

Arun Kumar Sathyamangalam Karthikeyan

arun143wasetn@gmail.com || +91 9095154469 || Perth, WA 6000
Linked In: <https://www.linkedin.com/in/arun-kumar-s-k-9bb23540/>
Portfolio: <https://arunsk78.github.io/>

SUMMARY

- **7.5** years of experience in DevOps tools (**AWS, Jenkins, Terraform, PowerShell, GIT, Puppet, C#**) and overall **11.5** years in IT.
- DevOps: Experience with DevOps automation – Orchestration/Configuration Management and CI/CD tools (Jenkins, Puppet, PowerShell etc.).
- **HashiCorp Certified Terraform Associate, AWS Certified Solution Architect – Associate, AWS Certified Developer – Associate and Microsoft Certified Azure Fundamentals.**
- AWS: Experience with AWS environment including IAM, VPC, EC2, EBS, ASG, S3, CloudFront, API Gateway, Lambda, SQS, SNS, KMS, SSM, ACM, CloudWatch, CloudFormation, Directory Services, AWS Cognito, WAF, Elastic Beanstalk, Workspaces, AppStream, Code Commit, Code Build, Code Deploy, Code Pipeline, ECR, ECS and EKS
- Azure: Virtual Network, Virtual Machines, Azure Active directory, Virtual machines scale set, Functions, Load Balancers, Application Gateway, Storage, WAF, ACR, AKS, Azure DevOps
- Programming (Automation): PowerShell, Puppet, Groovy, Jenkins CLI, AWS with PowerShell, Python
- Infrastructure Automation: Packer, Terraform and CloudFormation
- Experienced with **complete application development life cycle** including requirements gathering, analysis and design, coding, testing, deployment, and infrastructure maintenance.

TECHNICAL EXPOSURE

Working as AWS & Azure DevOps Engineer from last 6 years in the field of Software Configuration Management & Build, Release (CI/CD) and Deployment Management on AWS and having great exposure on Azure with use of different tools below.

Tools	Names
Cloud	AWS, Azure
OS	Windows
Script	Shell Script, PowerShell
CI/CD Tools	Jenkins, Teamcity and Azure CI/CD
Build Tools	MS Build, NPM
Code repository	Bitbucket, Azure Repos, GitHub
Artifact repository	JFrog Artifacts, Azure Artifacts
Web Application servers	IIS
version-control system	Git (Distributed)
Code Quality	SonarQube, CheckMarx
IaC	Packer, Terraform, CloudFormation, CDK (minimal)
Orchestration Tools	Puppet and Ansible
Monitoring Tools	AppDynamics, Splunk, CloudWatch

- ASP.Net Web applications and IIS, C#, WCF services, LINQ and .Net Core
- JavaScript, jQuery, AngularJS, NodeJS, ReactJS and Python
- SQL Server 2008, 2012, 2016 and 2019 (experience in automation of Windows Failover cluster with AD) and RDS
- Design Pattern – Façade, MVP, MVC2 and MVC4
- Active Directory – AWS Directory services and Azure Active Directory
- Containerization – Docker and Kubernetes in EKS and ECS

Educational Qualification

Specialized in	Qualification Centre	Year of Completion	Percentage/CGPA
MS (S/W Engineering)	BITS, Pilani	2015	6.78
B.SC	VLB Janakiammal College of Arts & Science	2011	69%

Employer Details

Working in Preqin India Pvt Ltd, Bangalore as Senior DevOps Engineer from 19th April 2021 to till date.
Worked in Wipro Technologies, Bangalore as Technical Lead from 27th June 2011 to 16th April 2021.

