**Name: Ravalika Pinnamaneni**

**Sr.Cloud / Devops Engineer.**

**PROFESSIONAL SUMMARY**

* Around 9+ years of IT experience focusing on infrastructure and application automations in **Azure/AWS** cloud ecosystem with extensive practice of tools that include Kubernetes, Terraform, Ansible, Jenkins, Docker.
* Lead automation of **Azure** deployments utilizing Power Shell, Architected automation of Azure Virtual Networks, Network Security Groups and access control rules. Leveraged “Azure Automation” and PowerShell, Chef, and Puppet to automate process in the **Azure Cloud.**
* Creating and Managing Virtual Machines in Windows Azure and setting up communication with the help of Endpoints. Configured Shared Access Signature (SAS) tokens and Storage Access Policies in **Azure Cloud Infrastructure.**
* Involved in development of **REST** Web Services using Spring Boot to extract client related data from databases and used SOAPUI, POSTMAN for testing RESTFUL API web services.
* Expertise in deploying and configuring using **AZURE AD** Connect. Experience in Azure Network Security Groups, Azure Operational Insight and OMS, AZURE Premium Storage, Site Recovery, Network Virtual Appliance, Client-Side encryption for Azure storage objects.
* Experienced in **Azure** Role-based Access Control (RBAC) to segregate duties within our team and grant only the amount of access to users that they need to perform their jobs.
* Experience with Microsoft **Azure** which includes creating PaaS builds, PaaS deployments, Storage Accounts, Queues, CDN, ARM templates, and Azure Service Bus.
* Experienced in migrating on-premises **DevOps** platform to **Azure** CI/CD processes by utilizing ARM templates, and Azure DevOps App services such as Repos, Test Plans, Pipelines, Web Apps, and Application Insights.
* Expertise in deploying microservices, application development, and upgradation using AWS/Azure services such as Azure Kubernetes Service **(AKS),** Container Registry, Cosmos DB, and Grafana, Azure pipelines, Monitor, AWS Kubernetes EKS, and Kubernetes API to run workloads on **EKS** Clusters.
* Experienced in setting up Amazon **EC2** instances, Virtual Private Cloud (VPCs), security groups, and Lambda. Setting up databases in **AWS** using **RDS**, storage using S3 bucket, and configuring instance backups to S3 bucket.
* Created **Dockerfiles**, built Docker images for microservices to run on Kubernetes platform.
* Built and maintained **EKS** on **AWS** using Helm, Terraform, Jenkins to trigger a helm chart to deploy internal applications.
* Extensively worked configuring Amazon EC2, S3, RDS, Lambda, ELB, EBS, SNS, Route53, Glacier, and different administrations in the **AWS** family.
* Built and deployed **Docker** containers to break up monolithic app into microservices, improving developer workflow, increasing scalability, and optimizing speed.
* Knowledge of **AWS** Elastic Beanstalk for app deployments and worked on AWS Lambda with Amazon Kinesis. developed, deployed, and managed event-driven and scheduled AWS Lambda functions.
* Expert in managing **Kubernetes** charts using Helm. Created reproducible builds of the Kubernetes applications, templatize **Kubernetes** manifests, and provide a set of configuration parameters to customize the deployment.
* For check in process used Tortoise SVN as a migration tool. Involved in migration of Bamboo server, Art factory, Perforce &**GIT** server.
* Expertise in configuring the monitoring and alerting tools according to the requirements like **Prometheus**, Grafana, Jira, ELK, Cloud watch, Nagios, and Splunk setting up alerts and deployed multiple dashboards for individual applications in **Kubernetes.**
* Expert in using **Ansible** for Installing packages, Managing Web applications, Configuration Files, Users, Mount points and deployed microservices. Wrote Ansible playbooks with Python SSH as the wrapper to manage configurations of **AWS** Nodes and Test playbooks on AWS instances using Python.

