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Description automatically generatedName: Shirisha**

**Cloud/DevOps Engineer**

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Total 10+ years of IT experience with sound knowledge in Amazon Web Services **(AWS), Azure, and GCP** under the **Unix/Linux/Windows** platforms with strong knowledge of the principles and best practices of Software Configuration Management (**SCM**) in **Agile, Scrum, and Waterfall methodologies**. Experience in the IT industry with a major focus on **Release Management, Software Development, Configuration, Build and Release Engineering, DevOps engineering, and Automation**.

**PROFESSIONAL SUMMARY:**

* Strong Experience in setting up the enterprise infrastructure on Amazon Web Services (**AWS**) like **EC2** instance, **ELB, EBS, S3 Bucket, Security Groups, Auto Scaling, AMI, RDS, IAM Cloud formation, Cloud Front & VPC services.**
* Experience in technologies and platforms including **JAVA**, **Node.js**, **Jenkins**, **Subversion**, **Git**, **Unix/Linux**, windows server, **VMWare**, **Docker**, **Vagrant**, **Ansible**, **Chef**, **Puppet AWS**.
* Provisioning Web Servers in **AWS** using different services **EC2, VPC, ELB, Auto Scaling, Route53** using Cloud formation templates & AMIs using Infrastructure as a Service (**IAAS**).
* Experience in **Azure IaaS, PaaS**, Provisioning VMs, Virtual Networks, Deploying **Web Apps** and creating **Web-Jobs, Azure Cosmos DB**, **Active Directory, Azure Windows server,** Microsoft **SQL Server**, **Microsoft Visual Studio, Windows PowerShell**
* Hands-on in various **Azure** services like **Compute** (**Web Roles, Worker Roles), Caching, Azure SQL**, **NoSQL**, **Storage**, and **Network services**, **Azure Active Directory, API Management, Scheduling**, **Azure Autoscaling**, **PowerShell Automation**, **Azure Virtual Machines**, **Azure Search**, **Azure DNS**, **Azure VPN** Gateway.
* Expertise in **Azure IaaS - Virtual Networks, Virtual Machines, ARM Templates, Resource Groups, Traffic Manager, VPN, Load Balancing, Application Gateways, Auto-Scaling,** and Applied high availability with **Azure Classic and ARM** deployment models.
* Architected and implemented automated **Cloud Infrastructure** using **Chef** and **Puppet** on multi-platforms on **AWS** Cloud Servers.
* Experience in working with configuration management tools like **Puppet, Chef,** and **Ansible**. Experience in setting up **Puppet Master, and Puppet Agents** for managing enterprise policies and configurations.
* Created and Maintained **Chef Recipes** and **Cookbooks** to simplify and expedite the deployment of applications and mitigate user error.
* Proficient with container systems like **Docker** and container orchestration like EC2 Container Service, and **Kubernetes**, worked with Terraform.
* Managed Docker orchestration and Docker containerization using Kubernetes.
* Used **Kubernetes** to orchestrate the deployment, scaling, and management of Docker Containers.
* Implemented a Continuous Delivery framework using **Chef,** **Jenkins**, and **Maven** in a **Linux** environment on the **AWS** Public cloud.
* Written **Terraform** templates, **Chef** Cookbooks, and recipes, and pushed them onto the **Chef** server for configuring **EC2** Instances.
