**Mastan**

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**PH: 9805228787 Sr. AWS Cloud DevOps Engineer**

**Professional Summary:**

* Around **8+** years of experience in the IT industry comprised of Development, Systems Administration, Infrastructure Management Installation, Configuration, Tuning and Upgrades of Linux (Red Hat and Oracle). Software Configuration Management (SCM) experience includes Build/Release Management, Change/Incident Management implementing duties such as monitoring, Automation, deployment, documenting, support and troubleshooting along with Amazon Web Services and Cloud Implementation.
* Unique experience working with AWS services like VPC with scalable infrastructure, knowledge on transferring petabytes of data between on premise data center and S3 using Snowball, written CloudFormation templates to provision and configure many resources and services running on AWS EC2.
* Experience with AWS services EC2, managed Docker containers on a cluster hosted on a serverless infrastructure using ECS and distributed the application traffic in ELB, CloudFront to distribute content to edge locations, Cloud watch to set alarms and notifications. Also worked with Glacier storage, IAM policies for different users, RDS, Route53, and SNS.
* Experience in Designing Azure Resource Manager Template and in designing custom builds steps using PowerShell. Written Power shell scripts to perform Patching, Imaging and Deployments in Azure.
* Good Knowledge in Azure cloud services, Azure storage, Azure active directory and Azure Service Bus. Managed Client's Microsoft Azure based PaaS and IaaS environments.
* Having good experience in implementing CI/CD pipelines end to end including version control in GitHub. Creating jar, war files in Maven, Gradle, later integrated to Jenkins using webhooks in GitHub and deployed the artifacts into Nexus, Frog.
* Designed filesystems to install 3 instances of Jenkins on a single server with different port numbers and deployed Jenkins war file onto Apache Tomcat with different ports and integrated them to load balancer to perform round robin distribution of builds in Jenkins.
* Experienced in branching, tagging and maintaining the version across the environments using SCM tools like GIT, Subversion (SVN) and TFS on Linux and Windows platform.
* Implemented Build/Deployed automation Server utilizing CI Technologies like Jenkins/Hudson, Subversion, Maven, Ant, Nexus, JIRA and Selenium for both .NET and J2EE Applications on mixed OS (Windows/Linux/Unix).
* Extensively worked with Scheduling, deploying, managing container replicas onto a node cluster using Kubernetes and experienced in creating Kubernetes clusters work with frameworks running on the same cluster resources. Proficient knowledge with Mesos providing the fine-grained resource allocations for pods across nodes in a cluster.
* Worked on creating the Docker containers, Docker images, tagging and pushing the images and Docker consoles for managing the application life cycle and Deployed Docker Engines in Virtualized Platforms for containerization of multiple applications.
* Extensive experience working with command line utility tool Vagrant and configured Vagrant File in Ruby, creating Vagrant Boxes and synced folders to sync onto a host machine. Installed Plugins to extend Vagrant with stable API’s to withstand major version upgrades.
* Written Chef Cookbooks and recipes to automate the deployment process and to integrate Chef Cookbooks into Jenkins jobs for a continuous delivery framework. Worked with developing Chef Recipes using Terraform scripts to perform deployments onto application servers like Tomcat and Nginx.
* Maintained multiple Applications that run in a Multi-Tenant Environments, Such as Load Balancer to Web server to App Server and Databases which are SQL databases like PostgreSQL, MySQL and NoSQL Databases.
* Expertise in configuring and administering network services such as DNS, NFS, SMTP, NTP, DHCP, LDAP, SAMBA, Mail Servers. Knowledge on using various routed protocols like TCP, FTP, SFTP, SSH, HTTP, HTTPS and Connect direct.
* Experienced in Administration of Prod, Dev, Stage and QA environment’s carrying on Windows, RHEL, Centos, Ubuntu, Sues and Solaris servers.
* Ability to build deployment, build scripts and automated solutions using scripting languages such as Shell, Perl, Python and Ruby.
* Managed all the bugs and changes into a production environment using the JIRA/TFS/HP ALM tracking tool and configured various workflows, customizations and plug-in for the JIRA bug/issue tracker.
* Worked on web servers like Apache, Nginx and application servers like Web Logic, Tomcat, WebSphere, JBOSS and IIS Server to deploy code.
* Experience in keeping up and looking at log archives using monitoring tools like Nagios, Splunk, CloudWatch, ELK Stack, Dynatrace, New Relic, Prometheus, and AppDynamics.
* Worked on the connectivity and Firewall issues for the installation and connectivity of the tools.
* Experience with Agile Development Methodology (Scrum), and Waterfall.

