Yousuf Khan

PROFESSIONAL SUMMARY:

Over 7+ years of IT experience in DevOps life cycle using CI/CD pipelines and migrating On-premise infrastructure to cloud platformsAws/Azure and infrastructure orchestration using containerization technologies. Experience in Cloud implementations [AWS, Azure] involving extensive work towards code compilation, packaging, building, debugging, automating, managing, tuning and deploying code across multiple environments yet flexible in multitasking when necessary. Proficiency in writing automation scripts to support infrastructure as code in AWS/Azure and Linux/Windows Administration.

- Experience in architecting and Configuring public/private cloud infrastructures utilizing Amazon Web Services (AWS) including EC2, Elastic Load-balancers, Elastic Container Service (Docker Containers), S3, CloudFront, RDS, DynamoDB, VPC, Direct-Connect, Route53, CloudWatch,Kinesis, CloudFormation, IAM.
- Used Microsoft SSIS using SSIS Power pack used to migrate to AWS Redshift data warehouse.
- Extensively worked on Jenkins and Hudson for CI (Continuous Integration) and CD (Continuous Deployment) methodologies and for End to End automation for all build and deployments.
- Architect and design severless application CI/CD by using AWS Serverless(Lamda) application model.
- Administered and Engineered Jenkins for managing weekly Build, Test and Deploy chain, SVN/GIT with Dev/Test/Prod Branching Model for weekly releases.
- Experience in code deployment and writing Cloud Formation Templates for AWS Infrastructure as a Code using Terraform.
- Monitored RDS instances, Elastic Cache and Elastic Load Balancer for performance and availability and used Cloud Watch to monitor instances.
- Custom integration, plugins dev for different tools around CI-CD like GIT, JENKINS, Artifacory, Rally, Guard, Reporting and Dashboards using API and other techniques.
- Created computing and data resources on AWS using EC2. Installed Pivotal Cloud Foundry on EC2 to manage the containers created by PCF. Used Docker to virtualize deployment containers and push the code to EC2 cloud using PCF.
- Used OpsCenter to monitor prod, dev, test, and Cassandra clusters
- Configured and Installed GIT with TFS as VSTS.
- Worked on creating ASP.NET, MVC, WCF and REST API application development.
- Developed microservices onboarding tools leveraging Python and Jenkins allowing for easy creation and maintenance of build jobs and Kubernetes deploy and services.
- Setup code repositories like SVN, GIT, and TFS and managed plugins for Jenkins for scheduled automatic checkout of code. Automate the Build and deploy of all internal Java environments using various continuous integration tools and scripting languages.
- Installation and configuration of ELK stack (Log Management tool) in both legacy and Docker swarm mode.
- Worked on infrastructure with Docker containerization. Collaborated with development support teams to setup a continuous delivery environment with the use of Docker.
- Experience with container-based deployments using Docker, working with Docker images, Docker Hub and Docker registries and Kubernetes.
- Configured Chef Server Enterprise on premise /workstation /bootstrapped the nodes using knife and automated by testing Chef Recipes/Cookbooks with test-kitchen/chef spec.
- Managed Chef Server in pushing the infrastructure change to client nodes, monitoring the logs and security.
- Written Chef Cookbooks and recipies for various packages. Implemented environments, roles, databags in Chef for better environment management.
- Experience in integrating non-standard logs and sources into Splunk including SQL queries, scripted inputs and custom parsers.
- Experience in Artifact deployment using MAVEN and GRADLE as build tools along with automation using Playbook development and deployment.

