 **Manikanth S**

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**PROFESSIONAL SUMMARY**

**7+ years** of experience in IT industry with major focus on **Cloud Computing, DevOps** tools and technologies, Continuous Integration, Continuous Delivery, Continuous Deployment **(CI/CD pipeline)**, **Version Control**, **Build and Release management**, **Monitoring tools**, **Software Configuration Management**, **Linux/Windows System Administration & Automation**.

* Experience in maintaining, designing, and deploying applications using most of the **AWS** service stacks like **EC2, Route 53, AWS Lambda, S3, Cloud Watch, Cloud Front, Dynamo DB, RDS, AMI, KMS, Elastic Container Service, ELB, Cloud Formation, VPC**, and Simple Notification Service.
* Experience with **Google Cloud Platform** (**GCP**) services like **Google Compute Engine** (**GCE), Cloud Virtual Network, Cloud CDN, Google Cloud Build, Google Kubernetes Engine (GKE), Google Cloud Load Balancing, Google Cloud Storage, Google Stack driver, Google Cloud deployment Manager, Persistent Disk** and **BigQuery**.
* Experience in **Azure** Development services **Azure Active Directory, Azure web application, Azure Resource Manager (ARM), App services, Azure storage, Azure SQL Database, Azure Virtual Machines, Azure AD, Azure search, Azure DNS, Azure AD DS, Azure VPN Gateway** and **Notification hub**.
* Experience in Microsoft **Azure** IaaS provisioned **Virtual Networks, Virtual Machine Scale Sets, Container Instances, CLI, Traffic** **Manager, Monitor, Express Route, Load Balancer, Application Insights, Route, Application Gateways** and **Auto-Scaling**.
* Experience in creating **Azure** **Resource Groups** using **Resource manager** for monitoring resources within resource group.
* Worked on Terraform to set up the **AWS** infrastructures such as launching the **EC2 instances, S3 buckets, VPC, Subnets, and created the module driven AWS Infrastructure** with **Terraform**.
* Experience in writing **Helm Charts, Kubernetes YAML** **files** for deployment of microservices into **Kubernetes clusters**.
* Managed and distributed builds generated by **Maven** and **ANT** by using binary repos like **Nexus, Jfrog** and **Artifactory**.
* Managed a PaaS for deployments using **Docker, Kubernetes, Mesos** and **Chef** which reduced considerably deployment risks.
* Experienced in Installing, Configuring, and Managing **Docker Containers, Docker Images** for **Web Servers** and **Applications servers** as **Apache, Tomcat** using **Docker** and **integrated Amazon MySQL RDS database.**
* Expert in heavily in setting up the **CI/CD** pipeline using **Jenkins, Maven, Nexus, GitHub, Puppet, Terraform** and **AWS.**
* Expertise in **Ansible Playbook, YAML** for **Maintaining Roles, Inventory Files** and **Groups Variables**.
* Extensively worked with CI/CD using **Jenkins** and configuration management tools like **chef** and **Ansible.**
* Experience in writing **PowerShell** to automate the administrative tasks and management.
* Created and Maintained **Chef Recipes** and **cookbooks** to simplify and expedite deployment of applications and mitigate user errors.
* Experienced in cloud automation using **AWS Cloud Formation Templates, Chef**.
* Used **Atlassian** tools **JIRA**, **Bitbucket**, **Bamboo** for team collaboration, source code management and continuous integration and deployment practices.
* Experienced in **Branching, Merging, Tagging,** and maintaining the version across the environments using **SCM** tools like **GIT, Bitbucket and Subversion (SVN)**.
* Expertise in integrating and using build tools like **Maven** and in **Ant** to **build artifacts**.
* Worked extensively on automation engine Ansible that automates cloud provisioning, configuration management, application deployment, intra-service orchestration, and many other IT needs.
* Used **Ansible Control** server to deploy plays and **Playbooks** to the machines and systems in the inventory. Have worked on integrating **Ansible YAML Scripts**.
* Developed **Chef Cookbooks** and **Recipes** using **Ruby** for various DB configurations to modularize and manage systems configurations.
* Production experience in large environments using **Configuration Management** tools **Ansible, Chef**.
* Extensively worked on installing, configuring and maintaining **Jenkins** and **Bamboo** for the purpose of all build and deployments that are implementing CI/CD for database using **Jenkins** in **Groovy**.
* Debugged our APIs using **Splunk logs** and made performance analysis through **AppDynamics** and **Nagios** for **Resource Monitoring/Network Monitoring/Log Trace Monitoring**.