**TECHNICAL SKILLS:**

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| **Cloud Environments** | AWS, Azure, Google Cloud (GCP), Confluent Cloud, Kafka |
| **Operating Systems** | Red Hat Linux, CentOS 6 & 7, Ubuntu12.x, 13.x, 14.x, Windows 98, Vista,  Windows Server 2003, 2008, 2012, VMware ESX and Mac OS. |
| **Web/ Application Servers** | Apache Tomcat, WebLogic, JBoss 5.x/6.x/7.x, Web Sphere Administration, IIS and Nginix. |
| **Databases** | MySQL, MySQL, Oracle, MySQL, Mongo DB, PostgreSQL, RDS, Elastic ache, Azure Data lake, Data factory |
| **Version Control Tools** | Subversion, TFS, GIT, GIT HUB, SVN, Bitbucket. |
| **Configuration Management** | Ansible, Chef, Puppet, Atlassian |
| **CICD Tools** | Cloud Bees Jenkins/Hudson, Team City, Maven, SonarQube, Nexus Artifactory. |
| **Container Tools** | Kubernetes, Docker, OpenShift |
| **Monitoring Tools** | Dynatrace, Grafana, Nagios, Splunk, AWS cloud watch, ELK, Azure Monitor |
| **Scripting Languages** | Ruby, Python, Golang, groovy, Unix Shell scripting, Node JS, XML, HTML, JAVA, JEE,  JavaScript, Angular JS, Power Shell, JSON, YAML, AWS Lambda. |
| **Bug Tracking & Testing tools** | JIRA, J Unit, J Meter Test Flight, Test Rail, Selenium. |
| **Networking** | TCP/IP, NFS, DNS, VPN, DHCP, WAN, HTTP, LAN, FTP/TFTP, VMware  nexus switch, IP Networking, F5 load balancer. |

**CERTIFICATIONS:**

* [Microsoft certified Azure AdministratorAssociate.](https://www.credly.com/badges/f487b766-918d-4ad5-b176-6e6d8825cfb9/public_url)
* [Microsoft certified Azure DevOps Engineer Expert.](https://www.credly.com/badges/f7f02dba-e25a-4682-8964-daa3324a0ea7/public_url)
* [AWS certified Solutions Architect Associate.](https://info.credly.com/badges)
* [Certified Kubernetes Administrator.](https://info.credly.com/badges)

**PROFESSIONAL EXPERIENCE**

**Role: Senior Cloud / Kubernetes Engineer**

**Client: KPMG Financials, Durham, NC Dec 2021 – Present**

**Responsibilities:**

* Primarily responsible for creating **Azure**infrastructure in Microsoft Azure cloud and Implemented AzureDevOps build pipelines based on **YAML** scripts from scratch.
* Created and managed **Azure AD** (Active Directory) tenants manage users and groups and configure application integration with AzureAD. Integrate on-premises Windows AD with AzureAD, configure multi-factor authentication (MFA) and federated single sign-on (SSO).
* Configured **AWS** application deployment infrastructure services like VPC, EC2, S3, RDS, Dynamo DB, IAM, EBS, Route53, SNS, SES, SQS, CloudWatch, CloudTrail, Security Group, Auto Scaling Group ASG, Aurora and RDS using CloudFormation, **Terraform templates**.
* Help in migration of resources from the on premises or other cloud platform to the public cloud and vice-versa.
* Involved and performed the designing and development of Rest API configuration **MFA** (multifactor authentication) from Entrust to Microsoft Authenticator.
* Configured **AWS** Identity and Access Management (IAM) Groups and Users for improved login authentication. Provided policies to groups using policy generator and set different permissions based on the requirement along with providing Amazon Resource Name (ARN).
* Extensively worked on Continuous Integration and Continuous Deployment **(CI/CD)** process by automating build on time basis using Azure DevOps pipelines.
* Worked on integrating **GIT** into the continuous Integration (CI) environment along with Jenkins.Helped teams to configure Webhooks in **Bitbucket** to trigger automated builds in **Jenkins**.
* Designed the project workflows/pipelines using Jenkins for ContinuousIntegration and deployment into different Web/Application Server.
* Developing scripts using RESTful API models for the purposes of integrating workflows with **AWS**.
* Worked on **Docker** to containerize the Application and all its dependencies by writing, **Docker-Compose files**, Docker container snapshots, managing Docker volumes, and deployed.
* Managed **Kubernetes** environment using **Helm charts** and created reproducible builds of the Kubernetes applications, managed Kubernetes manifest files and managed releases of Helm packages and used Kubernetes and Docker for the runtime environment for the CI/CD system to build, test, and deploy.
* Using **Ansible** for **Kubernetes** deployment automation and handling the Kubernetes infrastructure with one click.
* Developed Helm charts for Elasticsearch, Kibana and Fluentbit to setup on Kubernetes, and managed to collect log files.
* Worked on implementing the **Kubernetes** Cluster API to manage the creation, scale, upgrade and destroy of the Kubernetes clusters using a declarative API on both on-premises and Azure Cloud using BareMetal operator and Azure providers from CAPI.
* Created dynamic routing/load balancing capability enabling large application scaling, used ingress rules and Ingres Controllers- Nginx in **Kubernetes**. Also added global network policies in Calico CNI.
* Used **SonarQube** in build system for continuously inspecting the code quality, Nagios for monitoring and performed log analysis using ELK stack and created monitoring charts.
* Working on Rest API technologies Java, JavaScript, NodeJS, Vue JS, OAuth on Microservices development.

