**Kavya Nallajerla**

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**Site Reliability Engineer / Sr. DevOps Cloud Engineer**

**PROFESSIONAL SUMMARY:**

* **DevOps And SRE engineer with 8+ years** of extensive experience in IT industry with ability to accomplish all aspects of UNIX/LINX system administration, software configuration management (SCM) process, Infrastructure, Build & Release management, Deployment and AWS Cloud engineering.
* Knowledge of working on Agile (Scrum) methodologies and Waterfall Model.
* Automated various infrastructure activities like Continuous Deployment, Application Server setup, Stack monitoring using Ansible playbooks and has Integrated Ansible with Jenkins.
* Hands on experience and exposure to a variety of OS: Windows, Linux, Unix.
* Managed Amazon Web Services like VPC, EC2, S3 bucket, Dynamo DB, CLI Route53, ELB, Auto-Scaling, ACL, SQS, SNS, Cloud Formation, KMS, IAM through AWS Console.
* Implemented CI/CD pipeline using Jenkins and extensively worked for End-to-End automation for all build and deployments.
* Experience with monitoring and management tools NAGIOS.
* Worked on deployment of complex infrastructure using AWS CLI and AWS Console.
* Experience in AWS services such as **EC2, ELB, Auto-Scaling, S3, IAM, VPC, RDS, Dynamo DB, Cloud Trail, Cloud Watch, Lambda, Elastic Cache**.
* Expertise in setting up **Kubernetes (k8s)** clusters for running **micro services** and deploying them into Production environment.
* Worked on end-to-end POC for **Spinnaker** in setting up and configuring pipelines. **Airflow** for batch job
* work flow automation
* Experience working with Web servers & application servers such as **Apache2, Nginx, Apache Tomcat**.
* Experience in using Nexus and Artifactory Repository Managers for **Ant & Maven** build packages.
* Extensive experience using **MS Build, Maven** and **Gradle** as build tools for the building of deployable artifacts (**MSI, jar, apk**) from source code.
* Experience in migration of Source code from **Team foundation Servers** to **GITHUB** and Converting all the **Team foundation Server** Jobs into **Jenkins Pipeline** Jobs.
* Hands on Experience on Writing **Jenkins** File with auto creating of **Seed jobs** and depends on the flavour of applications.
* Involved in **Soap UI** automation of application API’s using **PowerShell** scripting after successful rollout of application in Production.
* Designed and created multiple deployment strategies, **CI/CD** pipelines using **Jenkins**.
* Experience in working on source control management tools like **GIT** (GitHub), **Subversion** (SVN) and creating **GIT** repositories with specified branching strategies.
* Hands on experience on automating various infrastructure activities like **Continuous Deployment**, Application Server setup, Stack monitoring using **Ansible playbooks, SCCM** and worked on Integrating **Ansible** with **Run Deck** and **Jenkins**.
* Expertise in entire setup of **CICD** in Jenkins using Jenkins file for **Java, .Net & .Net core** based applications.
* Expertise in scripting for automation, and monitoring using like **PowerShell, Shell, Bash, Python** scripts.
* Good experience on following **Agile** strategies. Preparing **Sprint** planning and tracking.

**TECHNICAL SKILLS:**

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| --- | --- |
| Build Tools: | MS Build, Ant, Maven, Gradle, Cruise Control |
| Versioning Tools: | TFS , Visual Studio 2015/2017,GIT, GITHUB |
| CI-CD Tools | Jenkins, Air watch, Team Foundation servers, Spinnaker. |
| Operating Systems: | Windows, UNIX, LINUX, REDHAT. |
| Cloud Platform | GCP, Azure, AWS. |
| GCP Cloud Services | Google kubernetes Engine (GKE), cloud functions, cloud build, Stack driver. |
| Azure Cloud Services | Azure Resoruces, Azure storage, Azure AD, Azure Virtual Machines, Azure resource manager, Azure Devops. |
| CM tool | Terraform, Ansible, SCM. |
| Containerization & Orchestration | Docker, Kubernetes, Docker Swarm. |
| Languages/Scripting | Shell, Python, Bash, Git bash, Power Shell Scripting. |
| Bug Tracking Tools | JIRA, Bugzilla, HP Quality Centre |
| Web servers | Web Logic, WebSphere, Apache Tomcat, JBOSS |
| RDBMS | MYSQL, DB2, Cassandra |
| Monitoring Tools | Splunk, Firebase/Fabric Crashyanlytics, Cavisson, Cloud watch, Stack driver. |