**Technical Summary:**

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| **Cloud Platforms** | AWS, AZURE, GCP, |
| **Version Control Tools** | GitHub, Bitbucket, Subversion (SVN), Azure Repo, Code Commit |
| **CI/CD & Build Tools** | Jenkins, Azure DevOps, Bamboo, Maven, ANT, Gradle |
| **Configuration Tools** | Chef, puppet, Ansible |
| **SDLC** | Agile, Scrum, Waterfall |
| **Infrastructure Tools** | Terraform, Azure Resource Manager. |
| **Container Tools** | Docker, Kubernetes |
| **Scripting/Languages** | Python, Ruby, Shell, Power Shell scripting, Golang, .Net, Java |
| **Web/Application Servers** | Apache Tomcat (2.x, 3.x, 5.x, 7.x). |
| **Operating Systems** | Linux (RedHat 4/5/6, Ubuntu), Windows |
| **Database Management** | Oracle, MySQL, SQL, AWS RDS, |
| **Monitoring Tools** | Nagios, Splunk, CloudWatch, ELK (Elasticsearch) |

**Professional Summary:**

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| Client & Location | Bill.com Houston, TX |
| Duration | September 2020 to Present |
| Role | **DevOps Engineer** |
| Platforms Used | Linux, Git, Maven, Kubernetes, Docker, Ansible, Jenkins, Helm Charts, GCP, Golang, webservers Apache/httpd and Tomcat, Nagios, Jira, Bitbucket. |

Responsibilities:

* Worked on optimizing infrastructure operations of Google Cloud Platform(GCP) by designing target state architectures for the next generation of GCP infrastructure, leveraging the latest services and innovations from GCP Work closely with GCP Platform Engineer to incorporate solutions into custom designed cloud-based applications.
* Configured, supported, and maintained all network firewall, storage, load balancer, operating systems, and software in Google Compute Engine Instances.
* Configured Cloud Storage versioning and lifecycle policies to and backup files and archive files in Cloud File store which was fully managed by Network Attached Storage (NAS).
* Designed Google Deployment Manager templates to create custom sized VPC, setting up firewall rules to ensure successful deployment of Web based applications and database templates.
* Involved in deploying applications utilizing AWS stack Including EC2, Route53, S3, RDS, Dynamo DB, IAM and focusing on high-availability, fault tolerance, and auto-scaling.
* Implement the process of deployement to lower and higher environments in GCP using Google Kubernetes engine and in AWS using ECS.
* Managed Google infrastructure and automation with CLI and API. Worked on Inbound and Outbound services with automation of Ansible. Deployed multiple resources simultaneously, using Deployment Manager Templates in Google.
* Worked on Setting up a 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.
* Launched multi-node Kubernetes cluster in Google Kubernetes Engine (GKE) and migrated the containerized application from AWS to GCP.
* Created Terraform templates for provisioning virtual networks, subnets, VM Scale sets, Load balancers and NAT rules and used Terraform graph to visualize execution plan using the graph command.
* Managed Kubernetes using Helm charts. Created reproducible builds of the Kubernetes applications, templatize Kubernetes manifests, provide a set of configuration parameters to customize the deployment and managed releases of Helm packages.
* Closely worked with Solution architects to set up a dedicated AWS cloud environment for our project.
* Experience in migrating various data center applications, services and databases to AWS cloud.
* Responsible for installation & configuration of Jenkins to support various Java builds and Jenkins plugins to automate continuous builds and publishing Docker Images to the JFrog Repository.
* Implemented Docker for convenient environment setup for development and testing. Worked on Docker container snapshots, attaching to a running container, removing images, and managing containers.
* Implemented Jenkins and built pipelines to drive all microservice builds out to the Docker registry and then deployed to Kubernetes.
* Involved in CI/CD process using Git, Jfrog, Jenkins job creation, Maven build and create Docker image and use the docker image to deploy in gcloud clusters.
* Involved in writing Ansible playbooks for setup and configuration of tools including Jenkins and Artifactory on remote servers using REST API protocol and created playbooks for deployments and bug fixes with Ansible.
* Implemented Ansible Tower for scheduling playbooks and used Bitbucket repository to store playbooks and updated multiple manifests and customized facts.
* Worked with Ansible for Orchestration of deployments for various servers and managed Ansible Playbooks with Ansible modules, implemented CD automation using Ansible, also involved in managing existing Tomcat Webservers and automated the configuration of new servers.
* Automated configuration of infrastructure and deployment of web applications on webservers Apache/httpd and Java on application servers like Tomcat by using Ansible playbooks.
* Configured Nagios to monitor critical IT infrastructure components including system metrics, network protocols, applications, servers, services, and network infrastructure.
* Monitored servers using Nagios, Dynatrace also used Net scalar and Nagios for Load Balancing and Controlling flow of Traffic.
* Implemented REST services by Golang with microservices architecture and developed new RESTful API services that work as middleware between applications and third-party APIs using Golang.
* Designed configurable REST APIs on demand using Golang and worked on numerous go frameworks like gin and revel.
* Involved in setting up JIRA as defect tracking system and configured various workflows, customizations, and plugins for the JIRA bug/issue tracker.
* Written Jenkins Pipeline Groovy Scripts for Continuous integration and build workflows and used Jenkins for uploading Artifacts into JFrog Repository.