- Managed Ubuntu, Amazon Linux and RHEL virtual servers on AWS EC2 instance by creating Ansible Nodes.
- Experience deploying and operating AWS, specifically VPC, EC2, Amazon Lambda, S3, EBS, IAM, ELB, Cloud Formation and Cloud Watch using the AWS console and AWS CLI.
- Good scripting knowledge on Pearl, Bash, Shell, Groovy, Python& Developed python, and shell scripts for automation of the build and release process.
- Supported API development team in creating Ansible playbooks for deploying, integrating, and monitoring their continuous integration environment.
- Extensively experienced in using Build and Automation tools like ANT and Maven, Gradle.
- Management done utilizing Puppet, Ansible for automation and AD authentication.
- Supported the process of first time configuration of Web Applications using Vagrant along with Puppet and Chef for provisioning. Install and configure the Databases servers like Oracle 9i, 10gstart Servers.
- Responsible for build and deployment of Java applications on to different environments such as QA, UAT and Production and Implementation of NAT gateways for web apps hosted in private subnets. Integration of application with monitoring tool new relic for complete insight and proactive monitoring.
- Experience in Monitoring infrastructure to identify and troubleshoot issues on servers using tools like Nagios, Splunk and JIRA.
- Expertise in Predix-Cloud Services (Enterprise Connect, Redis, Kibana, Predix-Views, Logstash, UAA).
- Experience in using different source code version control tools like GIT, Subversion (SVN), and TFS.
- Experience in Installing, upgrading, and configuring Red Hat Linux 4.x, 5.x, 6.x and 7.x using Kickstart.
- Able to install, configure the MYSQL, Apache, Tomcat, and WebLogic.

PROFESSIONAL EXPERIENCE:

Intuit, Mountain View, CA   **June 2016 – Present**
Cloud AWS/DevOps Python Engineer

Environment:
Redhat Linux 7.x,AWS EC2, VPC, ELB, S3, Cloud Trail and Route 53, Post GRE,VDI, ELB, CloudWatch,CloudFront, AWS CLI, Cloudformation, IAM, AWS AutoScaling, Linux, Git, Docker, Lambda CHEF, JENKINS, Cloud Foundry, VSTS, Ruby CHEF, JIRA, Confluence,Datadog, Maven, Artifactory, GITHUB, Ubuntu, CentOS.

Responsibilities:
- Involved in designing and deploying a multitude application utilizing almost all AWS stack (EC2, S3, VPC, ELB, Auto Scaling Groups, Route 53,Cloud Front, IAM, CloudFormation, Lambda, Glue, SQS, Kinesis) focusing on high-availability, fault-tolerance and auto-scaling.
- Designed AWS Cloud Formation templates to create custom sized VPC, subnets, NAT to ensure successful deployment of Web applications and database templates.
- Managing various database services by AWS like RDS, DynamoDB and Elastic cache.
- Used AWS Lambda to Automate log handling process for blacklisting bad IPs in AWS WAF.
- AWS tasks such as migrating applications to Cloud, importing volumes, optimizingEC2, configuring and migrating to RDS, S3 storage, creating security groups, auto-scaling, elastic load balancers (ELBs), Route53.
- Virtualized the servers on AWS using the Docker, create the Docker files and version control to achieve Continuous Delivery goal on high scalable environment, used Docker coupled with load-balancing tool Nginx.
- Maintaining a farm of EC2 instances, ELB's and RDS.
- Worked on Cloud automation using AWS Cloud Formation templates.
- Evaluating testing of CHEF Recipes - Concept of Test Driven Development for Infrastructure as a Code.
- Automate Continuous Build and Deploy Scripts for JENKINS Continuous Integration tool.
- Implemented continuous integration using Jenkins and VSTS.
- Automated the cloud deployments using CHEF, PYTHON (boto & fabric) and AWS Cloud Formation
- Setup load balancers in front of auto scaling groups in AWS to create a dynamically scalable production environment able to handle large swings in load.

