Balal Chattha

551-587-8484 | balalchattha84@gmail.com

**OBJECTIVE**

Acquire A Cloud / DevOps position where I can challenge and optimize my 8 years of technical experience in the installation, configuration, and automation of Cloud-based environments.

**TECHNICAL SKILLS**

**Operating System: Red Hat / CentOS/ Ubuntu / Windows 2003, 2008, 2012 / Windows 7 / VMware Esxi**

**Network: LAN / TCP/IP / UDP / SNMP / Tcpdump / Wireshark/ Traceroute / Netstat / Dig / DNS / DHCP / VLAN / NIC Bonding / Systat / Sar**

**Hardware: HP / Dell Servers / Desktops / Phaser Printers / Cisco Switches**

**Programming / Scripting: Python**

**Applications & Protocols: SSH / SFTP / Yum / RPM / Apache / Samba / NIS / NFS / SMTP / Nagios XI / Postfix / PXE Boot / Kickstart / KVM / NAS / Kerberos / Openldap / ITSM Remedy Ticketing System/ Netbackup / Logical Volume Manager (LVM) / RAID / FirewallD / IPtables / Amazon EC2 / Amazon CloudWatch, IAM, VPC, S3, Elastic Load Balancing, Auto Scaling, Cloud Formation, Route53, RDS/ Selinux / Jenkins / CI/CD**