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| Client & Location | FedEx Orlando, FL |
| Duration | June 2019 to August 2020 |
| Role | **DevOps Engineer** |
| Platforms Used | AWS, GIT, Jenkins, Chef, ANT, Maven, Tomcat, Nagios, Java/J2EE, Ansible, AZURE, EC2, IAM, SQL Server, Kubernetes, Terraform, Docker, GitHub |

Responsibilities:

* Used GIT Version Control Tool for Branching, Tagging, Release Activities.
* Build and release software baselines, code merges, branch and label creation and interfaced between development and infrastructure. Performed all necessary day-to-day GIT support for different projects.
* Managed servers on the Amazon Web Services (AWS) platform instances using Chef Configuration management.
* Used Configuration Management Tool Chef & created Chef Cookbooks using recipes to automate system operations.
* Deploying the cookbooks, recipes using knife tool from Chef-DK Workstation to Chef-server.
* Developed Chef Cookbooks for Tomcat, MySQL and application servers and versioned them on Git repositories and Chef Server.
* 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.
* Spinning up AWS resources by using terraform. Deploying a multi-node application to AWS using Terraform and Chef.
* Created Reports, Alerts and Dashboards by Splunk Query language.
* Splunk configuration that involves different web application and batch, create Saved search and summary search, summary indexes.
* 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.
* Implemented AWS solutions using EC2, S3, Redshift, Lambda, RDS, EBS, Elastic Load Balancer, Auto scaling groups, SNS, Optimized volumes and Cloud Formation templates.
* 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.
* Managed the configurations of multiple servers using Ansible.
* Responsible for creatingPuppet modules and manifest files from scratch and experience in editing existing puppet manifests and automated manual installation processes using puppet.
* Worked on setting up new tools such as Kubernetes with Docker to assist with auto-scaling, continuous integration, rolling updates with no downtime.
* Setup Open Monitoring Distribution with AppDynamics to monitor system metrics such as Disk usage, logging, CPU, RAM etc.
* 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.
* 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.
* Created 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 Ruby 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.
* Involved in deploying Urgent fixes in Production servers, Datacenter migration, RAD installation, roll back Process, new environment setup for development and Testing.
* Proficient in installing and configuring Nagios, monitoring tool to monitor bandwidth of server network and hard drive status.
* Deployment of applications on Apache Web server, Nix and Application Servers such as Tomcat.

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| Client & Location | Honeywell Phoenix, AZ |
| Duration | September 2018 to May 2019 |
| Role | **Azure Devops Engineer** |
| Platforms Used | Agile Methodology, Azure Portal, Azure Resource Manager, Azure Data Factory, AVN's, Azure Active Directory, BGP, TFS, IBM Clear Case, GIT, Maven, Jenkins, Chef, Docker, Kubernetes, Tuxedo, VSTS, Terraform, Shell, Nagios, JIRA, Ansible, PowerShell scripting, Red Hat satellite server, ANT. |

Responsibilities:

* Worked on Agile Methodology and responsible for monitoring and managing the development and production and worked with Azure Portal to Provide IAAS resources to client.
* Worked with Azure PaaS and IaaS Solutions like Azure Web Apps, Web Roles, Worker Roles, and SQL Azure and Azure Storage.
* Worked with Azure compute services, Azure Web apps, Azure Data Factory & Storage, Azure Media & Content delivery, Azure Networking, Azure Hybrid Integration, and Azure Identity & Access Management.
* Implemented Azure Databricks to other Azure services (such as Azure Storage) in a more secure manner using service endpoints.
* Experience with Azure Cloud Terraform API to create infrastructure on Azure as a code, write YML script to build infrastructure.
* Implemented Ansible, PowerShell scripting to automate day to day job tasks.
* Updating patches to keep servers updated against bugs present in the operating system using Red Hat satellite server, yum etc.
* Designed, Planned, and created Azure virtual machines, Implementing, and managing virtual networking within Azure and connect it to on-premises environments.
* Experience with automation orchestration of Azure technologies. Examples PowerShell or ARM Template scripting, Azure Automation.
* Developed build using ANT and MAVEN as build tools and used CI tools to kick off the builds move one environment to other environments.
* Worked on Azure Databricks to use custom DNS and configure network security group (NSG) rules to specify egress traffic restrictions.
* Designed and configured Azure Virtual Networks (VNets), subnets, Azure network settings, DHCP address blocks, DNS settings, and Security policies to provide high-secure environment for running Linux in Virtual Machines (VM's) and applications.
* Configured Broder Gateway Protocol (BGP) to enable the connection between Data Centers and Azure cloud to exchange routing and reachability information.
* Design and Implementation of Azure Site Recovery in both Disaster Recovery Scenario and for migrating the workloads from On-Premises to Azure.
* Involved in migration of source code from SVN to GitHub across the organization.
* Wrote Shell script for automating process during migration for setting up environment variables to build outside the SVN and for managing dependencies.
* Administered and Engineered Jenkins for managing weekly Build, Test and Deploy chain, SVN with Dev/Test/Prod Branching Model for weekly releases.
* Administered and Monitoring Visual Studio Team System (VSTS), taking backups and consolidating collections at the time of migration from one version of VSTS to another.
* Created U-SQL script for transform activities and developed complex queries to transform the data from multiple sources and outputted the data into Azure Data warehouse.
* Configured Blob storage services in Azure for storing large amount of unstructured object data which can be accessible via HTTP and HTTPS.
* Managed major architectural changes from single server large software system to a distributed system with Kubernetes orchestration.
* Built and deployed Docker containers to break up monolithic app into microservices, improving developer workflow, increasing scalability, and optimizing speed.
* Worked on Chef as a configuration management tool and created Chef Cookbooks and modules to automate system operations using Ruby programming language.
* Configured servers to host Team Foundation Server (TFS) instance to setup and manage continuous integration using TF Build Service & deployed JAVA applications to Oracle Tuxedo servers.

