Ahsan Hassan

1, The Orangery, EARLEY, READING, Berkshire RG6 1FH, UK **| +44 (0)7405187706** **|** [ahsanhassan172@gmail.com](mailto:ahsanhassan172@gmail.com)|

# Summary

Highly experienced, solution-oriented professional with 10+ years of experience of remarkable background in overseeing all aspects of the software Development Life Cycle, from extensive analysis and design through execution and maintenance. Proficient in utilizing a wide variety of programs and tools to provide high quality and cost-effective applications/systems to boost organizational efficiency and productivity.

# Skill SEt

## Cloud Computing

|  |  |
| --- | --- |
| * AWS (Amazon Web Service) | * IAAS |
| * EC2 | * PAAS |
| * S3 * EBS * IAM | * SAAS * Cloud Foundry (CF) * Cloud Formation |

|  |  |
| --- | --- |
| * Docker |  |
| * Vagrant * Kubernetes |  |

## Containerization tools

## Scripting Languages/ Programming Langauges

|  |  |
| --- | --- |
| * Java Script | * Java |
| * Java Beans | * JSP |
| * Type Script * Ruby * React JS * T-SQL * Ant * VB script * C * C++ * PowerShell * Jira * Groovy | * jQuery * Node JS * HTML * C, C# * Maven * Bash * Go * Chef * Ansible * SQL (PostgreSQL, Oracle) * Python |

## Databases

|  |  |
| --- | --- |
| * SQL Server * Mango DB * NoSQL * MySQL | * Oracle * IBM DB2 * PL/SQL |

## SLDC Methodologies

* Agile Methodologies
* Scrum
* Waterfall

## Build Tools

* Gradle
* Maven
* Ant
* Open Make

## Automation Frameworks

* Pipeline
* TestNG
* Selenium Web driver
* Junit
* Nunit

## Operating System

* Windows
* Unix
* Linux

## Continuous Integration and Delivery (CI & CD)

* Jenkins
* TeamCity
* Chef
* Puppet
* Ansible
* Apache Tomcat

## Source Code Control Systems

* TFS
* SVN
* Git/ GitHub

## Infrastructure as Code

* Cloud Formation
* Terraform

|  |  |
| --- | --- |
| * XHTML * XML * XSL * XSLT | * JSON * Node.js * JavaScript * Knockout. Js |

## MarkUp Languages

## Version Control Tools

|  |  |
| --- | --- |
| * Visual Source Safe * Team Foundation Server (TFS) * Object Oriented Development (OOD) * GIT * CVs | * Subversions * Test Driven Development (TDD) * Behaviour Driven Development   (BDD) |

# Professional Certificates

* Microsoft Certified Solutions Associate-Cloud Platform-Implementing MS Azure Infrastructure Solutions (70-533)
* Microsoft Certified Professional- Cloud Platform Architecting Microsoft Azure Solutions (70-535)
* Microsoft Certified Professional: Cloud Platform Certification Number: G944-2507
* AWS Certified Solutions Architect Professional Validation Number: TLYMHHJ2B2E4Q9S0
* Google Cloud Certified Professional Architect Certification ID:9iCamR
* CCNA (Routing & Switching)

# Qualification

* Master of Science in Inter-networking from University of Alberta, Canada
* Bachelor of Science (BSc.) in Electrical Engineering (Majors in Computers)