**TECHNICAL SKILLS:**

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| **Operating Systems:** | Windows, Linux, UNIX, RHEL/CentOS 5.x/6.x/7, Mac OS. |
| **Virtualization:** | VMware ESX 3.x, VMware Server 1.4, Virtual Center 2.5, Virtual Box. |
| **Versioning Tools:** | Harvest, Subversion (SVN), GIT, BitBucket, IBM Rational Clear Case. |
| **Build Tools:** | ANT, Maven, Team City, Gradle. |
| **Repositories:** | Nexus, Artifactory. |
| **CI Tools:** | Hudson, Jenkins, Bamboo. |
| **Configuration management Tools:** | Chef, Puppet, Ansible, Saltstack. |
| **Cloud Providers:** | AWS, Azure, Openstack. |
| **Bug Tracking Tools:** | JIRA, Rally, Remedy, IBM Clear QUEST, HP Quality Center. |
| **Scripting/Programming languages:** | Shell, Perl, Ruby, Bash, Python, UNIX, Java scripting, PHP, .Net, java. |
| **Web Technologies:** | HTML, Java Script, XML, Servlets, JDBC, JSP. |
| **Web/App servers:** | Apache Tomcat, JBOSS, AWS, Hadoop, Web logic, Web Sphere, Nginx. |
| **Databases:** | Oracle 11g/10g/9i/8i, MYSQL, SQL server. |
| **Other Tools:** | Docker, Terraform, kubernetes. |

**Professional Experience:**

**Client: Freedie Mac, Mclean, VA March 2022 to Present**

**Role: Sr. AWS Cloud DevOps Engineer**

**Responsibilities:**

* Created, maintained and customized complex JIRA project configurations including workflows, custom fields, permissions
* Installed and configured Splunk monitoring server, installed Splunk forwarded on all the nodes in the environment
* Designed AWS Cloud Formation templates to create custom sized VPC, subnets, NAT to deploy Web applications and database templates
* Designed roles and groups for users & resources using AWS Identity Access Management (IAM).
* Deployed instances in AWS EC2 and used EBS stores for persistent storage; configured & supported storage level
* Used CloudFront to deliver content from AWS edge locations to users, allowing for further reduction of load on front-End servers.
* Established Queuing mechanism using AWS SQS with SNS and created Cloud Watch alerts for instances
* Experience with Puppet, cloud-hosted solutions, specific AWS product suite experience.
* Cookbooks with test-kitchen and chef spec. Refactored Chef and OpsWorks in AWS cloud environment.
* Implemented and maintained the branching build/release strategies utilizing Subversion/GIT. Manage configuration of Web App and Deploy to AWS cloud server through Chef.
* Migrated VMware Virtual Machines to AWS and managed Services like EC2, S3, Cloud Formation, Route53, ELB, RDS, and VPC
* Created a Python Script to stop all the instances with a specific tag in Instance using Lambda functions and made it into Cloud Watch Scheduler to schedule it every night.
* Installed Jenkins plug-in for GIT Repository, setup SCM Polling for immediate build with Maven and used web Configured, Administered Jenkins for managing weekly Build, Test and Deploy chain, GIT with Dev/QA/Prod
* Analyzed code quality of project's source code using SonarQube code quality tool by performing a scan on the source code based on set of standard rules for a programming language
* Installed and configured the Nexus repository manager for sharing the artifacts within the company. Created proxy
* Worked on Docker container snapshots, attaching to a running container, removing images, managing director
* Worked on several Docker components like Docker Engine, Hub, Machine, Compose and Docker Registry to create container replicas when there is high traffic or load to leverage crashes and shutdown containers and stored them in Docker Hub.
* Worked on message queuing systems like Kafka. Created Automation to create infrastructure for Kafka clusters different instances as per components in cluster using Terraform for creating multiple EC2 instances & attaching ephemeral or EBS volumes as per instance type in different availability zones & multiple regions in AWS.
* Utilized Kubernetes and Docker for the runtime environment of the CI / CD system to build, test deploy.
* Created Clusters using Kubernetes and worked on creating many pods, replication controllers, replica sets, services, deployments, labels, health checks and ingress by writing YAML files.
* Configured Ansible Control Machine and wrote Ansible Playbooks with Ansible roles. Used file module in Ansible Playbook to copy and remove files on EC2 instances.
* Wrote Ansible Playbooks with Python SSH as the Wrapper to Manage Configurations of OpenStack Nodes and Test Playbooks on AWS instances using Python.
* Experience in Ansible setup, managing hosts file, Using YAML linter, authoring various playbooks and custom modules with Ansible and Ansible Playbooks to automate in AWS services like Launching EC2, Provisioning IAM, Configuring VPC, EBS, Monitoring using CloudWatch and CloudTrail.
* Created multiple playbooks using Ansible for machine creations and SQL server, cluster server and my SQL installations.
* Used Ansible to Setup/teardown of ELK stack (Elasticsearch, Log stash, Kibana) and troubleshoot the build issues with ELK and work towards the solution.
* Created inventory in Ansible for automating the continuous deployment and wrote playbooks using YAML scripting.
* Installed, configured and administered application servers like WebSphere Application Server, web servers like Apache 2.2, IIS and Oracle DB in various environments like Dev, QA, and Prod on RHEL.

