**Avinash Ganga**

**Cloud/DevOps Engineer**

**Email: ganga.avinash1@gmail.com**

**Phone: + 1 551-236-3227**

**Professional Summary:**

* Around 7+ years of excellent experience on various DevOps roles methodologies, configuration & build management, continuous integration, and deployment methods for many markets driven international companies.
* Expertise with various AWS services like **EC2**, **ELB**, **Auto Scaling**, **S3**, **Glacier,** **VPC**, **Route** **53**, **Cloud** **watch, IAM Roles and Policies.**
* Expertise in the development and implementation of **Azure Service** Offering, in **Azure Cloud Services, Azure Storage, IIS, Azure Active Directory (AD), Azure Resource Manager (ARM), Azure Storage, Azure, Blob Storage, Azure VMs, Azure Functions, Azure Service Fabric, and Azure Service Bus**.
* Have used Azure Container Service (**ACS**) to deploy a Windows Kubernetes (K8s) cluster from the **Azure CLI** and Kubernetes and Docker for the CI/CD system's runtime environment to build, test, and Octopus Deploy.
* Experience working with version control systems like **GIT** and Source code management client tools like **GitHub**, **GitLab** and **Bitbucket**.
* Experience with GitLab-ci building automation runner in building **Docker** images
* Hand-on experience implementing Confidential **Redshift** data warehouse solutions; worked on numerous projects to move data from **on-premises** databases to Confidential **Redshift**, **RDS**, and **S3**.
* Worked on **Terraform** and **CloudFormation** for infrastructure as code versioning and management.
* Experience in writing **Infrastructure as a code** (IaC) in Terraform, **Azure resource management**, AWS Cloud formation. Created reusable **Terraform modules** in both **Azure** and AWS cloud environments.
* Experience in Configuring and deploying to Application servers **WebLogic,** **Nginx**, **Apache tomcat**.
* Hands on Experience in performing tasks in Databases like **Oracle, MYSQL, NoSQL, MSSQL, MongoDB**, and have good working knowledge of **Database Administration and Windows Server Administration**.
* Good knowledge in detecting vulnerabilities and security defects, performs static/dynamic code testing, manual code analysis, threat modeling, design reviews, and penetration testing of internal **web applications** and external partner applications.
* Extensive experience and knowledge of real time data analytics using Spark Streaming, Kafka, and Flume.
* Expertise in scripting with **Perl, groovy** and **Python** programming languages.
* Extensive experience with Visual Studio.NET technologies such as C#, ASP.NET ASP.NET, ADO.NET, Web Services, and WPF.
* Installation and setup of the **SPLUNK, and Nagios** tools for monitoring logs and managing infrastructure in a highly accessible configuration.
* Excellent understanding of **SDLC** methodologies such as **Agile, scrum and waterfall.**
* Experience in using **Nexus** and **JFrog and** used **NPM Registry and Docker Registry** as a database of JavaScript packages**.**
* Experienced in developing of pom.xml files, Maven release plugin updates, Mavenization of Java projects and managing **Maven repositories**.
* Implement **Ansible** to manage all existing servers and automate the build, and configuration of new servers, and Expertise in automation technologies like Puppet, **Chef**, **Selenium**, Ant and Maven.
* Maintain the quality of the code using **SonarQube** and generate code coverage reports from it.
* Experience in **writing Bash and PowerShell to automate the administrative tasks and management.**
* Extensively worked with **CI**/**CD** using **Jenkins** and configuration management tools like chef, puppet and **Ansible.**
* Worked with scrum teams, system teams and production managers to develop a component release and dependency reduction strategy.
* Experience in managed Kubernetes services such as **Google Kubernetes engine** (**GKE**), **Azure Kubernetes** and **AWS Elastic** container service.
* Used **Groovy** scripts for the building of CI/CD pipelines and actively involved in the configuration of the entire pipeline in Jenkins.
* Manage orchestration of **Docker** and containerization of Dockers using **Kubernetes.**
* Used Jenkins pipelines to drive all microservices to the Docker registry and then deployed to Kubernetes, built Pods, and managed using **Kubernetes**.