# Professional Experience

## Vodafone April 2021 – November 2021

### Senior Devops/GCP Devops Engineer/ Senior Platform Engineer

* Building/Maintaining Docker/ Kubernetes container clusters managed by Kubernetes Linux, Bash, GIT, Docker, on GCP.
* Experience in creating AWS AMI, have used Hashi corp Packer to create and manage the AMI's.
* Integrated Kubernetes with Hashicorp Vault to inject configurations at runtime for each service using init, config sidecars and persistent volume sharing between app and config containers.
* Performed all necessary day-to-day Git support, implemented, maintained the Branching, Build/Release strategies utilizing Git repositories.
* Implemented Continuous Integration using Jenkins server with Maven plugins and automated the build triggers to the testing environment.
* Deploy using Force.com IDE tool, Ant Migration Tool & Gear Set from sandbox to UAT and production environments.
* Implemented Chef best-practices and introduced Berkshelf and Test Kitchen to facilitate a more natural cookbook development workflow.
* Hands on experience in troubleshooting vCenter and ESXi issues and also in system hardware failures
* Detailed Knowledge and experience in building Docker images and publishing to private Docker registry.
* Created and Configured Kubernetes cluster on AWS using KOPS and cloud formation templates.
* Hands on experience in creating CI/CD pipeline and configured all the build credentials and users in Jenkins.
* Configured CI/CD tools Jenkins, Maven, Ant, and GitHub repository for the continuous smooth build process.
* Worked on google cloud platform (GCP) services like compute engine, cloud load balancing, cloud storage, cloud SQL, stack driver monitoring and cloud deployment manager.
* Configured and deployed GIT repositories with branching, forks, tagging, merge requests and notifications.
* Set up Git repositories and SSH Keys for Agile teams.
* Design and implement application infrastructure components for WPF, WF, WCF, SSRS, SSAS components.
* Design and implement automated deployment solutions for different project types like WPF, IIS applications, Windows services, SSRS reports, SSIS packages, SQL Database projects using TeamCity and Octopus Deploy.
* Installation, configuration, administration and maintenance of VMware ESXi 6.0,5.5,5.1 hosts and Windows Server 2008 and Server 2012 Virtual Machines and VM templates.
* Created applications using ReactJS, Restful APIs and GraphQL Databases including MySQL, PostgreSQL, Oracle and SQL Server databases and hosted these apps in Docker containers on ECS or within AWS environment.
* Extensively worked on Jenkins CI/CD pipeline jobs for end-to-end automation to build, test and deliver artifacts and troubleshoot the build issue during the Jenkins build process.
* Involved in installing Jenkins on Linux environment and implemented a Master and Slave configuration to run multiple build operations in parallel.
* Integrated Jenkins with various DevOps tools such as Nexus, SonarQube, Chef, Docker etc
* Writing and Implementing Ansible Playbooks and Ansible Roles for configuration management as part of micro services implementation and deployments.
* Developed new RESTful API services that work as a middleware between our application and third-party APIs that we will used using Golang.
* Implemented real time log analytics pipeline using Confluent Kafka, storm, elastic search Logstash kibana, and Greenplum.
* Used AWS Bean Stalk for deploying and scaling web applications and services developed with Java, PHP, Node.js, Python, Ruby, and Docker on familiar servers such as Apache, and IIS.
* Worked on Amazon Web Services like EC2, S3 bucket, RDS, EBS, ELB, Auto-Scaling, AMI, Cloud Watch, Cloud Formation, Route53, IAM through AWS Console and API Integration with Puppet Code.
* Extensive experience in using Continuous Integration tools like Cruise Control, Jenkins, Build Forge, Team City, Bamboo and Hudson.
* Added NuGet and Chocolatey files when needed for CI deployment from Visual Studio.
* Involved with Identity & Access Management Services on deployment, implementation and operations of Privileged Identity tool, CyberArk.
* Create, design and develop the automated software disaster recovery solutions by setting up the server backup and restore solutions.
* Hands on experience in test driven development (TDD), Behavior driven development (BDD) and acceptance test driven development (ATDD) approaches.
* Developed custom consumers and producers for Apache Kafka in Go (Golang) for cars monitoring system.
* Build servers using AWS Importing volumes, launching EC2, creating security groups, Auto-scaling, load balancers, Route53, SES and SNS in the defined virtual private connection (VPC).
* Set up and maintained Logging and Monitoring subsystems using tools loke; Elasticsearch, Fluentd, Kibana, Prometheus, Grafana and Alertmanager.
* Installed VMware ESXi 5.5 and 6.x, vSphere Server and VMware vCenter server in rack servers and maintained VMware servers with multiple VM’s, running a multi VLAN physical and VM environment.
* Installed Pivotal Cloud Foundry (PCF) on instances to manage the containers created by PCF.
* Used Docker to virtualize deployment containers and push the code to instances cloud using PCF.
* Used Jenkins as Continuous Integration tools to deploy the Spring Boot Microservices to Pivotal Cloud Foundry (PCF) using build pack.
* Extensive experience in importing streaming data into HDFS using stream processing platforms like Flume and Kafka.
* Worked on designing, Implementing, and managing CI/CD pipelines and Kubernetes using EKS service.
* Implemented Route Guards for Authentication , used HTTPClient in Service to connect with URLs from Web API, used Postman to test Web API.
* Setup Multinode Kafka Cluster with Zookeeper and used Kafka to do real - time stream processing of data ingested from mupliple datasource into Elasticsearch.
* Involved in the design and development of Web Application in C#.NET, ASP.NET, user controls and deployment of the applications in the Cloud Environment.
* Strong experience in Jenkins, Proposed and implemented branching strategy suitable for agile/scrum development in a Fast-Paced Engineering Environment.
* Worked with Agile methodology in XL Deploy and XL Release, CI/CD automation from scratch, Docker, Openshift)
* Executes queries in NoSQL databases like Cassandra, MongoDB, Elasticsearch and GraphQL (Appolo and Relay server libraries).
* Integration of user-facing elements developed by front-end developers with server side logic using Node.js.
* Created and maintained user accounts, roles on NOSQL, production and staging servers.
* Worked on REST APIs in configuring the changes and to maintain Index points.
* Worked with ESXi server’s configuration, installation, maintenance and patch management using VMware Update Manager.
* Migrated and Managed VMware Esxi - 5.0 and 6.0, Worked on VMware capacity planning.
* Hands on experience on disaster Recovery planning of DevOps environment tools Jira, Confluence and Artifactory.
* Worked with AWS CloudFormation Templates, terraform along with Ansible to render templates and Murano with Orchestration templates in OpenStack Environment, also worked with Ansible YAML Automation scripts to create infrastructure and deploy application code changes autonomously.