**Professional Experience:**

**Client: Walgreens, Chicago. Feb 2022 to Till Today**

**Role: Site Reliability Engineer**

**Responsibilities:**

* Implemented Azure DevOps solutions for various development teams, including source control, work item tracking, build and release management.
* Configured and maintained Azure DevOps pipelines, including automated builds and deployments.
* Developed custom scripts and tools to automate various aspects of the software development process.
* Hands on Experience with Azure ARM templates worked on Azure resources, web applications, Azure Storage, virtual machines.
* Good at Manage Hosting plans for zure Infrastructure, implanting & deploying workloads in Azure Virtual machines.
* Responsible to setup notification alerts for spike in CPU, Memory, Vm health metrics and event logs.
* Wrote Chef Cookbooks, recipes and used them to configure EC2 instances using Chef.
* Monitored AWS using AWS cloud watch and configured Splunk to monitor granular metrics of all the AWS services. Also configured dashboard for each AWS resource.
* Rewrote some of the shell scripts to make deployments more efficient and reduce the deployment time
* Build Jenkins pipeline to upgrade Java version on Linux and Windows servers using shell script.
* Experience in Installing, Patching, and Configuring and Administering RHEL serversWorked on implementing backup methodologies by Power Shell Scripts for Azure Services like Azure SQL Database, Key Vault, Storage blobs, App Services etc.
* Authored and Maintaining IAAC using Terraform to run Maacs (Product under development) infrastructure in Microsoft Azure.
* Major focus on Configuration, SCM, Build/Release Management, Infrastructure as a code (IAAC) and as Azure DevOps operations Production and cross platform environments.
* Configured Grafana tool to view instance metrics and created Alerts using queries to get notifications.
* Administered DNS, DHCP and Implemented DNS for external name resolution.
* Experience in assigning the azure services on locations specific to integrate with web-apps and key-vaults.
* Created Jobs in Jenkins to build application using ANT and Maven, In addition developed several scripts for deployment in several environment
* Involved in periodic archiving and storage of source code for disaster recovery.
* Involved in migration applications to AWS cloud.
* Kept track of all the releases and requests of the developers through infrastructure management tools.
* Worked with the developers to rectify the common build errors.
* Deployed Virtual machines, Disks, Storage accounts, Azure App Service, App Service Environments, Function Apps. Logic
* Deployed Azure Kubernetes Cluster (AKS) and nodes on Azure Cloud.
* Worked on creating the Docker Images and uploaded the Docker images to Azure Container registry (ACR)
* Installed Minikube performed the deployments of the Docker images on to the clusters by updating the Labels and selectors in the Pod definition.
* Automated Configuration management process by using Ansible Playbooks for installing and configuring the Applications,
* Hardening the Operating systems like Domain Joining, attaching AD Groups to the servers, adding the privileges to the groups.
* Installed and configured Azure RDS, DNS servers, MacAfee anti-virus tool, Log Analytics, App Insights, and Power BI.
* Responsible for setting the various Environments like DEV, QA, INT, SID, SIT, UAT, Pre-prod and Production environments.
* Deployed PaaS services using the Azure Release pipelines.
* Managed tickets using JIRA ticketing tool, created projects, assigning permissions to users and groups for the projects & created notification schemes for JIRA
* Deployed the build Artifacts into environments like DEV, QA, UAT, and PROD according to the build life cycle.
* coordinated in end-end release process from the planning of release content to deployment and production.
* Configured Application Insights and Log Analytics for having the logging and monitoring enabled on Applications and Infrastructure.
* Configured Alerts on Azure Application insights and Log Analytics workspace to send notification if the performance of the server or performance of the Application is above the configured threshold of system resources.