**Environment:** Azure, Terraform, Jenkins, Kubernetes,PostgreSQL, Docker,Spark Data Frame AP, Azure, Ansible, Jira, Confluence, PowerShell Windows, IIS, Python, Splunk, Grafana, Prometheus, Twist lock, Istio, Jenkins, git.

**Role: SeniorAzure DevOps Engineer**

**Client: Humana Health, Chicago, IL Sep 2019 – Dec 2021**

**Responsibilities:**

* Configured **Azure**VirtualNetworks, subnets, DHCP address blocks, Azure network settings, DNS settings, security policies and routing.
* Deployed **Azure** IaaS virtual machines and Cloud services (PaaS role instances) into secure Virtual Networks and subnets.
* Design and implement scenarios using AzureQuickStartTemplates, create Azure Managed Apps, MicrosoftAzure Compute infrastructure and networking, Azure Active Directory, Azure Data Storage and AzureData Access Strategy, Web Apps applications that use mobile services and notifications to design advanced applications.
* Managed Azure Infrastructure, **Azure Web Roles**, Worker Roles, SQL Azure, **Azure Storage**, Azure AD Licenses, Office365. Virtual Machine Backup and Recover from a Recovery Services Vault using Azure PowerShell and Portal.
* Created VMs on the Microsoft cloud service **Azure**, Created and managed the virtual networks to connect all the servers and designed **ARM templates** for Azure platform. Configured three types of blobs, block blobs, page blobs, and append blobs in Azure for storing a large amount of unstructured object data such as text or binary data, that can be accessed from anywhere via HTTP or HTTPS.
* Managed **Azure Container Registry** to store private Docker images, with secured read right user privileges to build, test, and deployments.
* Provisioned the high availability of **Azure** VMs using **Terraform**, wrote new plugins to support new functionality in Terraform and involved in using terraform to migrate legacy and monolithic systems to **AZURE**.
* Worked on Docker and Ansible in build automation pipeline and Continuous Deployment of code using Jenkins and wrote Playbooks to automate Ansible servers using **YAML** scripting and Developed an Ansible role for Zabbix-agent which will be integrated into the to the **CICD** pipeline.
* Worked with developing RESTFUL API’s for creating web services.
* Developed custom functionality using excel services and the SharePoint REST API.
* Involved in creating, validating, and reviewing solutions for migrating to Azure cloud environment also conducting Proof of Concept for the latest **Azure** cloud-based service, by using simplified automation using **JSON** Templates and PowerShell.
* Worked on Power Shell scripts to automate the **Azure** Cloud resource creation such as Resource groups, Web Applications, Azure Storage Blobs &Tables, firewall rules.

**Environment:** Azure, Terraform, Jenkins, Kubernetes,PostgreSQL, Docker,Spark Data Frame AP, Azure, Ansible, Jira, Confluence, PowerShell Windows, IIS, Python, Splunk, Grafana, Prometheus, Twist lock, Istio, Jenkins, git.

**Role: AWS DevOps Engineer**

**Client: Schneider, Chicago, IL Mar 2018 -Aug2019**

**Responsibilities:**

* Building and configuring of **EC2** instances on **AWS** cloud platform, the configuration of elastic load balancer **(ELB)** for traffic control for the **EC2** instances and **S3**.
* Created Python scripts to totally automate **AWS** services which includes web servers, **ELB**, **CloudFront** distribution, database, **EC2** and database security groups, **S3** bucket and application configuration, this script creates stacks, single servers, or joins web servers to stacks.
* Implement metrics and log forwarding to **Datadog**. Create monitors and reports from Datadog metrics. Assign alerts to PagerDuty.
* Connected continuous integration system with **GIT** version control repository and continually build as the check-in's come from the developer.
* Setting up Jenkins master, adding the necessary Plugins and adding more slaves to support scalability and agility and written Shell Scripts to restore Jenkins and **GitHub** from daily backups and Leveraging Jenkins and Groovy provided a recoverable micro service build solution.
* Created terraform templates for provisioning virtual networks, subnets, **VM** Scale sets, Load balancers and **NAT** rules and used terraform graph to visualize execution plan.
* Created Health reports from **AWS** Personal Health Dashboard to **SNS** topics and PagerDuty.
* Building/Maintaining **Docker** container clusters managed by Linux, GIT, Docker. Utilized Docker for the runtime environment of the CI/CD system to build and test deploy.
* Designed and developed the automated deployment and scaling processes based on Docker and **Ansible** for all the services.
* Developed RESTful Web Services with JAX-RS using Spring Boot and Micro Services Architecture and worked on testing the RESTful APIs using tools like POSTMAN.
* Implemented Ansible to manage all existing servers and automate the build/configuration of new servers.
* Installed and configured **NGINX** for the running services.
* Utilized Kubernetes for the runtime environment of the CI/CD system to build, test deploy.
* Worked with Atlassian tools like **Jira**.
* Worked on the Service now form enhancements for **AKS** Namespace, AKS RBAC, AKS Key Vault services.
* Installed, configure, test, monitor, upgrade, and tune new and existing PostgreSQL databases.