## Devops World/Ericsson june 2019 – March 2021

### Senior Devops Engineer

* Worked in DevOps team and was responsible for building infrastructure and successful Application Build deployments for UAT and Production environments (Windows 2012/2008, IIS 7/8, SQL Server 2012, Azure)
* Worked on creating deployment scripts using PowerShell and automated multiple daily maintenance tasks using PowerShell.
* Good knowledge on NoSQL Data bases such as HBase, Cassandra, Redis and using SPARK streaming for real time stream processing of data into the cluster.
* Installed Confluent Kafka open source and enterprise edition on Kubernetes using the helm charts of 10-node cluster and applied security SASL/PLAIN and SASL/SCRAM and pointed the cluster for outside access.
* Build whole stack including AWS EC2 Redhat Linux, ALB/NLB, Security Group and EBS Volume using Cloud Formation script and Jenkins.
* Experience of DevOps implementation across the full stack (Database, Services, Code, Deployment & Monitoring).
* Experience in migrating and implementation of multiple applications from on premise to cloud using AWS services like SMS, DBMS, CloudFormation, S3, Route53 Glacier, EC2, RDS, SQS, SNS, Lambda, and VPC.
* Create load balancers i.e., ELB and used Route53 with failover and latency options for high availability and fault tolerance.
* Extensively worked With VMware ESXi 5.1/5.5/6.0, vCenter Server, Host Clustering with HA, DRS, Replication.
* Implemented AWS solutions using EC2, S3, RDS, VPC, Elastic load balancer, Auto-scaling groups, Route53.
* Experience managing AWS Route53 to route traffic between different regions set alarms and notifications for EC2 instances using Cloud Watch.
* Set-up databases in GCP using RDS, storage using S3 bucket and configuring instance backups to S3 bucket. prototype CI/CD system with GitLab on GKE utilizing Kubernetes and Docker for the runtime environment for the CI/CD systems to build and test and deploy.
* Worked on google cloud platform (GCP) services like compute engine, cloud load balancing, cloud storage, cloud SQL, stack driver monitoring and cloud deployment manager.
* Installed, deployed and managed Linux RedHat Enterprise 7.x, CentOS, Ubuntu, and installed patches, packages for Red Hat Linux Servers.
* Strong experience in managing VMware infrastructure with Virtual Center Server and migration of virtual machines to ESXi 5.5
* Developed different environments of different applications on Google cloud by provisioning Kubernetes clusters on GCE instances and GKE using Docker, Ruby, Bash and Python.
* Worked extensively with Service Mesh platforms with working knowledge on Istio.
* Experienced in automating various web applications and web services using SOAPUI and Cucumber implementing with JUNIT and TestNG
* Highly skilled in implementation and execution of automation test in Selenium WebDriver, TestNG, JUnit and creating reports by using ANT and Maven
* Created automated pipelines in AWS Code Pipeline to deploy Docker containers in AWS ECS using services like CloudFormation, Code Build, Code Deploy, S3 and puppet.
* Configured Clusters for the ESXi hosts and created Affinity/Anti-Affinity rules in the DRS to either keep the VMs together or separate them on ESXi hosts.
* Managed, configured and deployed static contents using AWS services like EC2, Lambdas, VPC, CloudFront, Elastic Beanstalk, SaaS, Route53 and S3.
* Developed a software test suite that tests file usage, database integrity, and processes restarting frequently using Python, JSON, and Postgres SQL. Interacted with support team for requirements.