**Environment**: Red Hat Linux, AWS, S3, EBS, Ant, Gradle, Kubernetes, Elastic Load balancer (ELB), Docker, Octopus, VPC, IAM, Perl, shell, Cloud Watch, Glacier, Terraform, Azure, Jenkins/Hudson, Maven, Bash, Nagios, Bash Scripts, GIT, Splunk, Docker, Jira, Chef, Ansible.

**Client: Telligen, Glen Allen, Virginia September 2020 to February 2022**

**Role: Cloud DevOps Operations Engineer**

**Responsibilities:**

* Configured VMs availability sets using Azure portal to provide resiliency for IaaS based solution and scale sets using Azure Resource Manager to manage network traffic.
* Configured Azure Backup service for taking backup of Azure VM and data on premise to Azure, built and installed servers through Azure Resource Manager (ARM) templates or Azure Portal. Using Azure cloud services performed various web operations in Azure App Service. Familiarity with Azure OMS monitoring and dashboards.
* Installed, Configured and administered VMware ESXi 5/5.5 Setup vCenter Server in the environment, Configured HA, DRS.
* Installed Web components like IIS 7.5, Apache, Tomcat Servers, on the Windows 2008/ UNIX environments.
* Administered legacy IIS 6.0 servers supporting consolidated website hosting.
* Installed ESX Servers, vSphere Client and vCenter Server and Deployed Virtual Machines and used Clones, Snapshots, templates and configuring vMotion and Storage vMotion.
* Administered Troubleshoot and resolved issues with VMWare systems hosting Windows and Linux Operating systems.
* Worked on installation, configuration and maintenance RHEL/Debian, CentOS and SUSE Servers at multiple Data Centers.
* Installed, Configured and administered DNS, LDAP, NFS, NIS, NIS+ and Send mail on RHEL/Debian Servers.
* Deployed Azure as virtual Machines (VMs) & Cloud services (PaaS role instances) into secure VNets subnets. Worked with a team to design, plan and implement an existing application to Azure cloud (ARM).
* Experience in configuring Azure web apps, Azure App services, Azure Application insights, Azure Application gateway, Azure DNS, Azure Traffic manager, Azure Network Watcher, Implementing Azure Site.
* Experience in Windows Azure Services like PaaS, IaaS and worked on storages like Blob (Page and Block), SQL Azure.
* Well experienced with MongoDB in deployment & configuration management and Virtualization.
* Installation and configuration of PostgreSQL database on RHEL/Debian Servers and Performed Disk management with the help of LVM (Logical Volume Manager).
* Configured, Administered Jenkins for managing weekly Build, Test and Deploy chain, SVN/GIT with Dev/QA/Prod Branching Model for weekly releases.
* Configured and integrated GIT into the continuous integration (CI) environment along with Jenkins and written scripts to containerize using Ansible with Docker and orchestrate it using Kubernetes.
* Experienced with installing and configure the Elastic search for store log files, Logstash to process the incoming logs, Kibana web interface for searching and visualizing the logs which proxied to Nginx.
* Responsible for automating deployments, configuration management and capacity management of applications using CI/CD Tools. Build out operational capabilities to support secure, scalable, Fault-tolerant and cloud-based web architecture
* Experience working with cloud platforms such as Google Cloud Platform (GCP) and 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.
* Public Cloud, and Hybrid like Google Cloud Platform (GCP) certifications.
* Worked in setting up Chef Infrastructure, Chef-repo and Bootstrapping chef nodes.
* Written Chef cookbooks and recipes to Provision Several pre-production environments consisting of Cassandra DB installations and several middleware installations.
* Configured and used u Deploy to deploy artifacts to various environments and control the related dependencies.
* Deploying and configuring Writing Perl and Bash scripts to perform certain tasks and assisting user with problems and MYSQL.