**Automation: Ansible / Terraform**

**Cloud Computing: AWS / Azure**

**Database: MySQL**

**Containers: Docker / Kubernetes**

**PROFESSIONAL EXPERIENCE**

**General Electric Inc (GE Inc)**

**New York, New York** **July 2017 – Present**

**Cloud AWS / Sr. DevOps Engineer**

* Established Route 53 and S3 Buckets and conducted monitoring tasks utilizing CloudTrail, Nagios, and CloudWatch.
* Utilized Terraform modules to establish Auto Scaling, VPC, and EC2 instances, catering to several teams, such as the application and database teams.
* Skilled in Puppet configuration management tools, experience automating and managing infrastructure.
* Proficient in designing and implementing Puppet and Chef modules, recipes, and manifests to ensure efficient and reliable deployment of applications.
* Experienced in using both tools to provision and manage servers, containers, and cloud-based resources, while maintaining security and compliance standards.
* Proficient in utilizing GIS software and tools to create, analyze, and interpret geospatial data for decision-making purposes.
* Proficient in shell scripting, automation, and deployment of applications using tools such as Ansible, Docker, and Kubernetes.
* Extensive experience in Linux system administration, including installation, configuration, and maintenance of various Linux distributions.
* Proficient in managing Kubernetes clusters using Helm for deployment, scaling, and rolling updates of containerized applications.
* Skilled in creating and maintaining Helm charts to streamline the application deployment process and ensure consistency across multiple environments.
* Leveraged AWS tools such as EC2 and S3 to build scalable infrastructure, while implementing automated deployment pipelines using Jenkins for faster and more reliable software releases.
* Utilized Jenkins and AWS Code Pipeline to automate the build, test, and deployment of applications in a DevOps environment, resulting in significant improvements in software quality and delivery speed.
* Utilized Terraform to create and manage AWS infrastructure as code, including EC2 instances, S3 buckets, and IAM roles, resulting in increased efficiency and scalability.
* Implemented best practices for infrastructure such as code using Terraform modules, version control, and automated testing, leading to faster and more reliable deployments and reduced infrastructure costs.
* Utilized GitHub to implement version control for AWS infrastructure code, allowing for collaboration and tracking of changes in a multi-developer environment.
* Implemented automated CI/CD pipelines using AWS Code Pipeline and GitHub Actions, resulting in faster software delivery and more frequent releases, while also ensuring quality and stability through automated testing and deployment.
* Designed and deployed AWS CloudFront distributions using Terraform, resulting in significant performance improvements and reduced costs for global website traffic.
* Configured custom caching behaviors, SSL/TLS settings, and geo-restriction policies using Terraform modules and AWS CloudFront features, resulting in a secure and reliable content delivery system.
* Utilized AWS WAF with Terraform to create rules to block malicious traffic and attacks, leading to increased website security and protection against common web application threats.
* Implemented AWS Security Hub to provide centralized security visibility across AWS accounts and resources, resulting in improved security posture and compliance.
* Configured AWS Security Hub integrations with other AWS services such as AWS Config and AWS CloudTrail, resulting in automated security and compliance checks and streamlined remediation workflows.
* Utilized AWS Security Hub findings to prioritize and remediate security issues, resulting in a more proactive and effective approach to security management.
* Utilized JFrog Artifactory to manage software artifacts and dependencies, resulting in improved software build and release processes.
* Configured JFrog Artifactory integrations with other tools such as Jenkins and GitLab, resulting in automated artifact management and streamlined workflows.
* Utilized JFrog Xray to scan artifacts for security vulnerabilities and license compliance issues, resulting in a more secure and compliant software delivery process.
* Proficiency working with broad Amazon Web services such as IAM, S3, EC2, VPC, Auto Scaling, Cloud Trial, ELB, Route53, Databases, Serverless / Lambda, HA Architecture, CDNs, and highly available networks.
* Utilize IAM users, DynamoDB, Virtual Private Cloud, and SNS services in AWS.
* Experience with Identity Access Management, IAM to provision new accounts, roles, and groups and preserved user accounts plus Route53, RDS, and SNS services in Amazon Web Services.
* Expertise understanding in IAM skills, Oracle suite Applications, and SailPoint applications.
* Deployment of AWS EC2 Instances, S3 Buckets, Region and Snapshots, RDS DynamoDB MySQL databases on production environment with Terraform and Ansible. Requiring the correct VPC, Security Groups.
* \*Implemented and maintained AWS Cloud Formation Templates to organize a structure for Prod / UAT / DR / Test.
* Provisioned static websites via S3 and cloud front distribution while utilizing the use of edge location for rapid process for end users.
* Deployment of AWS services and infrastructure via Terraform to ensure smooth infrastructure management.
* Developed Ansible playbooks for AWS Environment regards to efficiently manage of AMIs used by all EC2 servers.
* Experience working with Docker through writing modest Docker documents and formed on Docker Hub.
* Created AWS EC2 servers with Auto scaling groups and Elastic Load Balancers in multiple VPCs as well as utilizing Lambda Functions to efficiently manage DynamoDB.
* Developed AWS Cloud formation templates in conjunction with Terraform to install EC2 instances, VPC, and network subnets.
* Created simple Python scripts to apply and achieve AWS S3 bucket snapshots.
* Experience working with Amazon Redshift clusters. Deploying different types with specific node variations.
* Managed S3 versioning also lifecycle management policies to replica files and store files in an S3 Glacier storage class.
* Applied AWS server-less structure for example Kinesis, and Lambda through Terraform
* Installed several Azure IAAS Virtual machines in Azure atmospheres.
* Proficiency in the configuration of VPC, scripting cloud formation models, and organizing Amazon Web Services resources.
* Developed Terraform to write models for AWS automation to build your numerous environments such as Performance / Production / UAT / Test
* Broad data working with Docker for example fulfilling Docker images using Docker records.
* Functioned with several Docker container services, for example, snapshots and supervision of Docker dimensions.
* Proficiency in working with CloudWatch to monitor various AWS EC2 resources such as Memory and CPU for system and application implementation.
* Managed to terraform in Amazon web services VPC to routinely set up and amend settings by interfacing with the control layer.
* Managed Ansible in conjunction with Terraform to generate subnets, security groups, and Access Control List for generating Virtual Private Cloud.
* Deployment of automation with Cloud formation for AWS services such as EC2, Dynamo DB, Lambda, and EBS.
* Provisioned Docker images using Docker files, deleting images, and managing Docker volumes.
* Managed the IAM users, Dynamo DB, RDS, Route 53, VPC, and SNS services in the Amazon web services cloud.
* Managed Jenkins planned also implemented diverging tactics appropriate for scrum/agile, and Progressed in fast-paced Engineering circumstances.
* Created Workflow for several applications by orchestrating Test, Release, Build, and install stages through numerous CI/CD pipelines with Gitlab, Ansible, and Cloud formation tools.
* Provisioned private cloud with Kubernetes that maintains PROD, DEV, and Test Environments.
* Expertise in Design service encounter on EKS (Kubernetes).
* Grab the important Docker images from the centralized and provision containers and install them into Kubernetes Cluster.
* Expertise with GIT to collect the code and combined it into Ansible tower to implement the playbook.
* The cloud structure keeps determination with a sequence of Jenkins and Terraform for automating the CI/CD pipeline in Amazon Web Services.
* Accountable for strategy and maintenance of the GIT sources and achieved all compulsory day-to-day GIT maintenance for diverse projects.