* Worked as RDS DBA on Oracle/SQL Server/Postgres/Mysql/DynamoDB/Redshift.
* Developed a portal to manage entities in a content management system using Python and Django.
* Design, build and manage the ELK (Elasticsearch, Logstash, and Kibana) cluster for centralized logging and search functionalities for the App.
* Written and Maintained Automated Salt scripts for Elasticsearch, Logstash, Kibana, and Beats.
* Developed, designed and handled a dashboard control panel for customers and Administrators using Django and MySQL.
* Extensively worked on the end-to-end SFDC Release Management using Gearset tool including the Code Deployment, Code Merge, Compare Environments, Deployment Rollback, and Static Resources migration, Seed Data / Metadata Migration from three different Vendors as the code is developed through three different organizations.
* Create and maintain highly scalable and fault tolerant multi-tier AWS and Azure environments spanning across multiple availability zones using Terraform and CloudFormation.
* Write terraform scripts from scratch for building Dev, Staging, Prod and DR environments.
* Used AWS Beanstalk for deploying and scaling web applications and services developed with Java, PHP, Python, Ruby, and Docker.
* Deployed .NET and JAVA applications to application servers in an Agile continuous integration environment
* Create develop and test environments of different applications by provisioning Kubernetes clusters on AWS using Docker, Ansible, and Terraform.
* Manage implementation on Google Cloud Platform - React, Node.js, Cloud SQL, Graph QL with Docker containers using Kubernetes management.
* Installed and administered various tools like Jenkins, BitBucket, Chef, Jfrog Artifactory and executed maintenance tasks such as creating users and groups.
* Maintained the user accounts (IAM), RDS, Route 53, VPC, RDB, Dynamo DB, SES, SQS and SNS services in AWS cloud.
* Setup and Implement Continuous Integration and Continuous Delivery (CI & CD) Process stack using AWS, GITHUB/GIT, Jenkins, and Chef.
* Responsible for designing and deploying best SCM processes and procedures with Subversion (SVN), Bitbucket, GitHub, Git & eclipse.
* Hands-on experience with J2EE Architecture, Application servers and Web servers and wide variety of development tools (Web Sphere, Apache Tomcat, STS, Bitbucket, AWS)
* Designed, Developed and Deployed Web pages using Microservices that were written using Golang and also used HTML and CSS.
* Developed / Developing (Maintaining) a WPF Application to serve as a Sys Management Tool to Manage their Azure Off-Premises Environments.
* Development of full life cycle web and windows-based solutions using Confidential .NET technologies C#, ASP.Net, and SQL Server.
* Designed and built high performance, scalable and secure cloud native application with .NET and Microsoft Azure PAAS Services.
* Integrated Apollo client with GraphQL database for React and React Native for Payment, Dispatch services
* Developed client websites in front end technologies such as SASS, Javascript, Gulp, Webpack, VueJS, React, GraphQL and Apollo.
* Worked on Installation/Configuration/Administrated VMware ESXi 5.1/5.5 & 6.0 and migrated existing servers into VMware Infrastructure.
* Used AWS Beanstalk for deploying and scaling web applications and services developed with Java, PHP, Node.js, Python, Ruby, and Docker on familiar servers such as Apache, and IIS.
* Maintain customer relationship management databases (MySQL/NoSQL).
* Developing VMware vCenter and vROps reports for performance, troubleshooting and capacity planning.