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| Client & Location | Flipkart Bengaluru, IN |
| Duration | February 2016 to July 2018 |
| Role | **Build Engineer** |
| Platforms Used | Git, Aws, Jenkins, Bamboo, Ansible, Maven, Power shell, Jira, Python, ANT. |

Responsibilities: 

* Organized and Coordinated Product Releases, work closely with product development, QA, Support across global locations to ensure successful releases.
* Managed GIT repository, code merging and production deployment.
* Maintained JIRA for tracking and updating project defects and tasks.
* Worked on JIRA installation and upgrade and Performed JIRA configuration.
* Developed entire frontend and backend modules using Python on Django Web Framework.
* Configured AWS Config for setting up CloudTrail and compliance check on AWS Resources like S3.
* Automated the deployment process by writing Python scripts in Jenkins.
* Wrote ANT Scripts to automate the build process. Configured Bamboo for doing the build in all the non-production and production environments.
* Handled complete Build and Release process including code, documentation and supporting testing team along with the server Administration.
* Set-up and configure Bamboo, created Jobs for automating build and deploy activities.
* Implemented Jenkins for Continuous Integration Builds, automated deployments, and Notifications.
* Built upstream and downstream jobs in Jenkins to build and deploy onto environments.
* Implementing new project builds framework using Maven, Jenkins as framework tools.
* Created Pipeline in Jenkins by integrating Git and Maven Plugins.
* Implementing a Continuous Delivery framework using Jenkins, Bamboo, Ansible, Maven, and Artifactory in Linux environment.
* Involved in supporting cloud instances running Linux and Windows on AWS, experience with Elastic IP, Security Groups and Virtual Private Cloud, Subnets, route tables, gateways in AWS.
* Involved in Designing and setup of CI tool Bamboo to integrate SCM tool Git and automated the build process.
* Presented on View Object pattern in Web Application Automation C#, PowerShell, Selenium, Team City.

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| Client & Location | Han Digital solution (p) ltd Bengaluru, IN |
| Duration | November’2013 to January 2016 |
| Role | **Java Developer/Devops Engineer** |
| Platforms Used | AWS, Python, Chef, Java 7/J2ee, Jenkins, Maven, GIT, Docker, Shell script. |

Responsibilities:

* Setting up the build and deployment automation for Java base project by using JENKINS and Maven.
* Gathering Information from the Clients and providing consultation by performing POC and setup the Build/Deployment and Release management.
* Setup the continuous Integration (CI) and continuous Deployment (CD) process for the application using the Jenkins.
* Implementing a Continuous Delivery framework using Jenkins, CHEF, Maven in Linux environment.
* Created Scripts to Automate AWS services which include web servers, ELB, Cloud front Distribution, database, AWS EC2 and database security groups.
* Source code management is performed using GIT from master repository and knowledge on container management using Docker in creating images.
* Used chef server and workstation to manage and configure nodes, installed Chef Server and clients to pick up the Build from GIT repository and deploy in target environments.
* Worked on Spring Frameworks Spring IOC, Spring Boot, Spring Cloud and using third party libraries.
* Responsible for building out and improving the reliability and performance of cloud applications and Cloud infrastructure deployed on Amazon Web Services.
* Developed & Supported tools for integration, automated testing & Release.

EDUCATION: Master’s in computer science from Texas A & M university-Kingsville, Texas

Bachelor of Engineering in Computer Science from VIT University, INDIA.