**Environment:** AWS, Terraform, Jenkins, Kubernetes, PostgreSQL, Docker, Spark Data Frame AP, Azure, Ansible, Jira, Confluence, PowerShell Windows, IIS, Python, Splunk, Grafana, Prometheus, Twist lock, Istio, Jenkins, git, Ansible.

**Role: DevOps Engineer**

**Client:Computershare, Edison, NJ Dec2016 – Feb 2018**

**Responsibilities:**

* Involved in installation, configuration, implementation, maintenance, and support for the Linux servers, RHEL, CentOS, Ubuntu, Solaris, and Fedora.
* Experience in using Cloud Infrastructure management and Implementation Working experience on various Azure services like Compute (Web Roles, Worker Roles), **Azure Websites**. Caching, SQL Azure, NoSQL, Storage, Network services, Azure Active Directory, Scheduling, Auto Scaling, and Power Shell Automation.
* Extensive working experience with different SDLC methodologies such as Agile and Waterfall with an ability to be creative and to take self-initiatives to execute/manage multiple projects in parallel during time critical situations.
* Deployed **Azure**IaaS Virtual Machines (VM’s) and PaaS role instance`s (Cloud Services) into secure VNets and subnets, designed VNets and Subscriptions to confirm to Azure Network Limits.
* Experience in migrating on-premise data center to **AWS**cloud using VM Import/Export, Aws Data Migration Services.
* Maintained the user accounts (IAM), Cloud **SQL**, Cloud DNS, VPC, RDB, Cloud Datastore Cloud Bigtable, SQS and CloudPub/Sub services in Aws.
* Designed and implementing **AWS** Cloud Infrastructure by creating templates for AWS platform also used Terraform to deploy the infrastructure necessary to create development, test and production environments.
* Configured Jenkins as a build engine to build and deploy applications to DEV, QA, UAT and PROD environments.
* Configured in setting up **CI/CD** pipeline integrating various tool with Cloud Bees**Jenkins** to build and run Terraform script templates to create infrastructure in Azure.
* Worked on **Power Shell scripts** to automate the Azure Cloud system in creation of Resource groups, Web Applications, Azure Storage Blobs& Tables, firewall rules and used Python scripts to automate day to day administrative tasks.

**Environment:**Azure, Aws, Docker, Swarm, Jenkins, Ansible, Jira, Confluence chef, Git, Git-Hub, Maven, MySQL, PowerShell Windows, Terraform, JIRA, SRE, Apache Tomcat, Shell Script, Python, Linux, Dynatrace, Splunk.

**Role: Linux Administrator**

**Client: SP Soft. Hyderabad, India Mar2013– June 2015**

**Responsibilities:**

* Installed, upgraded and configured Red Hat Enterprise Linux 4/5/6.
* Configuration and administration of DNS, LDAP, NFS, NIS and NIS+ on **Red Hat Linux**.
* Configured yumrepository server for installing packages from a centralized server.
* Automated server building using Kickstarting **RHEL 6** and Jumpstarting **Sun Solaris 10**.
* Troubleshooting production servers and configuring standalone production server for testing.
* Created local repository in yum.repos.d to run packages using yum, rpm and up to date. O Configured and managed **SELinux** (Linux Firewalls) and allowed appropriate ports with help of iptables.
* Installed and configured **DCHP** server in **Linux** to give IP leases to production servers.
* Management of Red Hat Linux user accounts, groups, directories and file permissions.
* Configured, managed ESX VM's with virtual center and VI client.
* Performed **Kernel** tuning with the sysctl and installed packages with yum and rpm.

**Environment:** RHEL 4/5, CentOS 4/5, Fedora 9/10/11(beta), Ubuntu 8.10/9.04 Server, Debian SID, Vmware ESX, Veritas File System, Veritas Volume Manager, Veritas Cluster Server.

**EDUCATION**

**MASTER’S**

* Electrical and computer engineering WICHITA STATE UNIVERSITY 2016

**BACHELOR’S**

* Electrical & electronics engineering JNTUK 2012