## Teknovatesol/Santandar NoVember 2018 – may 2019

### Senior Devops Engineer

* Have strong knowledge of Service Oriented Architecture (SOA), Microservices, web services, including JSON and XML.
* Experience in Microsoft Azure platform Azure AD Security, and associated infrastructure architecture.
* Experience developing tools for build automation, version control (Bitbucket, Github), issue tracking (Jira), continuous integration (Jenkins, Azure DevOps, Github Actions), automated testing, or deployment automation
* Designed and built security architecture using AWS Lambda, AWS API Gateway, AWS Cognito and AWS STS.
* Configured Keycloak to authentication applications and user level authorization to perform operations.
* Used Cucumber to implement Behaviour Driven Design (BDD) for acceptance tests and Unit testing.
* Worked on creating mechanisms for frequent and automated reporting of test outcomes and maintaining and controlling the overall Infrastructure as Code (IaC) in AWS and GCP.
* Configured backup/archive policies using Tivoli Storage Manager backup utility, and mksysb images of root volume group to meet data archiving requirements, and disaster recovery readiness.
* Experience of DevOps implementation across the full stack (Database, Services, Code, Deployment & Monitoring)
* Good Knowledge on Containerization using Docker, Kubernetes, Rancher, AWS ECS, EKS, Azure Container Service, AKS.
* Experience in multiplatform Linux (Red Hat Linux, Centos, and FreeBSD) and Windows environments, with hands-on expertise in scripting (bash) and RUBY programming.
* Experience in professional system support and solution-based IT services for Linux OS (RHEL, Ubuntu, and CentOS), Amazon Web Services and OpenStack.
* Used TeamCity for continuous integration and Octopus Deploy for deployment of application.
* Strong expertise in Integration with Team City and Octopus for the continuous integration and continuous delivery.
* Experience working with YAML, a swagger used to describe the API’s Documented APIs using Open API Specification (Swagger).
* Hands on experience in Installation and configuration of RedHat virtual servers using ESXi 4/5.

## Siemens March 2016 – October 2018

### DevOps Engineer

* Design EC2 instance architecture to meet high availability application architecture and security parameters.
* Developed processes, tools, automation for Jenkins based software for build system and delivering SW Builds.
* Experience in deploying and maintaining private cloud infrastructure of OpenStack and Cloud Foundry.
* Worked on managing packages and configuration across multiple of nodes.
* Designed and built a continuous integration and deployment framework for Chef Code using test driven development.
* Also worked on Apache Hadoop and used Kafka for messaging system and spark for processing large sets of data.
* Managing users and groups using the amazon identity and access management (IAM)
* Implemented continuous integration using the Hudson, which tracks the source code changes
* Managing PaaS and IaaS components across Dev, Test and Production in conjunction with the Development and Infrastructure teams across multiple cloud platforms.
* Strong background in row and column-oriented data bases and highly experienced in PL/SQL. performance tuning and debugging of existing ETL process.
* Implemented a 'server less' architecture using API Gateway, Lambda, and Dynamo DB and deployed AWS Lambda code from Amazon S3 buckets.
* Have experience with Serverless/PaaS technologies (API Gateway, Lambda, Dynamo, S3, etc.).
* Setting up failover and failback pipelines in Azure DevOps (VSTS) to automate teh BCP (Business Continuity Process) testing which is a part of Disaster Recovery (DR) strategy.
* Worked with Terraform key features such as Infrastructure as code, Execution plans, Resource Graphs, Change Automation and extensively used Auto Scaling to launch configuration templates for launching Amazon EC2 instances while deploying Microservices.
* Designed and worked with team to implement ELK (Elastic search, log stash and Kibana) to process large datasets and visualize the results based on aggregations.
* Worked with ticketing tool JIRA with short sprint cycle to release product and documented the process in Confluence.
* Hands on experience in administration of DevOps tools suite: Jenkins, GitHub, JIRA, Confluence, Puppet and ELK stack , used Rundeck for deployment and orchestration.