- Optimized the Cassandra cluster by making changes in Cassandra properties and Linux (Red Hat) OS configurations.
- Implemented automated local user provisioning in instances created in OpenStack cloud through Ansible Play books.
- Architected, planned, developed & maintained Infrastructure as code using CI/CD deployments using Terraform.
- Used Artifactory to set up several Docker registries, using local, remote and virtual Docker repositories.
- Management and AWS infrastructure automation using Cloud formation and Terraform.
- Experience in Implementation of Continuous Integration and Continuous Delivery and other tooling as needed to support internal and customer development efforts to customize and enhance OpenStack.
- Automated the cloud deployments using AWS Cloud Formation Templates.
- Developed scripts using ruby to automate and unify multi-node chef deployment, cloud verification, benchmarking, and profiling.
- Created alarms and triggers using Cloud Watch based on thresholds, Utilized Nagios and Splunk and ELK, New Relic for monitoring, also utilized Kibanna and Grafana as visualization tool Writing chef recipes for various applications and deploying them in AWS using Terraform.
- Creating the Docker containers and Docker consoles for managing the application life cycle. Responsible for Build and Install Schedules using Unix Cron jobs.
- Experience with setting up Chef Infra, bootstrapping nodes, creating and uploading recipes, node convergence in ChefSCM.
- Experience in RDBMS and NoSQL installation and support including Oracle, SQL Server, MySQL, Post GRE, AURORA and MongoDB.
- AWS EC2/VPC/S3/SQS/SNS based infrastructure automation through Ansible, Python, Bash Scripts.
- Actively involved in architecture of DevOps platform and cloud solutions.
- Integration of Automated Build with Deployment Pipeline.
- Install and configure the application servers such as Apache Tomcat and JBoss for application deployment, and automated using Chef.
- Involved in writing recipes and cookbooks for configuration management to manage EC2 instances running on AWS using Opscode chef.
- Experience in Agile Methodology and Agile Engineering practices like TDD, Continuous Integration, Continuous Deployment Experience in DevOps tool like Git, JIRA, Jenkins, Maven, Jfrog Artifactory and Gradle.
- Set up JENKINS server and build jobs to provide continuous automated builds based on polling the GIT.
- Used ANT and Maven plugins to integrate Jenkins with GIT for building java projects.
- Installation of Solaris 8, 9 based servers with Jumpstart and RedhatLinux EL 4.x based servers using Kickstart development, test, and production environments.
- Integration of GIT with Jenkins to automate the code check-out process with the help of Jenkins DSL Plugin.
- Installed and configured GIT and communicating with the repositories in Bitbucket.
- Managed local deployments in Kubernetes, creating local cluster and deploying application containers.
- Configured AWS Identity and Access Management (IAM) Groups and Users for improved login authentication.
- Performed necessary day to day GIT support for different projects, Created and maintained GIT repositories, branches tags and Migrated on premises Databases to AWS cloud.
- Setting up JIRA as defect tracking system and configured various workflows, customizations and plug-ins for the JIRA with SVN and Jenkins.
- Managed and configured Various Atlassian Tools like JIRA, Confluence.

Northwestern Mutual, San Francisco, CA   **Nov 2014 – May 2016**
Cloud Automation Engineer

Environment:
Artifactory, Subversion(SVN), AWS (IAM, EC2, S3, CFT, AMI, VPC, Glacier) GIT, Redis, ANT, MAVEN, Java/J2EE, Jenkins, JIRA, Chef, LINUX, XML, Selenium, Junit, Perl Scripts, Shell Scripts, Nginx, UNIX.

Responsibilities:
- Developed and supported the Software Release Management and procedures.