**Client: Kohl’s, Milwaukee, WI**

**Role: Site Reliability Engineer April 2018 to Dec 2021**

**Responsibilities:**

* Working an AWS cloud computing Launching instances and adding them to security groups.
* Architect and design server less application CI/CD by using AWS Server less (Lambda) application model.
* Managed continuous build and continuous integration environments in Scrum and Agile projects.
* Wrote an automation script for application for start and stop process.
* Designed and build the architecture of the applications and services used for the project.
* Worked on kinesis data streams, kinesis firehose delivery streams to consume and produce the data.
* Experienced with event-driven and scheduled AWS Lambda functions to trigger various AWS resources.
* Automated the creation of Lambda and S3 Buckets using Terraform.
* Created a Lambda Deployment function and configured it to receive events from your S3 bucket.
* Worked on Cloud Watch event triggers for lambda function.
* Worked on AWS IAM Services: IAM Policies, Roles, Users, Groups, AWS Access Keys and Multi Factor Authentication (MFA).
* Implemented multiple CI/CD pipelines as part of DevOps role for on-premises and cloud-based software using Jenkins, Chef, Docker and AWS.
* Deploying applications using Lambda, ECS and Docker containers.
* Written Cloud Formation Templates (CFT) in JSON and YAML format to build the AWS services to automate the deployments.
* Responsible for Continuous Integration and Continuous Delivery process implementation using Jenkins along with Python and Shell scripts to automate routine jobs.
* Implemented multiple CI/CD pipelines as part of DevOps role for on-premises and cloud-based software using Jenkins, Chef, Docker and AWS.
* Deploy and monitor scalable infrastructure on Amazon web services (AWS).
* Worked on boarding .Net and .Net core applications.
* Experience in Designing AZURE Resource Manager Template and extensive experience in designing custom build steps using PowerShell.
* Performed Provisioning of IAAS & PAAS Virtual Machines and Web, Worker roles on Microsoft AZURE Classic and Azure Resource Manager.
* Using Terraform created resource in Azure portal.
* Worked on creating users automatically to an instance when a new instance is launched using Ansible.
* Involved in AWS EC2/VPC/S3/SQS/SNS based on automation Ansible, Python, Bash Scripts.
* Created Jenkins pipeline projects for Docker images push to Amazon EC2 Registry and from ECR to Amazon Ec2 service.
* Worked on taking snapshots of AWS images, volumes.
* Hands on experience on building cloud infrastructure from scratch using EC2, ASG, ELB, Route53, Dynamo and VPC. Chef is used as the provisioning tool along with Terraform.

**TIAA, New York, NY Feb 2017 – March 2018**

**Role: Sr. DevOps Cloud Engineer**

**Responsibilities:**

* Writing groovy scripts to build and deploy the Maven projects, with Jenkins deployment tool.
* Have actively worked with the Development team to create the **CICD** pipelines.
* Automate the Continuous Integration and Continuous Deployment process.
* Implementing a Continuous Delivery framework using **Jenkins**, **Groovy**, **Bitbucket, Helm Charts,** **Docker Image**, **GKE**, **Istio**, **Maven** and **Nexus** in Linux environments.
* Integrating Unit Testing, Sonar, Jacoco, Integration and Regressions to the code and applications for the enhanced modules.
* Participates in Agile meetings to gather the information to design and implement new Microservices. Working with JIRA to write the user Stories and assigning to the team.
* Applying project configuration, secret files and application support files using Helm Charts. And supporting the team for deployments.
* Maintaining and managing microservices in **Google Kubernetes Engine**, to ensure the availability, performance, scalability, and security of production systems.
* Installed **Istio Service mesh** to manage Kubernetes workloads and services. Configured **mesh policies, Gateways, Virtual Services**.
* Implemented **SSL/TLS** and **mTLS** with Istio gateways to authenticate the traffic.
* Creating **Jenkins jobs** to build artifacts and images and push to **Nexus Repository** and **Google Container Registry (GCR).**
* Building and configuring various environments like **DEV, UAT, PERF, CTE** and **PROD** for release plans.
* Implementing pipelines to deploy the code into all kinds of environments.
* Working to create branches for release management and code merge and deployments using **GIT**.
* Implementing configuration changes using **GIT**, **GitEye** for **Ansible playbooks**.
* Working with the security team and firewall team to configure firewalls and certificates.
* Coordinate with Security, Infrastructure, Firewall and Middleware teams to build and implement Production systems.
* Implementing and creating new workflows for **GKE deployments**. Creating service and deployment configurations with **YML** files.
* Installed and Configured Jenkins Plugins to support the project specific tasks. Supporting team during **Jenkins deployments** issues.
* Created **Jenkins files**, **Groovy scripts** for deployments. And implemented **shell scripts** to support project level functionalities.
* Using Terraform to create GCP resources, like GKE, Compute Instances, Service Accounts, Storage Buckets…
* Installed and Configured **Redis Cluster** to support high cache memory records and configured Sentinel to support failovers and High availability.
* Integrated applications with **AppDynamics**, configured **AppDynamics** Health checks and alerts with PagerDuty for production system application support.
* **Troubleshooting application** code issues Using **Stack driver** and **Splunk**.
* Using **JIRA** to write user stories as a ticketing tool in release planning and to execute release build requests from the project team.
* Actively working with developers, project managers and product owners to setup the road map, and supported day to day build issues.
* Works with Development and testing teams to identify and implement required configuration for the Microservices.
* Works with the Business Analysts to prepare functional specifications during the project requirements stage.

**Environment:**

Bitbucket, Jenkins, Helm, GKE, Nexus, Nexus IQ, Fortify, Sonar, groovy, shell, Maven, Stack Driver, Splunk, java, NodeJS, JIRA, GCP (GCR, GKE, Compute Instances, Service Accounts, Firestore DB, Storage Buckets… ), Redis Cluster, Dataflow cluster, AppDynamics, Apica, PagerDuty.