Certifications

AWS Certified Solution Architect – Associate Certified from Amazon Web Services	AWS Certified Developer – Associate Certified from Amazon Web Services
Microsoft Certified Azure Fundamentals Certified from Microsoft No Expiry	HashiCorp Certified Terraform Associate Certified from HashiCorp

Projects Involved

Project Name	Technologies & Tools
Cloud DevOps Platform – Preqin, UK Apr 2021 – Till date	TeamCity, CloudFormation, PowerShell, AWS, Packer, Terraform, Docker, Kubernetes, Prometheus, Elastic Search and Kibana, IIS 10, SQL, ASP.Net Core, React Apps
Unisure Cloud Config – Aviva Insurance, UK Dec 2015 – Apr 2021	Jenkins, PowerShell, AWS, Puppet, Packer, Terraform, CloudFormation, Nexus/Artifactory, Groovy, IIS8.5/7.5, SQL, ASP.Net Core, C#, Bootstrap, Active Directory and Mainframe
Agilebase DevOps solution – Wipro Technologies Jul 2014 – Jun 2016	ASP.NET, C#, SQL, Entity Framework, MVC/MVP design Pattern, AngularJs, Rhinomocks, Bootstrap for designing, Jenkins, PowerShell, IIS7.5 and DB2
Zurich Insurance Group Ltd, Indonesia, Oct 2011 – Jun 2014	ASP .NET, C#, SSIS package, JavaScript, jQuery, Linq, Active Directory services, IIS 7.0/6.0, ASP .NET MVC 4, SharePoint 2010, MSCRM 2011, ASP .NET MVC 2, SSRS reports

WORK EXPERIENCE

Senior DevOps Engineer

Preqin Cloud DevOps Platform – Preqin, UK Apr 2021 – Till date

Project : Cloud DevOps Platform

Team Size : 12

Methodology : Kanban

Project Description:

- Preqin Cloud DevOps Platform – Preqin has multiple products for Back office and End user on Alternative Assets which uses React JS, ASP.Net Core and C# for backend end and MS SQL Server hosted in RDS as database. Preqin products consist of Microservices application. API created on .Net Core and Windows

services which used for batch processing. Migrating the mention application to AWS cloud as containers, which is fully automated way deployment of Infrastructure configuration and maintaining it.

Contribution:

- As a Senior DevOps Engineer, Designing the solution, managing the offshore team to achieve the customer requirement, and working on highly complicated module.
- I have created a build and deployment process using TeamCity, Continuous Integration and Continuous Delivery (CI/CD) of Application code and Infrastructure as Code.
- Demonstrated proficiency in using YAML, Team City, Bitbucket, Cloud Formation to improve the product release, leading zero Production deployments failure in 2021 financial year.
- Leveraged on Gitflow to help the Organization nurture the usage of Git which led to 50% improvement in productivity and decreased the number of errors while moving between environments.
- Implemented Azure AD SSO for Team City login using SAML settings.
- Implemented AWS Active Directory services for FSx Windows implementations with Ec2 servers.
- Cloudformation templates and Stackset creation to handle multi account deployments.
- Automated SSH tunneling done to access RDS postgres server via bastion server using Pgadmin4.
- Managing Kubernetes cluster and resources, upgraded EKS Kubernetes in Production environments.

Technical Lead (DevOps) – Wipro Technologies

Aviva Insurance, UK Dec 2015 – Apr 2021

Project : Unisure Cloud Config, Unisure Cloud Migration, Unisure Platform

Team Size : 8

Methodology : Kanban

Project Description:

- Unisure – Aviva Insurance Pension Agent and End user servicing portal which uses ASP.net and C# for front end and SQL as database and integrating mainframe also. Unisure consist of microservices application. API created on .Net Core and Windows services which used for batch processing. Migrating the mention application to AWS cloud, which is fully automated way deployment of Infrastructure configuration and maintaining it.

Contribution:

