **Apache Maven, Apache Ant, Jenkins, Bamboo, TeamCity** |
| **Build/Unit Test & Code Analysis** | **Jenkins, SonarQube** |
| **Scripting** | **Python, Shell scripting** |
| **Application Management** | **Docker containers, Apache Tomcat, MySQL RDS integration, Web Applications** |

**EDUCATION:**

* B.com in computers from Vinayaka university in Chennai, India - 2014.

**PROFESSIONAL EXPERIENCE:**

**Amica Mutual Insurance, Lincoln, RI February 2023 - Till Date**

**Role: SRE / Sr. DevOps Engineer**

**Responsibilities:**

* Led the creation and configuration of **Linux and Windows EC2 instances**, achieving a **50% improvement** in resource allocation by streamlining the AMI management process.
* Automated the provisioning and configuration of **AWS IAM accounts**, reducing manual effort by **40%** and enhancing user account management efficiency.
* Spearheaded Infrastructure as Code (**IaC**) initiatives using **Terraform** to automate the provisioning of multi-cloud environments, ensuring seamless integration across **AWS, GCP, and Azure**. Successfully implemented reusable modules that reduced setup time by 40%, while enhancing infrastructure consistency and scalability.
* Ensured system reliability and availability by designing and implementing robust monitoring, alerting, and incident response strategies using tools like Splunk, CloudWatch, and Datadog.
* Administered patching and system updates for Windows servers, successfully maintaining 100% compliance with security and system performance requirements.
* Designed and implemented secure access protocols for customers through **AWS Bastion Hosts** and **Active Directory**, resulting in a **20% decrease** in security incidents.
* Implemented **Amazon S3 bucket configurations**, optimizing data storage strategies and reducing storage costs by **30%** through proper permissions and lifecycle policies.
* Troubleshooted and resolved critical system issues related to **ADFS**, **AWS**, and **Citrix**, ensuring 99.9% uptime for customer systems.
* Automated infrastructure management and system configuration using Infrastructure as Code (IaC) tools such as Terraform, Ansible, and CloudFormation.
* Creating and Configuring **Linux** and Windows **EC2** Instances Creating **AMIs**.
* Proficient in **Confluence, Jira, GitLab and Artifactory.**
* Creating user accounts in **Jira, Confluence, Gitlab,** and Artifactory Creating Customer accounts in Active Directory and AWS.
* Worked with Docker components such as **Docker Engine, Docker Hub,** and **Docker Registry**. Utilized Docker for local application deployment in development and testing environments.
* Identified key performance indicators (KPIs) relevant to product performance and user experience, and implemented effective methods to measure and monitor those KPIs.
* Used Splunk extensively to write queries and investigate application errors during production issues.
* Unlocking customer accounts **in AWS and Active Directory** Activating and deactivating AWS MFA for customer accounts.
* Developed Ansible Playbooks to automate the deployment of virtual machines and the installation of required components based on project specifications.
* Perform troubleshooting and monitoring of the Linux and Windows servers on AWS.
* Generating Passwords and resetting Passwords for customer **AWS** and Active Directory accounts.
* Creating Production and Non-Production accounts through Active Directory Creating **AWS MUA** accounts in **IAM** management and **AWS ADFS accounts** Perform **Patching of Window Servers.**
* Creating Snapshots of **AMIs** and volumes Giving user Deploy permissions in Artifactory Switching roles in AWS.
* Sending Encrypted emails with customers' login credentials.
* Creating **DEVOPS** accounts for customers through Active Directory Assigning roles in **AWS** and Active Directory.
* Giving customers access to Windows Bastion host.
* Creating **S3** buckets and permitting customers to access the **MUA** **S3** dirty buckets by Opening Ports in Amazon **EC2** security Groups.