**Technical Skills**

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| * **Cloud Technologies**
 | AWS (EC2, S3, VPC, Route 53), Azure, Open Stack |
| * **Operating system**
 | Unix, Linux/Solaris, Windows, Mac OS, RHEL. |
| * **DevOps Tools**
 | Docker, Maven, Run deck, SonarQube, Snowflake, Veracode. |
| * **Configuration Management**
 | Ansible, Chef, Puppet. |
| * **Orchestration**
 | Kubernetes. |
| * **Web/App Servers**
 | WebLogic, WebSphere, Apache Tomcat, Nginx, IIS, JBoss. |
| * **Programming/Scripting Languages**
 | Perl, Bash, Shell Scripting, JAVA/J2EE, CGI, VB/C++, C#, .NET, Python, Groovy |
| * **Bug Tracking & Testing Tools**
 | JIRA, Bugzilla, Junit, Test Flight and Test Rail. |
| * **Versioning Tools**
 | GitHub, Bitbucket, GIT, GITLAB, SVN. |
| * **Continuous Integration**
 | Jenkins, Bamboo. |
| * **Databases**
 | MY SQL, Sqlite3, MS ACCESS, ORACLE 9I/10G/11G, DB2. |
| * **Continuous Monitoring Tools**
 | Splunk, Logstash, Nagios, Data Dog, CloudWatch, Kibana |

**Professional Work Experience**

**Client: Hines, Houston, TX Duration:** 2020 May - Present

**Role:** Azure/DevOps Engineer

**Responsibilities:**

* My role includes release management, Environment Management, deployments, Continuous integration, continuous deployment, Incident management, version management.
* As a subject matter specialist, make security recommendations to development teams at all stages of development.
* Designing and implementing fully automated server build management, monitoring and deployment solutions spanning multiple platforms, tools and technologies including Jenkins Nodes/Agent, SSH, Amazon EC2 etc.
* Defined **AWS Security Groups** which acted as virtual firewalls that controlled the traffic allowed to reach one or more AWS EC2 instances.
* Working with DevOps practices using AWS, Elastic Bean stalk and Docker with **Kubernetes**.
* Integration of Automated Build with Deployment Pipeline. Currently installed **Ansible** Server and clients to pick up the Build from Jenkins repository and deploy in target environments (Integration, QA, and Production).
* Involved in designing and deploying multitude applications utilizing most of the AWS stack (Including EC2, Route53, S3, RDS, IAM) focusing on high-availability, fault tolerance, and auto-scaling in AWS Cloud Formation.
* Working on AWS ELB and configure the auto scaling as per the application user traffic and managing the multi-tier and multi-region architecture using AWS Cloud Formation.
* Responsible for writing the Concept Requirements for **Groovy n Grails'** generic and application specific web services
* Versioned Cloud Formation templates, created and managed Azure Stack and integrated with Azure Operational
* Participated in **AZURE** environment setup for POC with AWS by setting up various services of Azure and AWS and compare their performance.
* Automated various infrastructure activities like Continuous Deployment, Application Server setup, Stack Monitoring using Ansible playbooks using CI tool like run desk and Jenkins.
* Implemented and designed AWS virtual servers by Ansible roles to ensure deployment of web applications.
* Used Ansible and Ansible Tower as Configuration management tool, to automate repetitive tasks, quickly deploys critical applications, and proactively manages change.
* Configuring the **Docker** containers and creating Docker files for various environment and worked on **Kubernetes** environment.
* Involved in using **Terraform** and Ansible, migrate legacy and monolithic systems to Amazon Web Services.
* Developing and implements manual and automated **web application** security testing of e-commerce web applications, to enforce **security** standards.
* Lead the cloud infrastructure maintenance effort using a combination of Jenkins, Ansible and Terraform for automating CICD pipeline in AWS. Designed and developed shell scripts. Wrote scripts for provision of infrastructure management using Terraform.
* Created reusable and tested infrastructure with Terraform modules and Versioned modules for Staging, Testing and Production environments in Azure.
* Deployed Azure **IaaS** virtual machines (VMs) and Cloud services (PaaS role instances) into secure VNets and subnets.
* Creating script using **AWS CLI** to report key CloudWatch metrics for Redshift to automate Redshift health monitoring.
* Implemented clean up **scripts/Lambda** functions in Python and to delete unused instances, EBS volumes, Snapshots and Cloud watch alarms.
* Proficiency in writing Docker files with best practices along with docker linting, Docker container management along with volumes, container-based DB and services, Docker Artifactory (JFrog) configuration and setup.
* Installed and configured Docker containers and orchestration platforms such as ECS and Kubernetes.
* Proficient in installing and configuring **Nagios**, monitoring tool to monitor bandwidth of server network and hard drive status.
* Collaboration with other UATs, QA Leads, Project Managers, Production Managers, and members of the QA Core.
* using **Jira** document results of JIRA workflows and process audits and Create complex JIRA workflows including project workflows, field configurations, screen schemes, permission schemes and notification schemes.