- Responsible for migrating and managing multiple applications from on premise to cloud using AWS services like S3, Glacier, EC2,CloudFront, RDS, SQS, SNS, SES, CloudFormation, VPC etc.
- Configured and maintained user accounts for dev, QA, and production teams and created roles for EC2, RDS, S3, CloudWatch, EBS resources to communicate with each other using IAM.
- Participated in the release cycle of the product which involves environments like Development, QA, UAT and Production.
- Creating Cloudwatch alerts for instances and using them in Auto scaling launch configurations and configured Route 53.
- Migrated present Linux environment to AWS/CentOS/RHEL by creating and executing a migration plan per scheduled timeline to complete the migration.
- Automated the cloud deployments using AWS Cloud Formation Templates.
- Used Identify and Access Management (IAM) to assign roles and to create and manage AWS users and groups and use permissions to AWS resources.
- Responsible for Branching and Merging the code as per the schedule.
- Used ANT and MAVEN as a build tools on java projects for the development of build artifacts on the source code.
- Provided pre-commit hooks and post commit hooks for Subversion.
- Configured AWS EC2 Instances using AMIs and launched instances with requirements of specific applications.
- Installed Chef-Server Enterprise On-Premise/WorkStation/ Bootstrapped the Nodes using Knife.
- Configured and integrated the servers for different environments to automatically provision and configuration management of Linux instances using CM/ Provisioning tool Chef.
- Maintained and coordinated environment configuration, controls, code integrity, and code conflict resolution.
- Used AGILE MVN method to develop a build and ANT as a build tool.
- Experience in integrating Unit Tests and Code Quality Analysis tools like JUnit, Selenium.
- Worked on creating tickets for bug stories and feature stories in JIRA with co-ordination of QA/BA team and issued it to developers to fix bugs and include necessary feature add.
- Setting up JIRA as defect tracking system and configured various workflows, customizations and plug-ins for the JIRA with SVN and Jenkins.
- Involved with ATDD automation using Ruby, Cucumber and Selenium testing frameworks in Test Environments. Built an on demand dedicated server hosting platforms using Docker, Golang and Redis.
- Create documentation for Chef best practices to be used by developers as a guide to Chef Automation.
- 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.
- Used Artifactory to set up several Docker registries, through the use of local, remote and virtual Docker repositories.
- Integrated JIRA and SVN to do the pre-commit checks using hook scripts.
- Worked on Apache to Nginx migration, also fine-tuned configurations with rigours performance testing.
- Involved in writingPerl and shell scripts for automation of the build and release process.
- Assisted with maintaining current build systems, developed build scripts, and maintained the source control system.
- Infrastructure management, infrastructure healthmetrics and performance monitoring using CloudWatch, Nagios, Datadog and Splunk.
- Worked on User administration setup, maintaining account, monitor system performance using Nagios & OpsGenie.
- Implementing a Continuous Delivery framework using Jenkins, Chef, Maven in Linux environment.
- Responsible for the Plugin Management, User Management and END-END build and deploy setup using Jenkins.
- Supporting different projects build & Release SCM effort e.g. branching, tagging, merge etc.
- Developed UNIX and Perl Scripts for the purpose of manual deployment of the code to the different environments and E-mail the team when the build is completed.
- Worked with development, testing, deployment, systems/infrastructure and project teams to ensure continuous operation of build and test systems.

Ellie Mae, Pleasanton, CA   **Oct 2011 - Nov 2014**
AWS DevOps Engineer/ Build & Release Engineer

Environment:
SVN, Jenkins, Nexus, GIT, ANT, MAVEN, Perl, Puppet, Ansible, Python Scripts, Shell Scripts, Sonar, Red Hat Kickstart server, Splunk.