**Ace Cash Express Inc., Irving TX**  **Nov 2015 – Jan 2017**

**Role: DevOps Engineer/ Cloud Engineer**

**Responsibilities:**

* Writing groovy scripts to build and deploy the Maven projects, with Jenkins deployment tool.
* Have closely working with the Development team to create the **CICD** pipeline
* Automate the Continuous Integration and Continuous Deployment process.
* Implementing a Continuous Delivery framework using **Jenkins**, **Groovy**, **Ansible**, **GIT,** **Docker Image**, **OpenShift**, **Maven** and **Jfrog** in Linux environments.
* Integrating Unit Testing, Sonar, Jacoco, Integration and Regressions to the code and applications for the enhanced modules.
* Participates in Agile meeting to gather the information to design and implement new Microservices. Working with KANBAN to write the user Stories and assigning to team.
* Writing and Implementing **Ansible Playbooks** for configuration management as part of **micro services** implementation and deployments.
* Applying project configuration, secret files and application support files using Ansible playbooks. And supporting team for deployments.
* Maintaining and managing microservices in Open Shift Cluster, to ensure the availability, performance, scalability and security of productions systems.
* Creating **Jenkins jobs** to build artifacts and images and push to jfrog artifactory and docker repository.
* Building and configuring various environments like **DEV, SIT, UAT, PERF, CTE** and **Maint** for two month release plans.
* Implementing pipelines to deploy the code into **DEV, SIT, UAT, PERF** and **Maint** servers for testing and part of dry run testing.
* Working to support and build **Docker images** and push them to Docker repositories.
* Working to create branches for release management and code merge and deployments using **GIT**.
* Implementing configuration changes using **GIT**, **Git Eye** for **Ansible playbooks**.
* Implement DevOps methodologies to help unify, track, and automate code deployment within a diverse range of system/stack environments using Ansible.
* Working with security team and firewall team to configure firewalls and certificates.
* Coordinate with Security, Infrastructure, Firewall and Middleware teams to build and implement Production systems.
* Works with gateway team to set up firewall between gateway and Open Shift Environments.
* Implementing and creating new work flows for **OpenShift deployments**. Creating service and deployment configurations with **YML** files.
* Installed and Configured Jenkins Plugins to support the project specific tasks. Supporting team during **Jenkins deployments** issues.
* Created **jenkinsfiles**, **Groovy scripts** for deployments. And implemented **shell scripts** to support project level functionalities.
* **Troubleshooting application** code issues Using **Splunk and Kibana**.
* Created Dashboard in **Splunk and Kibana** for project demos.
* Configure the new requirements for the **Microservices** deployments, fixing all the bugs that arise during the deployment process.
* Using **Kanban** to write user stories as ticketing tool in release planning and to execute release build request from the project team.
* Closely working with developers, project managers and product owners to setup the road map, and supported day to day build issues.
* Works with Development and testing teams to identify and implement required configuration for the Microservices.
* Works with the Business Analysts to prepare functional specification during the project requirements stage.
* Prepare documents for Technical design processes and post implementation documents.
* Develop and deliver Microservice presentations and other project specific training material.
* Analyzing and creating schema and public objects for the creating Dashboards. Providing documentation for the designed dashboard for future analyzations.
* Implementation, Administration of monitoring tools such as Log stash, Fluentd, Kibana and messaging queues such as ActiveMQ etc.

**Client: TS Technologies -India July 2014 -Aug 2015**

**Role: Build & Release Engineer**

**Responsibilities:**

* Responsible for Deployment Automation using multiple tools **Jenkins, GIT, and Maven.**
* Connected continuous integration system with **GIT** version control repository and continually build as the check-in's come from the developer**.**
* Responsible for design and maintenance of the **Subversion/GIT** Repositories, views, and the access control strategies.
* Designed and implemented **Subversion** and **GIT** metadata including elements, labels, attributes, triggers and hyperlinks.
* Set upthe master slave **Jenkins Farm** in the enterprise and upgraded it as per requirements.
* Educated team about continuous integration and automated testing practices and supported them throughout development.
* Configured **Jenkins** to implement nightly builds on daily basis and generated change log that includes changes happened from last 24 hours.
* Converted and automated builds using **Maven** Scheduled automated nightly builds using **Jenkins.**
* Used **MAVEN** as a build tools on java projects for the development of build artifacts on the source code.
* Installed **MAVEN** and configured **pom.xml** in conventional projects for continuous integration. Worked on configuring plug-ins like Junit, SSL authentications.
* Used **Shell/Perl** scripts to automate the deployment process.