* Performed automation tasks on various **Docker** components like **Docker Hub, Docker Engine, Docker Machine, Compose,** and **Docker Registry.**
* **Dockerized** applications by creating **Docker images** from **Docker file**
* Implemented Continuous Integration and deployment using various **CI** Tools like **Jenkins, and Bamboo**.
* Extensively worked on **Hudson, Jenkins**, **Team City,** and **Bamboo** for continuous integration and End to End automation for all builds and deployments.
* Experience in administrating, deploying, and managing **RedHat, Ubuntu,** and **CentOS** servers.
* Proficient in **Python, Perl Scripting, Shell Scripting, SQL**, and build utilities like open make, **ANT,** and Cruise Control.
* Experience in **AWS**, **Kubernetes, and Docker** andwriting scripts in **Perl** and **Shell** Scripts for managing various enterprise applications.
* Hands-on Experience in branching, tagging, and maintaining the version across the environments using **SCM** tools like **GitHub**, **Subversion** (**SVN**), and **TFS** on Linux and Windows platforms.
* Experiences in the design and implementation of Hybrid Test Automation Framework build using **Selenium RC, TestNG, Maven, and Apache POI** technologies under the **Java** platform.
* Automated setting up server infrastructure for the **DevOps** services, using **Ansible**, **shell,** and **python scripts**.
* Worked with different Bug trackings tools like **JIRA, Rally, Remedy, HP Quality Center,** and **Fisheye.**
* Combined Protractor with powerful tools and technologies such as **Selenium, Web Driver, Cucumber,** and **JBehave.**
* Integrated **Jenkins** with various **DevOps** tools such as **Nexus, Sonar Qube, Puppet,** etc.
* Extensively worked on **Artifactory** and **Nexus** Repository Managers to deploy software built through **Jenkins** Build Jobs.
* Created automation and deployment templates for Relational and **NoSQL** databases (standalone and RDS), including **Oracle, SQL Server**, **MongoDB, and** **MariaDB** in AWS.
* Define and build a workflow to include Compile, **JUnit, SonarQube**, **Jacoco, Karma, Packaging, Deployment**, and **Selenium** testing.
* Extensive Experience in **Atlassian**, ticketing, and tracking tools like **JIRA, REMEDY, ClearQuest, Redmiand, Bugzilla** for Production **hotfixes,** and **bugfixes**.
* Set up **GCP** Firewall rules to allow or deny traffic to and from the VM's instances based on specified configuration and used **GCP cloud CDN** (content delivery network) to deliver content from GCP cache locations drastically improving user experience and latency.
* Worked on **google cloud platform (GCP)** services like compute engine, cloud load balancing, cloud storage, cloud SQL, stack driver monitoring, and cloud deployment manager.
* Configuring and deploying instances on **GCP** environments and Data centers, also familiar with Compute, **Kubernetes Engine, Stack driver Monitoring, Elastic Search,** and managing security groups on both.
* Used **GCP App Engine** for deploying and scaling web applications and services developed with Java.
* Leveraged **GCP** cloud services such as Compute, auto-scaling, and VPC to build secure, highly scalable, and flexible systems that handled expected and unexpected load bursts.

