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**Profile**

17+ years of successful experience as an IT Consultant and Solution Architect.

I have an extensive emolument experience in IT development and service life cycle that infers Analysis, Domain, Solution and Technical Architecture. Ensolve the binding parameters concur in surface installed at the customers and users end by advising with effect to Practical implementations of technology concepts and methodologies, ever in delivering successful, value-rich and profitable solution.

This implies my practical experience gained on wide range of platforms and technologies - Cloud IAAS, PAAS and SAAS, Multi-tier architectures, Data Migration, .NET technologies, Web/E-commerce, B2B Payments, Client Server, Databases, Object Oriented design.

**Skills Summary**

* Experienced in designing cloud computing solutions (**SaaS, IaaS and PaaS**).
* Defined and implemented **IT Strategy and Roadmap**.
* Designed and delivered solutions that implies **‘Fit for Purpose’** & **‘Fit for Use’** as key strategy.
* Experienced in **Business Process Designing** and Re-Engineering.
* Experienced in **Architectural Design for integrations** between 3rd parties.
* Designed solutions using **SOA** and **Microservices**.
* Experienced in adapting company **merger /acquisition related IT changes**.
* Designed **Resilient Solutions**, by implementing **Disaster Recovery** and **Business Continuity** architectural plans.

**Work Experience**

**AWS Solution Architect**

**Home Office -Biometrics**- Croydon - Dec 18 to till date

BSG (Biometric Services Gateway) is an integration platform for presenting standardised biometric Services to Home Office system. BSG provides standardise message capability such as receipt of the message, validation, queue the message, error and retry, securing, message transaction, auditing and reporting data feed.

Prum interface provides bidirectional searching of DNA and fingerprint biometric data between Prum treaty members to support cross border security, crime prevention and illegal migration. The BSG supports the searching of fingerprint biometric currently and later DNA.

**Projects**

**-** Prum-BSG interface

**Summary**

* Created CICD pipeline using Git- Bitbucket, Jenkins
* Implemented 'Infrastructure as code' and 'Server Configuration' using Terraform, Puppet.
* Developed scripts using Python, Bash, JSON, YAML, Lambda, API Gateways to implement CICD and AWS Serverless Architecture.
* Created HLD and LLD architecture documents and program specifications, reviewed and approved by the TDA team for PRUM.
* Worked in agile environment, Scrum story-based methodology.
* Created Security rules, firewalls and vulnerability control measures, in compliance with HOB BSG Security, ‘Risk and Governance policies’, using SSL / TLS, AWS IAM, LDAP, Vault, MFA, NACL, Gateways, Security Groups, Bastion Hosts, Host Based Firewalls and Load Balancers for PRUM.
* Customized and developed ‘Serverless Architecture’ in AWS using AWS Lambda, S3, Dynamo DB, Auto-Scaling and API Gateway.
* Implemented backup and recovery solutions for key applications using Amazon S3, Glacier, Route 53, Snapshots, RDS multi-AZ, Duplicity.
* Monitoring and alerts are implemented using Zabbix, Elastic Search, AWS Cloud Watch and AWS SNS.

**AWS Stack Used**

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| **Compute: EC2, Lambda, ELB, Lambda** | **Networking:** VPC, Direct Connect, Route53, API Gateway,  Endpoint Services, ENI |
| **Storage:** S3, Glacier, EBS | **Security and Identity:** Certificate manager, IAM, SSO, Vault |
| **Database:** RDS, DynamoDB, Postgres SQL | **Management Tools:** Terraform, CloudWatch |
| **Integration:** SQS, SNS  **Scripting Languages:** NodeJS, Python, Bash, JSON, YAML, SAML | **CICD Developer Tools:** Bitbucket, Jenkins, Maven  **Other DevOps / CICD Tools:** GitHub, Jenkins, Maven, Nexus |

**Cloud / AWS Solution Architect**

**GlaxoSmithKline** - Brentford - Apr 17 to Sep 18

GSK HRIT business team has initiated ‘Open Targets’ projects, based on Cloud Transformation Strategy to implement and migrate solutions from HRIT portfolio to AWS Cloud Services. Key objective of this project is to mitigate the stability issues experienced in existing in-house infrastructure, when resources are stretched on demand.