Responsibilities:
- Defined and Implemented CI and Release Management Processes, Policies, and Procedure.
- Automated the release pipeline to achieve zero touch deployments using Jenkins, SVN, Nexus, and Nolio.
- Worked with SVN and GIT version controlling
- Creation and management of branches, merging branches, deletion of obsolete branches after every release.
- Writing the post-commit and pre-push hooks in Python for code checks.
- Coordinate/assist developers with establishing and applying appropriate branching, labelling/naming conventions using Subversion (SVN) source control.
- Analyze and resolve conflicts related to merging of source code for SVN.
- Developed Scripts for AWS Orchestration using EC2, EBS, S3, Cloud Formation and IAM.
- Develop/capture/document architectural best practices for building systems on AWS.
- Goal is to build a HA proxy Infrastructure so that two docker containers are running behind Application load balancer.
- Installed Ansible Registry for local upload and download of Docker images and even from Docker hub.
- Implement, maintain, and support reliable, timely and reproducible builds for project teams.
- Maintained build related scripts developed in shell for Maven builds.
- Created and modified build configuration files including POM.xml.
- Experienced in authoring pom.xml files, performing releases with the Maven release plugin, and managing artefacts in Sonatype NEXUS repository.
- Utilized Perl and Python for GIT for creating repository hooks
- Used Maven dependency management system to deploy snapshot and release artefacts to Nexus to share artefacts across projects and environments.
- Configured and maintained Jenkins to implement the CI process and integrated the tool with ANT and Maven to schedule the builds. Took the sole responsibility to maintain the CI Hudson server.
- Used Ansible for configuration management and deployed all the services on to the cloud using Ansible.
- Used Ansible playbooks to setup Continuous Delivery pipeline. This primarily consists of a Jenkins and Sonar server, the infrastructure to run these packages and various supporting software components such as Maven, etc.
- Integrated Ansible to manage all existing servers and automate the build/configurations of new servers
- Scripted cross-platform automation solutions in Python, Ruby, and Shell.
- Designed and implemented new procedures for infrastructure migration using Puppet.
- Automated deployment of Linux applications, system configuration and security settings using Puppet Enterprise.
- Implemented Puppet modules to automate configuration of a broad range of services.
- Expertise in build and deployment automation using Vagrant, VMWare ESX, Docker containers and Puppet.
- Using various tools such as Ant, Maven, Jenkins, VSTS and Chef, I have established release management processes for the existing Java based applications and established automated build processes that were non-existent previously
- Responsible for Deployment, automation, and installation of servers via Puppet.
- Configured the IT infrastructure as code writing manifests, classes, and modules in Puppet.
- Replaced non-functioning RedHat Kickstart server, allowing servers to be built at remote sites to accommodate customer requests during company's peak sales season.
- Development of SPLUNK Queries to generate the Report
- Administered and managed a Splunk server to monitor both Windows and Linux physical and virtual environments.
- Automation/Simplification of Digital Guarding Process through SPLUNK.
- Implemented Kickstart/PXE Boot Servers that Rsync between multiple locations.
- Provided Tier 1 (Help Desk) problem identification and Tier 3 (Watch Desk) support during normal to semi-critical situations.

Cloud services
- AWS(EC2/SQS/SNS/S3/IAM/ELB), Azure, Rackspace, Openstack, CloudFront,Amazon Kinesis

Operating System
- Windows98/XP/NT/2000/2003/2008, UNIX, IOS, Red Hat LINUX, Ubuntu, Fedora.

Scripts
- Shell Script, CMake, Batch Script, Groovy, Perl Script, PowerShell Script.

CI & Provisioning Tools
- Hudson, JENKINS, Bamboo 5.11, Ansible, CHEF, PUPPET.

Languages
- C, C++, SQL, .NET, PYTHON, Spring, Ruby, Objective C, Java/J2EE.

Virtualization Platform
- VMWare ESXi 6, VSphere ESXi 5.5, VM Ware ESX 3.x, VM Ware VSphere 4.x

Monitoring Tools
- Nagios, Splunk, JFrog, Grafana, AWS cloud monitoring

Build   Tools
- ANT, MAVEN, Gradle, Docker.

Bug Tracker & Testing Tools
- JIRA, Bugzilla, Remedy, Junit, IBM Clear, Quest, Findbug Static

SCM Tools
- Subversion, GIT, CVS, AWS, TFS and Bitbucket

Web Technologies
- Servlets, JDBC, JSP, HTML, Java Script, XML, JSON.

Web/App servers
- WebLogic, Web Sphere, Apache Tomcat, RHEL, JBOSS.

Tools
- MS Office Suite, Nexus, Atlassian Confluence.

SDLC
- Agile, Scrum Waterfall Methodologies.

Container Orchestration Tools
- Docker, EC2 Container Services, Docker Swarm, Kubernates