**Cigna Inc**

**New York, New York** **February 2015 – July 2017**

**Linux / Cloud Engineer**

* Created and configure virtual cloud data centers in AWS cloud to maintain enterprise data warehouse hosting with VPC, Security Groups, Route Tables, Public and Private Subnets, and ELB.
* Proficiency in configuration management tools like Ansible
* Experience operating Ansible, for configuring and managing servers, merging multi-node software utilization, ad hoc task performance, and configuration management.
* Knowledge of working with Ansible Tower, also installing playbooks using Ansible Tower.
* Arranged and fulfilled Ansible configuration managing system in UAT testing environment, Development, QA environment, and production environment.
* Delivered durable and obtainable data by utilizing S3 data storage, as well as provisioning AMIs for production servers for backup.
* Developed Ansible modules with the ad hoc task execution to get it across numerous environments variations in configuration Files, also supervisions Packages.
* Deliberate and utilize an actual simple Ansible playbook on the UAT testing environment to achieve the configuration of NFS and automate the installation process on RHEL 6.8 / RHEL 7. x
* Expertise on Amazon Web Services (AWS), Cloud Front, RDS, Auto Scaling, SQS, SES, Lambda, Route53.
* Utilized, established, and planned a dashboard control panel for clients with Oracle DB, VMWare API calls, and PostgreSQL.
* Utilized the configurations of several servers with Ansible. And install services for example FTP, Postfix, NFS, and Apache.
* Functioned on multiples Ansible modules in a playbook for example file, copy, service, shell command.
* Experience working through AWS cloud setup, for example EC2, VPC, EBS, IAM, CloudWatch.
* Design AWS Amazon RDS with Multi-AZ for automatic failover polices.
* Utilize AWS EC2 instance using deviation of many instances type such as M4 large, T2 micro.
* Provisioned S3 buckets in the AWS environment to store files and configure web hosting.
* Utilized CloudWatch to monitor several AWS resources, for example, EBS, ELB, S3, and EC2 along with executing alarms to monitor numerous metrics like CPU or RAM, etc.
* Worked on several networks ACLs & security groups for AWS VPC.
* Managing backups along with improving AWS EBS storage devices by taking snapshots. Applying it across many AWS EC2 instances through with AWS Command Line Interface.
* Provisioned Ansible playbook scripts via YAML file to program AWS services which contains CloudFront Distribution, Relational Database, ELB, AWS EC2, and Security Group.
* Applied Samba, a collective directory in conjunction with Windows 2008 and Windows 2012. troubleshoot the user issues associated with Selinux.
* Knowledge in Administrating Red Hat – Linux backup and re–establish with star, tar, and with data formatting disk and segmentation.
* Energetic maintenance of systems by updating patches and setting up of cron jobs to systems as well as applications.
* Managing and installing SAMBA software for allocation files as well as window virtual machines.
* Providing RHEL servers accompanied by Security and GIS kernel patching, with Blade Logic Server Automation.
* Kickstart servers based off RHEL 6.x / 7.x in creation, progress and testing the circumstances.
* Capability of installing Firewall, Selinux & security structures with IP tables, UDP/TCP, and KERBEROS.
* Maintained AWS infrastructure as code with Terraform. Proficiency in writing new plugins to maintain new functionality in Terraform.
* Conveyed support for Fabrication Environment, on-call revolution highlighted in 24/7 circumstances.
* Performing and managing security, method observing, rights, disk space, users, and profiles.
* Knowledge in maintaining Logical Volume Management [LVM], Disk partitioning, accompanied by Raid.
* Proficiency in working and mounting packages with Package Management implements with YUM & RPM.
* Improved scripts to develop obtainable build and troubleshooting procedures with bash shell.
* Determining TCP/IP, UDP associated networking matters on RHEL/ Centos systems.
* Utilized and managed Linux KVM servers to check UAT and Progress environment to achieve modesty applications and software.
* Operated Pxe-Boot and kickstart to provision Linux KVM servers and preserved network support.
* Proficiency in fulfilling Postfix in invention environments.