**TECHNICAL SKILLS:**

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| --- | --- |
| **Version Control** | GIT, SVN, CVS, Bitbucket |
| **Languages** | C, Java, Bash, XML, Ruby, Python, Perl, Shell Scripting |
| **Scripting** | Python, Shell Scripting, Power Shell, YAML |
| **Operating System** | Microsoft Windows, Red Hat, Centos7, Ubuntu, Sun Solaris, Fedora |
| **Virtualization** | Windows Hyper-V, VMware ESXi, Virtual Box, vCenter, vSphere |
| **Container Orchestration** | Docker, Docker Swarm, Kubernetes, OpenShift, EKS, ECS. |
| **Build Tools** | Ant, Maven, Gradle |
| **CI Tools** | Hudson, Jenkins, Bamboo |
| **Automation/Configuration Management** | Jenkins, Chef, Puppet, Ansible, Kickstart, Jumpstart |
| **Testing and ticketing tools** | SonarQube, Selenium, JIRA, ServiceNow, Remedy, ConnectWise, |
| **Monitoring and Logging Tools** | Nagios, Splunk, ELK, Datadog, Dynatrace |
| **Databases** | Oracle 10g/9i, SQL Server, MySQL, SQL Server, NoSQL, Mongo DB, Cassandra |
| **Servers** | Oracle WebLogic, Tomcat, WebSphere MQ series |
| **Protocols/ Services** | HTTP, HTTPS, SSL, DHCP, DNS, SSH, SFTP, TCP/IP, FTP/SFTP, SMTP |
| **Cloud Tools** | Microsoft Azure, AWS (EC2, EBS, ELB, Auto Scaling, S3, VPC, IAM, AMI, CloudFormation, CloudWatch, SNS, RDS, EFS), Open Stack |
| **Others** | Nagios, Splunk, Artifactory, Confluence |