**Environments:** AWS, GIT, Jenkins, ANT, Maven, Tomcat, JBOSS, Nagios, Java/J2EE, Ansible, AZURE, EC2, IAM, SQL Server, Kubernetes, Terraform, Docker, GitHub, Jira.

**Client: 3M, Atlanta, GA Duration:** 2019 March – 2020 April

**Role:** AWS DevOps Engineer

**Responsibilities:**

* Identify new tools/technologies that will make the process of release and SCM more efficient, repeatable, reliable, and cost-effective. Managing all aspects of the management process for software configuration, including compilation of code, methodology for packaging/release, and configuration of applications.
* Used Jenkins for Continuous Integration and deployment into **Tomcat Application Server**.
* Generated Ant, Maven, Perl & UNIX scripts for build activities in QA, Staging and Production

environments.

* Developed and maintained security standards and implements manual and automated web application security testing of **e-commerce web applications**.
* For the Data Access Layer in the **ASP.NET** MVC 3 program, Microsoft Entity Framework Code First was used.
* For clear access to SQL data sources, used ADO.NET and data objects like Data Adapter, Data Reader, Dataset, and Data Table.
* Using **Kubernetes** handled local deployments, built local clusters, and deployed application containers.
* Developed analytical techniques, real-time data analysis and computational methods with **Python** for structured and non-standardized reports for data analysis, processing, and integration.
* Authored Several scripts using VMware's PowerCLI and Windows PowerShell have been developed to assist with capacity planning and virtualization infrastructure monitoring.
* Used Redis and **Redis-cli** for simplifying the code and then reducing it to fewer lines of code to be stored using the hash tables. And using that simplified code and data for the application
* Designed and developed **ETL** jobs to extract data from a Salesforce replica and load it into a **Redshift** data mart.
* Used both packaged tools and different Windows scripting languages (PowerShell) to build and manage OS installation automation as well as application installation automation.
* Created shell scripts to automate various projects, including deployments of the **SQL Database** to different environments such as **DEV, SIT, UAT**, etc.
* Deployed JSON template to create a stack in CloudFormation which include services like Amazon EC2, Amazon S3, Amazon RDS, Amazon Elastic Load Balancing, Amazon VPC, SQS and other services of the AWS infrastructure.
* Control of the **OpenShift** cluster, which involves scaling the **AWS** app nodes up and down.
* Created AWS Route53 to route traffic between different regions. Created AWS Security Groups for deploying and configuring AWS EC2 instances.
* Implemented and maintained the monitoring and alerting of production and corporate servers/storage using AWS Cloud watch.
* Used **IAM** to create new accounts, roles, and groups. Managing IAM accounts (with MFA) and IAM policies to meet security audit & compliance requirements.
* Worked to standardize branching and tagging of code in our repository with the different agile development teams and preserve code base integrity using **Git, Bitbucket**, simple case and **Team Foundation Server (TFS**).
* Deployed TFS branching and merging operations for .NET Source Code in the Agile Development research methods.
* Performed automation tasks on various Docker components like Docker Hub, Docker Engine, Docker Machine and Docker Registry. Worked with Docker images & Docker Container.
* Managed **Kubernetes** charts using Helm. Created reproducible builds of the Kubernetes applications, managed Kubernetes manifest files and managed releases of Helm packages.
* Responsible for installation & configuration of **Jenkins** to support various Java builds and Jenkins plugins to automate continuous builds and publishing Docker images to the Nexus repository.
* Maintained CI environments with build automation tools like Jenkins and GIT, extensively used Jenkins to streamline CI/CD process, automated Master-Slave configurations using temporary slaves.
* Implemented Puppet modules to automate configuration of a various services.
* Hands on experience with Chef Enterprise Hosted as well as On-Premises, Installed Workstation, Bootstrapped Nodes, wrote Recipes and Cookbooks and uploaded them to Chef-server.
* Implemented **Terraform** modules for deployment of various applications across multiple cloud providers and managing infrastructure.
* Experienced in writing **Bash** and **Python** scripts. Included Boto3 to supplement automation provided by Ansible and Terraform for tasks such as encrypting EBS volumes backing AMI's and Scheduling **Lambda** functions for routine AWS tasks.
* Providing configuration services on multiple platforms in the test environment running on one or more IT Platforms: **Maven, Client/server, Jenkins, MS Build, Microsoft Windows NT, OS/390, UNIX**
* using Jira document results of JIRA workflows and process audits and Create complex JIRA workflows including project workflows, field configurations, screen schemes, permission schemes and notification schemes.
* Coordinated with all the teams for smooth production releases before and after the production deployments.