The projects mentioned below, employed architectural characteristics of ‘Network Connectivity pattern’, ‘Limited LAN extension’, ‘Scalable Virtual machines hosted at AWS’ and ‘Backup /Restore’.

**Projects**

**-** Data Centre Extension (Internal Facing).

**-** Internal Web Hosting (IWH) migration.

**-** Material Safety Data Sheet (MSDS) Data Migration and Archiving.

**Summary**

* Created CICD environment using **GitHub**, **Code Commit**, **Code Build**, **Code Pipeline**, **Jenkins, Maven**, **Ms Build**, **Nunit**.
* Implemented 'Infrastructure as code' and 'Server Configuration' using **CloudFormation, ECS**, **Ansible.**
* Developed scripts using **Python**, **Bash**, **JSON**, **YAML**, **Lambda**, **API Gateways** to implement CICD and AWS Serverless Architecture.
* Created **HLD** and **LLD** architecture documents and program specifications those are consumed by offshore development team.
* Worked in agile environment in Transformation Programmes (i.e. Workday Transformation, UK Payroll Cloud implementation).
* Developed a Cloud Adoption Strategy based on AWS CAS, Participated in Discovery Phase and created a migration plan using **6R migration Strategy.**
* Re-hosted web/app servers in AWS as **EC2** instances with GSK machine images (Win 2012, RHEL7).
* Created Security rules, firewalls and vulnerability control measures, in compliance with GSK Security, ‘Risk and Governance policies’, using **AWS IAM**, **SSO**, **Ping Federate**, **MFA**, **NACL**, **Gateways**, **Security Groups**, **Bastion Hosts, Host Based Firewalls** and **Load Balancers**.
* Customized and developed ‘**Serverless Architecture**’ in AWS using **AWS Lambda**, **S3**, **Dynamo DB**, **Auto-Scaling** and **API Gateway**.
* Built and deployed **Docker Containers** and clustered in **ECS** to break up monolithic apps into Microservices ,also created and executed batch jobs as ECS tasks.
* Managed server patches using AWS Systems Manager (**Patch Manager**).
* Network traffic between AWS and GSK data centre are monitored and logged using **VPC Flow logs**, **Cloud Trails**. Cloud Trail logs are pulled by **SIEM** (Security Incident and Event Management) system, analysed and report is sent to **Cloud Watch** for alerting and monitoring to admins using **SNS**.
* Implemented backup and recovery solutions for key applications using Amazon **S3**, **Glacier**, **Route 53**, **Snapshots**, **RDS multi-AZ**.

**AWS Stack Used**

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| --- | --- |
| **Compute:** EC2, ECS, Lambda, ELB | **Networking:** VPC, CloudFront, Direct Connect, Route53, API Gateway |
| **Storage:** S3, Glacier, EFS, EBS | **Security and Identity:** Certificate manager, IAM, SSO |
| **Database:** RDS, DynamoDB | **Management Tools:** CloudFormation, CloudTrail, CloudWatch, Ansible |
| **Integration:** SQS, SNS  **Scripting Languages:** NodeJS, Python, Bash, JSON, YAML, SAML | **CICD Developer Tools:** Code Commit, Code Deploy, Code Pipeline  **Other DevOps / CICD Tools:** GitHub, Jenkins, Maven |

**Job Perimeter**

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| **Responsibilities Given** | **Approach /Assessment** | **Deliverables** |
| Develop IT simplification and optimization strategy in Cloud. | **-** Lead **discovery and design phase**, to identify a list of legacy multi tired solutions /applications in ‘HRIT services catalogue’.  **-** Categorized the solutions as ‘Gold', 'Silver’ and ‘Bronze’ based on the **Business Impact and Data Sensitivity** of the applications.  **-** Classified and categorized the ASIS architectures of current solutions.  **-** Evaluated the Technical Capabilities that exist in HRIT.  **-** Identified Migration stages, Risks and Mitigations required to move in Cloud. | Developed an **‘IT simplification’ Cloud Strategy** document and submitted to **HRIT TAL (Human Resources IT – Target Architecture Landscape)** approval board. |