**PROFESSIONAL EXPERIENCE:**

**Apple, Austin,TX Jan 2022 - Current**

**Sr DevOps Engineer (AWS | Azure | Kubernetes) / SRE**

**Responsibilities:**

* Created **AWS** Launch configurations based on customized **AMI** and use this launch configuration to configure auto-scaling groups Implemented **AWS** solutions using **EC2, S3, RDS, DynamoDB, Route53, EBS, Elastic Load Balancer, and Auto Scaling groups.**
* Build servers using AWS, importing volumes, launching **EC2, RDS**, creating **Security groups, Auto-Scaling, and Load** **balancers** (**ELBs**) in the defined virtual private connection.
* Understanding secure-cloud configuration (**CloudTrail, AWS Configuration**), Cloud-security Technologies (**VPC, Security Groups**, etc.), and Cloud-permission systems (**IAM**).
* Used **Azure Kubernetes** Service to deploy a managed **Kubernetes** cluster in **Azure** and created an **AKS** cluster in the Azure portal, with the Azure CLI, also used template-driven deployment options such as Resource Manager Templates and Terraform.
* Experience in deploying **Apache Kafka on the Kubernetes container management system,** to automate **the deployment, scaling, and operation** of containers across clusters of hosts.
* Using Apache Kafka on Kubernetes with **cloud-native development** for the application development
* Responsible for deployment of large-scale Confluent Enterprise Kafka on Kubernetes and developing self-service tooling to **manage multiple Kafka clusters**
* Involved with the development team with best practices, **onboarding, monitoring, troubleshooting, optimizing, and tuning** Kafka clusters
* Involved in integrating Public Cloud messaging systems with internal ones with a focus on automation and DevOps
* Hands-on with **Azure Pipelines to automatically deploy to Azure Kubernetes Service (AKS)** to build, test, and deploy with continuous integration (CI) and continuous delivery (CD) using Azure DevOps
* Using AKS to create and manage containers on the cloud-based server systems.
* Using AKS Kubernetes run inthe infrastructure on containers to operate on different machines/environments to avoid breakdowns
* Implementing **Azure Service** Offering, such as **Azure cloud services, Azure storage, IIS, Azure Active Directory (AD), Azure Resource Manager (ARM), Azure Storage, Azure, Blob Storage, Azure VMs, SQL Database, Azure Functions, Azure Service Fabric, Azure Monitor, and Azure Service Bus**.
* Used Jenkins pipelines to drive all microservices builds out to the Docker registry and then deployed to **Kubernetes**, Created Pods, and managed using **Kubernetes**.
* Experience in **Migrating** the Legacy application into the **GCP** Platform.
* Responsible for managing the **GCP** services such as Compute Engine, **App Engine**, **Cloud Storage**, **VPC**, Load Balancing, Big Query, Firewalls, and Stack Driver.
* Building/Maintaining **Docker** container clusters managed by **Kubernetes** Linux, Bash, GIT, Docker on AWS,
* Utilized Kubernetes and **Docker** for the runtime environment of the CI/CD system to build, and test deploy.
* Involved in the development of test environment on Docker containers and configuring the **Docker** containers using **Kubernetes**.
* Created alarms and trigger points in **Cloud Watch** based on thresholds and monitored logs via metric filters.
* Worked on setting up Log Analysis AWS Logs to **Elastic Search** and **Kibana** and Manage Searches, Dashboards, custom mapping, and Automation of data.
* DevOps Engineering in various technology stacks including but not limited to **AWS, Azure, Docker, Containers, Python, Kubernetes, NodeJS, Angular, Terraform, Ansible, Jenkins, GIT, JIRA**, Monitoring in Cloud Environment.
* Converted **Pom.xml** into the build. **Gradle**to build the applications using **Gradle**.
* Managed the artifacts generated by Maven and **Gradle** in the Nexus repository.
* Deployed a Django application connected to Azure SQL using Docker and Azure App Service
* Involved in the migration of the **CI** tool stack from **SVN** to **GIT**, Maven to **Gradle**, and **Build a force** to **Jenkins**.
* Managed the artifacts generated by Maven and **Gradle** in the **Nexus** repository.
* Designing and implementing **CI** (Continuous Integration) system: configuring **Jenkins Servers, and Jenkins nodes**, **TFS** creating required scripts (**Perl & Python**), and creating/configuring VMs (**Windows/Linux**).
* Monitoring app servers using **ELK** - **Elasticsearch, Logstash,** and **Kibana** for debugging and logging.
* Used monitoring servers using **Nagios, Splunk, Cloud watch,** and using **ELK**.
* Worked on deploying **Splunk** systems and Monitor Splunk internal logs from the monitoring Console (MC) to identify and troubleshoot existing or potential issues
* Worked with **Terraform** for automating **VPCs, ELBs**, security groups, SQS queues, and **S3** buckets, and continued to replace the rest of our Infrastructure.
* Installed, configured, and administered the CI tool **Jenkins** for automated builds.
* Analyzed and resolved conflicts related to the merging of source code for **SVN** and **Git**.
* Worked on creating and documenting POC for helping migrate the current Application to microservice architecture. The architecture included **Docker** as the container technology with **Kubernetes** and worked with **REST API**.
* Created **Docker** images using a **Docker file**, worked on **Docker** container snapshots, removed pictures, and managed **Docker** volumes.
* Virtualized the servers using **Docker** for the test environments and dev-environments needs. And configuration automation using **Docker** containers.
* Created multiple **Python, Perl,** and **UNIX** shell Scripts for various application-level tasks.
* Used **Nagios** as a monitoring tool to identify and resolve infrastructure problems before they affect critical processes and worked on **Nagios** Event handlers in case of an automatic restart of failed applications and services.