**Environments:** ANT, Maven, UNIX**,** Selenium Testing, Bitbucket, Java/J2EE, AWS EC2, Tomcat 7.x, Shell, Bash, JIRA, OpenShift, MS Build, Jenkins, Postman, MYSQL, GIT, Kubernetes, IAM, Terraform.

**Client: U.S. Xpress Enterprises, TN Duration:** 2016 November – 2019 January

**Role:** AWS/DevOps Build and Release Engineer.

**Responsibilities:**

* Created and hardened an **Amazon Machine Image (AMI)** utilizing Centre for Internet Security (CIS) benchmarks to be used.
* EC2, VPC, Auto scaling, S3, EBS, ELB, IAM, IOT, RDS have been implemented in Cloud formation templates and AWS cloud watch services.
* Using Puppet, we managed Ubuntu Linux and Windows virtual servers on AWS EC2.
* Installed and configured GIT and GITHUB.
* Good working knowledge **AWS IAM** Service: IAM Policies, Roles, Users, Groups, AWS Access Keys and Multi Factor Authentication.
* Implemented multi-tier application provisioning in Open stack cloud, integrating it with **Chef/Puppet**.
* Used cloud providers as an uninterrupted deployment substratum to deploy and manage servers through Puppet and scripts.
* Responsible for Database build, release, and configuration**.**
* Experience with container-based deployments using Docker, working with Docker images, Docker hub and Docker registries
* Involved in periodic archiving and storage for disaster recovery of the source code.
* Design and document CI/CD tools configuration management.
* Designed an Architectural Diagram for different applications before migrating into **amazon cloud** for flexible, cost-effective, reliable, scalable, high-performance, and secured.
* Migrated Linux servers from physical servers to **Amazon AWS** virtual servers.
* Providing Application Support on Red Hat Servers which included Apache configuration.
* Installation, configuration and administration of **Red Hat Linux** servers and support for Servers.
* Experience operating with VMWare software such as vCenter & vSphere to handle VM's running on ESX cluster nodes and experience working on vMotion**.**
* Involved for setting up of Subversion-SVN server, server maintenance, Client machines setup.
* Installing and maintaining LAMP (Linux, Apache, MySQL, PHP) systems in agile quick scale cloud environment.

**Environments:** Open stack, Chef, Puppet, IAM, Docker, Red hat, Git, Linux, VMWare, AWS Cloud, Apache, MYSQL, SVN

**Client: Praneeth Soft Solutions Private Limited, HYD Duration:** 2014 April – 2016 October

**Role:** Build and Release Engineer.

**Responsibilities:**

* Set up and configuring of Linux (RedHat & SUSE) and Solaris servers/workstations for clients.
* Performed Builds using **MS Build** and Devin command line for C#, VB, .NET Applications.
* Make sure the configuration, version and systems are working fine.
* Strong understanding of web servers IIS 6.0, 7.5, and 8.0, ASP.NET, and Web Services on Windows
* Implemented continuous Integration using tools such as **Jenkins** and **Bamboo**.
* Working with developers to load software onto Linux Enterprise servers and debugging Scripts.
* Building & configuring **Red Hat Linux systems** over the network, implementing automated tasks through crontab, resolving tickets according to the priority basis.
* Written **bash shell** scripts to obtain information on different Linux servers.
* Administering **NFS** Mounts.
* Performed **Vmotion** using the **VCenter 5.0** on the ESX machines for migrating the VMs online.
* Responsible for the operation, maintenance, and integrity of a distributed, networked Linux based environment.
* Managed all the bugs and changes into a production environment using the **Jira** tracking tool.
* User management functions, such as creating new users, groups, user passwords, modifying passwords, maintaining user accounts, and locking users, have been carried out.

**Environments:** RHEL 6.x/5.x, SUSE 11, Solaris, Bamboo, Linux/UNIX, SSH, Bash, Red Hat, VM ESX, VM vSphere, Jira, MS Build.