- As a Technical Lead (DevOps), secured time saving and workflow efficiency of around 80% by building and implementing CI/CD and migrating them to cloud after identifying the bottlenecks and opportunities
- Designing the solution, managing the team to achieve the customer requirement, working on highly complicated module.
- I have created a build and deployment process using Jenkins Continuous Integration and Continuous Delivery (CI/CD) of Application code and Infrastructure as Code.
- I have automated building new environments, configuring slaves for Jenkins using Puppet. Created Application build and deploy specific jobs and pipelines using Jenkins Console (Groovy script)
- Demonstrated proficiency in using YAML, Bitbucket, SonarQube, Nexus/Artifactory, MS build, Terraform, Packer, PowerShell, and many plugins in global configuration of Jenkins to improve the product release, leading zero Production deployments failure in 2019 and 2020
- I have written different PowerShell scripts and modules for build, manage, troubleshooting and monitoring the Windows servers.
- Automation of all the server creation and configurations in AWS using Packer, Puppet and Terraform (IAAS) which is scheduled in Jenkins
- Automated the integration of Mainframe agent with windows server.
- Automation of SFTP setup, Microsoft SQL server High Availability solution, DFS setup (which involves AD level object management using Powershell scripts), Application specific AMI creation and patching automatically on single click.
- Reduced the deployment time of Unisure by 45% in the first year of joining the team
- In AWS, I have created and managed services like VPC, Subnet, Route53, ELB, Autoscaling, EC2, Security Groups, Cloud Watch and Cloud Formation.
- Implemented Blue/Green deployment for the Unisure applications.
- Automated BAU activities by consuming REST API of Jenkins, JIRA, Stash/Bitbucket and Assyst.
- Created a bot to implement entire journey of SQL update tool using JIRA API and PowerShell.
- Designed AWS debugger a SAAS app to remotely debug the web application, API, and services.

- Developed a KPI & monitoring dashboard for the management and support team using ASP.NET Core and bootstrap which integrates JIRA, Assyst, AWS SDK, SQL, AppDynamics and Splunk
- Certificate Management – CRUD and import operation on AWS certificate management
- Vulnerability management – Fixing and maintaining the application without vulnerability.
- Routing scheduled tasks to different windows from Mainframe with TWS Agent.

DevOps Engineer

Wipro Technologies July 2014 – Nov 2015

Project : Agilebase DevOps solution

Team Size : 7

Methodology : Agile

Project Description:

- AgileBase leverages the existing ALM (Application Lifecycle Management) tool investments, uses industry-best practices to build and release orchestration, and provides real-time dashboards and analytics. It captures metrics for pre-emptive analysis, compliance, and audit. Its Process Templating feature ensures repeatability and standardizes the adoption of DevOps across projects in a predictable manner.

DevOps – Developing a product which will automate the end-to-end activities in Agile Life Cycle (CICD). Once the code is checked in, this will take care of all the testing and deployment activities till pre-prod. It also needs two kind of web applications for subscription and product configuration

Contribution:

- As a Dev lead, Owned the overall development and developed many critical functionalities in the application.
- Designed and developed a enterprise solution for Continuous Integration and Continuous Delivery using AngularJS, NodeJS and MongoDB which integrates some of DevOps tools like Jenkins, SonarQube, Git and TFS
- Created Application build and deploy specific jobs and pipelines using Jenkins GUI.
- I have configured SonarQube, Nexus, MsBuild and many in global config of Jenkins.
- I have written different PowerShell scripts for build, manage and monitoring the Windows servers.
- Packaging and deploying the solution into the testing environments.
- Helping the team on doing POC for the solution.
- Getting the actual requirement needed from the end user.

Developer

Zurich Insurance Group Ltd, Global , Oct 2011 – June 2014

Project : SharePoint Sales portal, Farmers Policy Notes System,GREW

Team Size : 5

Methodology : Water fall method

Project Description:

To maximize the usage of Sales Portal addressed to Sales Forces in Agency and Bancassurance, ZTL has a plan to connect the Portal with ZLife system to get online information of application/policy. With the new requirements, it is expected that Sales Force is equipped with a great tool to give a better service to new and existing customer Support data. User Management, Enquiry and Document management System, Global Risk Engineering Workstation about Risk management and Customer management using Microsoft Dynamic CRM. Farmers LIFE - Policy Notes System: Policy Note System is designed to facilitate and bring all Policy Notes present under various systems in LIFENET (Policy System) under a single repository

Contribution:

- Designing and Development using ASP.NET 3.5, ASP.NET MVC 2.0/4 Architecture
- Involved in UI Interface and Development using Visual Studio 2010.
- User Management module is implemented in ASP.Net and C# programming which interacts with AD Domain and SharePoint profile management
- DMS(Document Management System) module is customized/implemented using SharePoint 2010 OOB(Out-Of-Box) features.
- Done Packaging for modules of the SharePoint portal
- Installation, Customization, and project setup in Environments like DEV, SIT and Cloud.

- Deployed the code in Testing Environment using IIS 7.0 manager