**Environments**: Git, Ansible, Docker, Kubernetes, Jenkins, Maven, Nexus, Terraform, Python, Bash, Apache Tomcat, MySQL, JIRA, AWS Cloud, Splunk, Kafka, AWS (EC2, ECS, S3, EFS, IAM, Security groups, RDS, Lambda, S3 Glacier, Resource Access Manager).

**Client: Thomson Reuters, Eagan, MN January 2019 to August 2020**

**Role: DevOps Engineer**

**Responsibilities:**

* Installed and Administered troubleshooting of Linux and AIX Operating Systems.
* Performed automated installations of Operating System using kickstart for Linux.
* Developed the POCs for the migration of the DR project from On-Prem to AWS.
* Written Bash scripts for the change of IPS from on-Prem to AWS.
* Drawn the Gliffy diagrams for the POCs of the DR project migration to AWS.
* Managing user access for AWS instance using Jenkins and created security groups and instance profiles.
* Supported AWS Cloud environment with 600+AWS instances and configured Elastic IP and Elastic storage.
* Providing highest level technical support in the production environment.
* Managed Amazon Web Services (AWS) infrastructure with Automation, implemented new
* AWS instances and worked with EBS and S3 storage, IAM.
* Launched and configured Amazon EC2 Cloud Servers using AMI; s (Linux /Ubuntu).
* Configured Apache servers and controlled them from Jenkins master. Written Shell & Perl scripts.
* Developed the scripts to push patches, files and maintain configuration drift through the Jenkins Tool.
* Hiring process management for Linux administrator (Capacity Planning).
* Mitigation of crucial issues related to Linux server, Jenkins and monitoring.
* Installing RedHat Linux using kickstart and applying security policies for hardening the server based on the company policies.
* Refreshed Linux servers which includes new hardware, OS upgrade, application installation, testing.
* Installing, configuring RedHat servers, automating scripts coordinated with SAN Team for storage allocation and Disk Dynamic Multi path.
* Installed & configured Nagios on Linux servers.
* Development and version control of Chef Cookbooks, testing of Cookbooks using Food critic and Test Kitchen and running recipes on nodes managed by on premise Chef Server, maintained Chef servers including backup, monitoring, security fix and worked on managing the Private Cloud Environment using Chef and Chef Server backups.
* Experience implementing Chef, including the internal best practices, cookbooks, automated cookbook CI and CD system. Made use of Jenkins for Chef CI, Berkshelf for dependency management and Test-Kitchen for testing and development.
* Used Chef to automate Configuration management, Web Applications, Config Files, Data Base, Commands, Users Mount Points, and Packages, implied in testing cookbooks on different platforms using Chef Kitchen. Hands-On knowledge with the ChefDK for storing cookbooks and in documenting the pattern and use of Delivery CLI to automate the adeptness in Chef.
* Used Chef to automate Configuration management, Web Applications, Config Files, Data Base, Commands, Users Mount Points, and Packages, implied in testing cookbooks on different platforms using Chef Kitchen. Hands-On knowledge with the ChefDK for storing cookbooks and in documenting the pattern and use of Delivery CLI to automate the adeptness in Chef.
* Automated Weekly releases with Maven scripting for Compiling Java Code, Debugging and Placing Builds into Maven Repository.

**Environment**: RHEL 6/7, Centos, Windows 2008/2012, VMware, WebLogic, Oracle DB, Apache, LVM, WebSphere, GIT, Maven, Jenkins, Nexus, SonarQube, Chef, Ansible, Docker, Selenium, AWS, Kubernetes, Splunk, JIRA, Python, Bash and Yaml scripting.