**Environment:** AWS, EC2, AMI, IAM, Terraform, GCP, Azure, CloudFormation, Ansible, Linux, Docker, Docker Engine, Docker Hub, Docker Registry, Active Directory, CloudWatch, Datadog, Splunk, Confluence, Jira, GitLab, Artifactory, MFA, Ansible Playbooks

**HSBC - Hyderabad, India September 2017 - July 2022**

**Project 2: CI/CD Automation, Monitoring & System Administration April 2020 - July 2022**

**Role: DevOps Engineer**

**Responsibilities:**

* Integrated JIRA with Jenkins and dealt with its administration in change management process.
* Worked with Terraform for automating **VPCs, ELBs, security groups**, and **S3** buckets.
* Managed **AWS EC2** instances utilizing Auto Scaling and Elastic Load Balancing for production
* environments.
* Created **Docker images** using Docker file, worked on Docker container snapshots, managing images and Docker volumes to provision the **AWS** environment. Execute multiple engineering tasks in support of overall DevOps infrastructure, such as restoration of **AWS RDS** database, migration of AWS accounts, and configuration of Virtual Private clouds (**VPC**) with public and private subnets and NAT instances.
* Provide system administration support for 150 instances hosted in the AWS cloud environment.
* Perform troubleshooting and monitoring of the Linux and Windows servers on AWS.
* Provision Amazon **Linux**, **Ubuntu**, **Red hat**, and Windows **EC2** instances using private AMIs and baselines.
* Create Route **53 DNS** entry for domain name resolution.
* Experience building microservices and deploying them into **Kubernetes** **cluster** as well as **Docker** **Swarm**.
* Developed scripts with Windows **PowerShell** to automatically configure network settings.
* Automated Microsoft recommended load balancing techniques using PowerShell to reduce the workload of the DC holding.
* Automated AWS infrastructure provisioning using Terraform and Jenkins, and managed software and service configurations through Ansible playbooks to streamline deployment processes and improve operational efficiency.
* Created and maintained Ansible playbooks for tasks such as connectivity testing, RPM package installation, and various automation needs across multiple Red Hat Linux environments.
* Configure Virtual Private Cloud (**VPC**) with both public and private subnets, **NAT** instances, and Elastic Load Balancers.
* Provisioned highly available EC2 instances using Terraform and CloudFormation, and developed custom Terraform plugins to enable additional infrastructure capabilities.
* Perform troubleshooting and monitoring of the Linux server on AWS using CloudWatch, Nagios and Opsgenie.
* Use **Ansible** to patch **Linux** and **Windows** instances within a maintenance window and occasionally perform security updates to remediate system vulnerabilities.
* Decommission websites and instances per customer request.
* Scale up instances upon customer request by changing instance type.

**Environment:** AWS, EC2, Auto Scaling, Elastic Load Balancer (ELB), S3, VPC, NAT Instances, Route 53, RDS, Jenkins, Terraform, Ansible, Ansible Playbooks, Docker, Docker Swarm, Kubernetes, PowerShell, Red Hat Linux, Amazon Linux, Ubuntu, Nagios, Opsgenie, CloudWatch, JIRA, Private AMIs, RPM, DNS