**Environment**: Chef, Vagrant, AWS EC2, AWS S3, AWS Route53, AWS VPC, Azure, Jenkins, Ruby, Shell, Apache Mesos, Marathon, Chronos, AWS API Gateway, Cloud formation, Docker, Kubernetes, Splunk

**Verizon, Frisco, TX Jun 2019 – Dec 2021**

**DevOps Engineer**

**Responsibilities:**

* Responsible for the continuous build and deployment of Java-based code using the **Jenkins** server.
* Implemented **AZURE** SQL Server for storing the data related to recruitment and extensively worked on queries and stored procedures.
* Troubleshooting Issues related to Cluster deployments.
* Managing Cluster nodes for Physical issues and escalating issues to respective vendors.
* Working knowledge of **AZURE** cloud IaaS and PaaS Services, **AZURE** SQL, **AZURE** storage, and **AZURE** Services.
* Setting up private networks and sub-networks using Virtual Private Cloud (VPC) and creating security groups to associate with the networks.
* Design roles and groups using **AZURE** Identity and Access Management (IAM)
* Develop and maintain custom internal Bash & **Python** scripts to automate the management of **AWS** and cloud environments.
* Experience with Configuration Management - **Ansible**, which includes creating, and modifying Playbooks for various applications.
* Worked on **Shell** and Python scripting to automate the tasks and passed Bash scripts to the Jenkins job for server **provisioning**.
* Installed **Nagios** on global servers, Managing Monitoring solution using Nagios Environment.
* Experience in **Monitoring** the system and **network stability** and performance, and tuning performance as necessary.
* Day-to-day management/monitoring/troubleshooting of multi-tier applications using **Ansible** and Nagios in Dev, QA, and Prod **environments**.
* Utilized **Kubernetes** for the runtime environment of the CI/CD system to build, test deploy.
* **Kubernetes** is being used to orchestrate the deployment, scaling, and management of Docker Containers.
* Implemented docker-maven-plugin in maven pom to build **docker** images for all microservices and later used **Docker** file to build the docker images from the java jar files.
* Building/Maintaining **Docker** container clusters managed by **Kubernetes** Linux, Bash, GIT, and Docker, on GCP (Google Cloud Platform). Utilized **Kubernetes** and Docker for the runtime environment of the CI / CD system to build, and test deploy.
* Developed microservice onboarding tools leveraging **Python** and Jenkins allowing for easy creation and maintenance of build jobs and **Kubernetes** deployment and services.
* Experience in Deployment Automation & Containerization (Docker, Kubernetes).
* AppleSystemUIFontExperience with SageMaker in creating notebook instances, preparing the data, and deploying the model
* Monitoring Amazon SageMaker using Amazon CloudWatch, collecting raw data, and processing it into readable, near-real-time metrics
* Experience in SageMaker for managing Identity-Based Policies, Resource-Based Policies, Access Control Lists (ACLs) Etc
* Experience in creating and managing IAM Users and Groups, IAM Roles like Federated user access, Temporary IAM user permissions, Cross-account access,
* Using SageMaker for the IAM role to manage temporary credentials for applications that are running on an EC2 instance and making AWS CLI or AWS API requests
* Built a new CI pipeline. Testing and deployment automation with Docker, Jenkins, and Ansible.
* Experience in running multi-container **Docke**r applications using Docker compose.
* Prepared mock cutover plans and cutover plans **for Pre-Prod and Prod Deployments**.
* Publish the changes concerning CIs and amend affected documents **periodically.**
* Tracking the change requests to closure and responsible for coordinating weekly Scrum meetings.
* Experience building **Virtual Machine Images** using VMWare primarily working on creating an RHEL6 server.
* Responsible for configuring the network on the **RHEL 6 and 7 servers**. Configured HTTP and Tomcat servers and deployed several .war applications on the **tomcat** servers.
* To achieve the **Continuous Delivery goal** in the highly scalable environment, used Docker coupled with the load-balancing tool Nginx.
* Responsible for **creating release documentation** after each release.

**Environment**: Red Hat, GIT, Ansible, Docker, Gradle, Maven, Ant, Jenkins, SSH, SSL, Kubernetes, Shell Scripting,

VMware, Conduit, Azure, AWS.