* Mainly in charge of keeping the servers (70% VMware and 30% BM which contains IBM, HP, and Dell hardware) up and running along with requiring direct user maintenance for any technical matters associated with Linux and Windows Systems.
* Provisioned servers inside the data center with Kickstart.
* Provisioning and managing Redhat, CentOS, and Windows systems with automation tools (HP SA) along with PXE-boot with kickstart.
* Creating and improving servers (HTTPD, DHCP, NIS, DNS) and all-purpose servers operating PXE-boot via kickstart.
* Mounting and improving the software on Linux (rpm and yum) and Windows Systems with Ansible.
* Starting NIS domains on Redhat, CentOS also Solaris systems, which include organizing servers and customers roles.
* Scheduling auto-mounts for home directories in different areas.
* Checking the health of setup servers and mission spiteful servers with Nagios XI
* Received Ticket alerts and resolved in an efficient and timely schedule.
* Constructing and maintaining Vmware ESXI servers.
* Mounting and managing Virtual Machines with KVM hypervisor.
* Giving direct user support for level 2 and level 3 concerns through email and ticket system.
* Resolving simple network connectivity concerns using tools for example TCP dump, and Wireshark.
* Provisioning and bring up to date iptables rules on Linux systems via host-based firewall.
* Resolving problems associated with user logon, NFS, and server connectivity.
* Set up Linux (RHEL 5/6, CentOS, and Ubuntu 12, 14) on HP blade, Dell R series servers also VMware ESXI 5.5 with PXE via kickstart.
* KSH knowledgeable at mounting, and troubleshooting as cron designed for Prod.
* Operated RPM and YUM designed for package administration in addition to installation, accompanied by patch management with server automation tools.
* Designing altered RAID levels on diverse hardware.
* Provision groups, added Users ID to a group as a principal or less important group, detaching Users ID from a group other than adding users in sudoers file.
* Established and maintained Logical Volume with LVM to provision volumes on the volume groups, also file systems.
* Knowledgeable with simple Python scripting
* Utilize vi editor to revise a variability of configuration records.
* NFS Administration, transferring file systems, increasing transmitting file systems, operational NFS daemons, and resolving any mounting problems.
* Networking SSH, DNS, DHCP, TCP/IP, Cisco Routers/Switches, also LAN
* Establishing and managing Linux VMs on VMWare ESXi using VSphere, Vmotion, Vcenter.
* Programing all features of VMware VSphere set-up with VRealize Orchestrator, VMware.
* Relating patches and upgrading, on ESXI nodes.
* Fulfill observing infrastructure NagiosXI on the assembly server. Along with the distribution of NagiosXI observing 100 servers.
* Determining package reliance problems in Linux.
* Provisioning and managing new VM boxes using Linux virtual machine scripts.
* Achieving substantial virtual machine transitions.
* Attributing NAS storage to Linux, provisioning standard segregates, establishing physical volumes, group volume, logical volumes, and extending/reducing logical volumes.
* Implementing file system checks and fixing when required
* Operated chmod, chgrp, chown permissions, and iptables to achieve LVM file system and security matters.
* Set up network adapters for IP addresses and set routing-related problems.
* Implement software package system, upgrading and updates with RPM and YUM commands.
* Analysis and installing security patches to the number of systems on Dev and Production circumstances.
* Functioning serious system administration duties from Single user mode
* Establishing and designing Apache HTTPD server to be run by the designer to host web applications within.
* Provisioning firewall rules in iptables, firewalld.
* Designing NFS server and supporting transmitting NFS sources at the customer’s side.
* Scheduling protected passwordless SSH authentication on servers using SSH key pair
* Observing and monitoring system development using renice, top, and kill.
* Utilizing IP address managing Men and Mice to address and troubleshoot problems like DHCP and DNS.
* Supervised system logs and activity on all the servers
* Contributed in 24/7 on call maintenance of Linux and various applications delivered technical support.
* Put together NTP client on servers to coordinate time zone with the NTP server

**EDUCATION**

UNIVERSITY OF SARGODHA June 2014

Bachelor of Science in Business Sargodha, Pakistan