## Virgin mobile Canada March 2014 – Februry 2016

### DevOps Engineer

* Deploying the Microservices in Cloud (Google Cloud Platform, Amazon AWS, Digital Ocean) using Docker - Kubernetes / AWS ECS with continuous integration / delivery - Git, Jenkins, Chef / Puppet.
* Familiar with Rally connector which supports mapping top-level Jira issues (bug, new feature, improvement, task, or a custom issue type).
* Implemented Kubernetes to deploy scale, load balance, scale and manage docker containers with multiple name spaced versions.
* Facilitated successful Release of Code from Engineering to Production by proactively & re-actively working with Development, QA, and Operations
* Used Ansible Tower for scheduling playbooks and used GIT repository to store our playbooks.
* Written custom modules to control system resources like services, packages, and to handle executing system commands.
* Experience of using Azure backups and Recovery Vault to be migrating on premise to Windows Azure in DR on cloud.
* Automated Nagios services for database server, web-server, application-server, networks, file sizes, RAM utilization, Disk performances using Python script in Chef.
* Integrated **Kubernetes with Hashicorp** Vault to inject configurations at runtime for each service using init, config sidecars and persistent volume sharing between app and config containers.

## Huawei July 2012 – februry 2014

### devops Engineer

* Managed different infrastructure resources, like physical machines, VMs and even Docker containers using Terraform.
* Worked with Terraform to create AWS components like EC2, IAM, VPC, ELB, Security groups.
* Automated the front-ends platform into highly scalable, consistent, repeatable infrastructure using high degree of automation using Vagrant, Jenkins, and cloud Formation.
* Experience in using Ansible playbooks, inventory, dynamic inventory, and automated Existing cloud environment.
* Written playbooks and roles to manage configurations of and deployments to remote machines.
* Managed SVN repositories for branching, merging and tagging and developing Shell/Groovy Scripts for automation purpose.
* Implementing multi-tier application provisioning in OpenStack cloud, integrating it with Jenkins and SonarQube.
* Deploying and monitoring scalable infrastructure on Amazon web services (AWS) & configuration management using Chef.
* Using AGILE MVN method to develop a build and ANT as a build tool.
* Working with the Docker to package an application with all its dependencies into a standardized unit for software development.

## LCC/Telenor January 2011 – June 2012

### Built And Release EngiNeer

* Create and setup automated nightly build environment for Java projects using Maven
* Maintain and track inventory using Jenkins and set alerts when the servers are full and need attention.
* Ensure that the builds are consistent after being ported from different platforms.
* Writing/Modifying various Manifests and applying them on the nodes using Puppet.
* Managed builds and wrote Build scripts for JAVA and WebSphere based applications
* Developed scripts using BASH and BATCH files for Automation of Activities and builds.
* Working closely with Web Administrators to setup an automated deployment for SharePoint applications using SVN and Git Tools.

Monitor and administer the automated build and continuous integration process to ensure correct build execution, and facilitate resolution of build failures

* Maintained configuration files for each application for the purpose of build and install on different environments
* Monitor and administer the automated build and continuous integration process to ensure correct build execution and facilitate resolution of build failures.
* Experience integrating test suites into build environments like Jenkins or TeamCity.
* Maintained configuration files for each application for the purpose of build and install on different environments.
* Created the build instructions docs and install (deploy) instructions docs for each application for different environments.
* Developed processes, tools, automation for Jenkins based software for build system and delivering SW Builds.
* Used ANT and MAVEN as build tools on Java projects for the development of build artifacts on the source code.
* Worked with the automated scripts for the Build and Deployment of the applications