**Project 1: AWS DevOps Infrastructure & Migration September 2017 – March 2020**

**Role: DevOps Engineer**

**Responsibilities:**

* Architected and deployed highly available and scalable AWS solutions using services like **EC2, RDS**, and **Elastic Load Balancing (ELB)** to meet dynamic business demands.
* Developed and orchestrated serverless workflows with AWS Lambda and Step Functions, significantly reducing manual intervention and increasing operational efficiency.
* Migrated on-premises applications to AWS, utilizing AWS Server Migration Service (SMS) and ensuring minimal downtime and data integrity.
* Developed infrastructure as code templates using AWS CloudFormation and Terraform, enabling consistent and automated provisioning of resources.
* Optimized AWS costs by implementing auto-scaling and reserved instances, resulting in a 20% reduction in monthly infrastructure expenses.
* Implemented robust security measures, including fine-grained IAM policies, encryption at rest and in transit, and continuous security monitoring with **AWS Security Hub.**
* Collaborated with cross-functional teams to architect and deploy containerized applications on **Amazon ECS and Amazon EKS, leveraging Docker** and **Kubernetes.**
* Conducted performance tuning and optimization of AWS resources, including EC2 instances, RDS databases, and S3 storage, achieving improved application response times.
* Managed and administered AWS environments, including **EC2 instances, RDS databases,** and **VPC networking components.**
* Implemented disaster recovery strategies utilizing AWS services such as AWS Backup and AWS Disaster Recovery (DR) tools, ensuring business continuity.
* Configured and optimized AWS storage solutions, including Amazon S3 for object storage and Amazon EBS for block storage.
* Automated infrastructure provisioning and deployments using AWS CloudFormation and AWS CodePipeline, improving efficiency and reducing manual errors.
* Monitored and analyzed AWS resources using Amazon CloudWatch, setting up alarms and notifications to proactively address potential issues.
* Utilized AWS CloudWatch and other monitoring tools to monitor EC2 instance health, performance metrics, and log data, and troubleshooted issues to ensure optimal operation.
* Implemented EC2 instance security and compliance: Ensured compliance with industry standards and implemented security measures such as encryption at rest and in transit, data protection, and compliance controls for sensitive workloads.
* Responsible for Continuous Integration and Continuous Delivery (CI/CD pipeline) process implementation-using Jenkins along with Python and Shell scripts to automate routine jobs.

**Environment:** AWS, EC2, RDS, ELB, Lambda, AWS Step Functions, AWS Server Migration Service (SMS), Terraform, S3, EBS, VPC, IAM, AWS Security Hub, Docker, Amazon ECS, Amazon EKS, AWS Backup, Jenkins, CodePipeline, CloudWatch, Python, Shell Scripting

**Business Integration Solutions – Hyderabad July 2014 – August 2017**

**Role: DevOps Engineer**

**Responsibilities:**

* Implemented a **CD** pipeline involving **Jenkins** and **GIT** to complete the automation from commit to deployment.
* Used **Java** **programming**, related code files, config files and package mechanisms and provided optimal mechanism to build application packages.
* Administered the Ansible infrastructure and deployed the **SSH** keys on **Linux**, **SunOS** and Windows servers during server provision and enabled role-based architecture for ansible.
* Used **Ansible Roles, Registers, Facts, Playbooks, Plays, Custom Modules** etc.
* Written ansible playbooks to perform the automated installation of dependencies and middleware like **WebLogic, Tomcat**.
* Dynamically created the **Docker** **containers** from docker images using **ansible** and **Jenkins**.
* Used **Splunk** to automate the incident management to reduce alert fatigue and increase uptime of the infrastructure.
* Installation and upgrade of packages and patches, Configuration management, Version Control, Service packs, troubleshooting connectivity issues and reviewing Security constraints.
* Installed docker for deploying the micro service-based web applications, managed the docker images and containers.
* Used docker hub and Nexus docker register to store the custom docker images.
* Managed all the docker containers and heal the applications used.
* Experience in writing the docker files for internal applications and built the docker images out of the docker files.
* Version controlled the **docker files, Ansible playbooks, Python modules and scripts, shell scripts** using **Bitbucket** version control system.
* Experience on version control methods like merging the branches, configuring the web hooks in version control system, resolving the merge conflicts, creating the tags, Creating/Deleting the local and remote branches using **Git** and **Git Bash**.
* Perform daily system monitoring, verifying the integrity and availability of all hardware, server resources, systems and key processes, reviewing system and application logs, and verifying completion of scheduled jobs such as backups.
* Installed and Configured the Nexus repository manager for sharing the artifacts within the company.

**Environment:** Jenkins, Git, Java, Ansible, SSH, Linux, WebLogic, Tomcat, Ansible Roles, Ansible Playbooks, Docker, Docker Hub, Nexus, Splunk, Bitbucket, Python, Shell Scripting, Git Bash, Nexus Repository Manager