**State of Arizona, Phoenix, AZ Jul 2017– May 2019**

**Build Automation Engineer**

**Responsibilities:**

* Developed and implemented Software Release Management strategies for various applications according to the **Agile** process.
* Deployed **java** applications to application servers in an Agile, **continuous integration** environment and automated the whole process
* As a member of the Release Engineering group, redefined processes and implemented tools for software builds, patch creation, source control, release tracking, and reporting on the **Linux platform**.
* Created and maintained various **Shell scripts** on different **Linux servers**.
* Having good hands-on Experience in administering **Linux** machines and building **RPMs**.
* Experienced with **Windows scripting** and **automation**, including **PowerShell.**
* Developed processes, tools, and automation for **Jenkins-based** software for a build system, and delivered SW Builds.
* Setting up a client-server model of **Chef** in the development environment.
* Create **cookbooks** for automation of Infrastructure using **Chef**.
* Developed build and deployment scripts using **ANT** and **MAVEN** as build tools for **Jenkins** to move from one environment to other environments.
* Application Deployments & Environment configuration using **Chef, Puppet, and Ansible**.
* Worked on **AWS** services such as Setting up new (**EC2**) instances/services in **AWS**, and configuring **security groups.**
* Participated in weekly release meetings with Technology stakeholders to identify and mitigate potential risks associated with the releases.
* Designed and implemented scalable, secure **cloud architecture** based on **Amazon Web Services**.
* Used **Jenkins** for enterprise-scale infrastructure configuration and application deployments.
* Using **ANT, Puppet**/ **Chef** **Scripts** to build the Application and deploy.
* Created a Continuous Build Process using **Jenkins** as a Continuous integration tool.
* Support as part of the **DevOps** team to help deploy using **Jenkins**.
* Worked on and run **Agile** projects for a **DevOps** team to help deliver critical functionality to a cloud-based service.
* **Configuration Management** Tools **(Puppet/ Chef)**. Used **Puppet** to configure and maintain tomcat servers.
* Work with **Docker** for a convenient environment setup of the test environments.
* Verified if the methods used to create and recreate software builds are consistent and repeatable.
* Involved in the project application architecture to support/resolve build, compile, and test issues/ problems.
* Experience with build tools **Ant, Maven, and Gradle** for writing a **build**. **XML, pom. XML** and build. gradles respectively.

**Environment:** AWS, Azure, Red Hat Linux, Jenkins, Puppet, Chef, MySQL, Tomcat server, ANT, SHELL,

Java, Docker.

**Advent Global Solutions, Hyderabad, India Nov 2014 - Mar 2017**

**Sr. Software Engineer**

**Responsibilities:**

* Installation, configuration, and administration of **Red Hat Linux** servers and support for servers.
* Planned and performed the upgrades to Linux (**Rhel 4x, 5x, use 10, 11, centos**) operating systems and hardware maintenance like changing memory modules, and replacing disk drives.
* Provided support for building the server, patching, user administration tasks, deployment, software installation, performance tuning, troubleshooting, and **KVM.**
* Installation and configuration of **Oracle** 7. X/8. X.
* Handling **NFS**, **Auto Mount, DNS, and LDAP-related** issues.
* Monitoring **CPU**, memory, physical disk, hardware and software raid, multipath, file systems, and networks.
* Performing failover and integrity tests on new servers before rolling out to Production.
* Deployment and configuration of application server **Tomcat** deploying java and web application.
* Writing **Shell Scripts** for automation of daily tasks, documenting the changes that happen in the environment, and each server, analyzing the error logs, analyzing the user logs, and analyzing the **/var/log/**messages.
* Good understanding of **OSI** Model, **TCP/IP** protocol suite **DNS, IP, ARP, TCP, UDP, SMTP, FTP, and TFTP**.
* Knowledge of Routers and Switches, Subnet, **VLAN, TCP/IP, Ethernet, VPN, OSI model, and Cisco Firewall**.
* Performed server updates, patching, upgrades, and package installations using **RPM.**
* Created local repositories on **Linux** servers Performed server updates, patching, upgrades, and package installations using **RPM** and **YUM**.
* Implementing Security policies using **ACL** and **CISCO PIX** firewalls.
* Creating new nodes and Pools in **F5 Load balancers** to support newly added servers in the Layer 3 environment.
* Performed server updates, patches, and upgrades using **YUM** and **RPM.**
* Installs Firmware Upgrades, **kernel** patches, systems configuration, and performance tuning on **Linux** systems.
* Extensive knowledge of Server administration, **Kernel** upgrade, and deployment of patches and applying all firewall and security policies with emphasis on maintaining best practices.

**Environment:** Microsoft Windows, RHEL5,6,7, Centos6,7, VMware, IBM WebSphere, IBM HTTP, Oracle Web Logic, MySQL, Shell, Bash, TCP/IP, SMTP, NFS, DNS, DHCP, KVM, LDAP, LVM, RAID.

**Education:**

Bachelors of Technology – 2013, JNTU University, Hyderabad, India.