**Client: Mayo Clinic, Rochester MN July 2017 to December 2018**

**Role: DevOps Engineer**

**Responsibilities:**

* Created continuous integration/deployment with Application Release Automation by integrating and improving client's existing infrastructure and build pipelines, largely aiming for autonomous automation when possible.
* Worked on Multiple AWS instances, set the security groups, Elastic Load Balancer and AMIs, Auto scaling to design cost effective, fault tolerant and highly available systems.
* Worked extensively with AWS services like EC2, S3, VPC, ELB, Autoscaling Groups, IAM, CND, Cloud Trail, CloudWatch, NAT and RDS.
* Administered databases using RDS and DynamoDB in AWS and executed the DML and DDL scripts.
* Used JIRA as defect tracking system and configured various workflows, customizations and plugins for JIRA bug/issue tracker, integrated Jenkins with JIRA, GitHub.
* Performed JIRA administration, setting up new projects, creating new workflows, adding users to roles.
* Worked with layout of project workflow/pipelines using Jenkins as CI tool, performed cleanup of file system using Shell scripting and configured various Cron jobs.
* Created the branches in Git to perform the simultaneous development process to support quarterly release.
* Developed and maintained Cloud Formation JSON Templates and automated the cloud deployments using Chef.
* Prepared projects, dashboards, reports and questions for all JIRA related services and generated scripts for effective integration of JIRA applications with other tools.
* Involved in setting up builds using Chef as a configuration management tool and managed the configurations of servers and Installed Chef Server on the workstation and bootstrapped the nodes using Knife and involved in writing Chef Cookbooks and recipes to automate the deployment process.
* Created tickets for bug stories and feature stories in JIRA with co-ordination of QA/BA team respectively and issued it to developers to fix bugs and include necessary feature add.
* Installed Nexus repository tool to manage artifacts/dependencies jars. Actively worked with DEV team and SQA team for product release.
* Generated Ant, Bash scripts for build activities in QA, Staging environments.
* Worked with Ant and Maven build tools and implemented it with AWS services.
* Provisioned the highly available EC2 Instances using Terraform and cloud formation and wrote new plugins to support new functionality in Terraform.
* Installed, configured and administered Bamboo on Linux machines along with adding/updating plugins like GIT, ANT, Sonar, Check style, Build Pipeline etc.
* Implemented a continuous Delivery Pipeline with Bamboo and GitHub and worked in designing and implementing a continuous integration system using Bamboo by creating Python and Perl scripts.
* Worked with Terraform key features such as Infrastructure as code, Execution plans, Resource Graphs, Remote State.
* Used Bamboo, Build forge for Continuous Integration and deployment into Tomcat Application Server.
* Developed installer scripts using Python, Groovy and Linux for various products to be hosted on Application servers.

**Environments**: Microsoft Azure (Including ASP, VNETs Web & Mobile, Blobs, Resource groups, Key Vault, Azure SQL, CouchDB, RabbitMQ), Bitbucket, Chef, Docker, Kubernetes, Jenkins, Maven, JFrog, Terraform, .Net, Ruby, Oracle Web Logic, Rally, Nagios, DynamoDB, PowerShell.

**Client: Amtex Software Solutions, Hyderabad – India September 2014 to March 2017**

**Role: Build and Release Engineer**

**Responsibilities:**

* Involved in S3 Buckets in AWS and storing files. Enabled Versioning and security for files stored. Manage AWS EC2 instances utilizing Auto Scaling, Elastic Load Balancing and Glacier for our QA and UAT environments as well as infrastructure servers for GIT and Chef.
* Performed AWS Cloud deployments for web applications running on AWS Elastic Beanstalk with monitoring using CloudWatch and VPC to manage network configurations.
* Installed Jenkins/Plugins for GIT Repository, Setup SCM Polling for Immediate Build with Maven and Maven Repository (Nexus Artifactory) and Deployed Apps using custom ruby modules through CI/CD Process.
* Installed and Administered Jenkins CI for ANT and Maven Builds and installation, Configuration and Management of RDBMS and NoSQL tools such as DynamoDB.
* Worked on installing, configuring and managing Docker Containers, Docker Images for Web Servers and Applications and Implemented Docker -maven-plugin in and maven pom to build Docker images for all microservices and later used Docker file to build the Docker images from the java jar files
* Worked on writing Jenkins build a pipeline with Gradle script and Groovy DSL (Domain Specific Language) and integrating ANT/MAVEN build scripts with Gradle for the sole purpose of continuous build.
* Administered and Engineered Jenkins for managing weekly Build, Test and Deploy chain as a CI/CD process, SVN/GIT with Dev/Test/Prod Branching Model for weekly releases.
* Coordinate/assist developers with establishing and applying appropriate branching, labelling/naming conventions using Subversion (SVN) and Git source control.
* Deployed Puppet, Puppet Dashboard, and Puppet DB for configuration management to existing infrastructure.
* Installed Puppet client software on RHEL 6.x servers and established a communication between master and client through SSL certification.
* Configured the squid servers and controlling them from Puppet master for the allowed sites.
* Containerize applications and services using Docker, CoreOS, and Virtualization technologies, implementing all necessary tooling to support the products andautomated deployments, scaling, and operations of application containers across clusters of hosts, provided container-centric infrastructure by Kubernetes.
* Built and Implemented complete CI stack to migrate from a Puppet stack in a colo to Terraform with Chef in AWS.

**Environments**: AWS (EC2, VPC, Subnet, ELB, NAT, CND, Beanstalk, CloudTrail, S3, RDS, Cloud watch, DynamoDB), Jira, chef, Ant, terraform, Tomcat, Git, Groovy.