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| **Responsibilities Given** | **Approach /Assessment** | **Deliverables** |
| Evaluate HRIT capability and readiness to move into Cloud Technologies. | **-** Collected and prepared a list of **People capabilities** in HRIT.  **-** Conducted internal people IT skills survey and identified the gaps between current IT skills and those required for cloud technologies.  **-** Prepared a list of **business processes** those are automated by applications in HRIT service lines.  **-** Participated and contributed inputs in ‘Stage Gate’ and Review meetings with, **Global Project Teams,** **3rd party vendors and suppliers**. | Lead **‘Technology Workshops’** and translated cloud technology capabilities into **‘Cost/Business’ benefits** for stakeholders.  Developed a **Cloud Adoption strategy** document focussing on **People, Process & Technology** capabilities of GSK, suggesting **‘Trainings required’** and **‘Process refinements’**. |
| Develop Architecture, Implementation and Migration Plans. | **-** Documented Baseline (AS-IS) and Target (TO-BE) Data and Technology architecture requirements.  **-** Followed TOGAF ADM (Architecture Development Model) to derive the Target architecture. | Developed **Target (TO-BE) ‘Data’ and ‘Technology’ architectures** in AWS Cloud, to implement **‘Five Pillars’ of ‘AWS well-architected Framework’**.  Created **‘Cloud Implementation Roadmaps’** for 1-year and 2-year timelines, with definitions of AS-IS, TO-BE and Transition architecture models.  Created **AWS Standards & Guidelines** document, in compliance with GSK Policy documents. |
| Minimize the Servers maintained in HRIT. | **-** Identified a list of applications that uses common libraries, batch jobs and micro services. | Customized and developed **‘Serverless Architecture’** in AWS using AWS Lambda, S3, Dynamo DB, Auto-Scaling and API Gateway.  Implemented **containerization** using AWS ECS docker containers for Microservices and batch jobs.  Consolidated and reduced the number of servers from 73 to 24 in HRIT portfolio. |
| Develop Backup, Business Continuity and Recovery plans that suit cloud architecture. | **-** Identified a list of Critical / Non-Critical applications along with sensitiveness (**PII-Personal Identifiable Information, Sensitive PII**) of the data stored.  **-** Prepared a list of applications that has the Business Impact in the scale of ‘High', 'Medium’ and ‘Low’, when the applications fail from its functional state. | Designed **reliable, durable and scalable backup and recovery solutions** for key applications using Amazon S3, Glacier, Route 53, Snapshots, RDS multi-AZ, and Storage Gateway to meet the **RTO** (Recovery Time Objective), **RPO** (Recovery Point Objective), Data retention and Compliance requirements of GlaxoSmithKline. |
| Implement Security and Compliance Requirements. | **-** Identified existing security measures implemented in the applications.  **-** Examined potential security gaps identified from **SARBOX** and other security test reports.  **-** Coordinated with ‘Corporate Network IT Security’ and ‘Risk & Compliance’ team to understand their requirements and designed the cloud security framework. | Created **Security rules, firewalls and vulnerability control measures**, in compliance with GSK Security, ‘Risk and Governance policies’, using AWS IAM, SSO, MFA, NACL, Gateways, Security Groups, Bastion Hosts and Load Balancers. |
| Minimize maintenance and deployment resources and achieve cost optimization. | **-** Collected and evaluated the current demand of IT and People resources, required for HRIT maintenance and deployments from existing ‘Change Requests’ catalogue.  **-** Identified potential candidates for automated deployments where manual intervention is not required.  **-** Created and categorized **‘deployment workflows’** based on the technology stack consumed by the applications. | Created **‘Infrastructure as Code’ templates** using AWS Cloud formation and utilized AWS CICD **Automated deployment tools** to reduce the deployment duration by 73%, also reducing the applications downtime effectively.  Created **consolidated billing** in AWS across businesses in HRIT to provide cost optimization, in addition to appropriate **pricing models** defined in the architecture document. |

**Cloud Solution Architect**

**GlaxoSmithKline** – Stockley Park - Jan 16 to Apr 17

**UK Payroll Replacement**

A major transformation programme in the functionality of GSK HRIT and to replace the current UK Payroll solution to a new **Payroll solution hosted in Cloud**. This transformation enables single **cloud hosted solution as SAAS**, along with a managed payroll services and reduces the complexities and risks that are faced in the current payroll system.

Worked along with stake holders, responsible for designing and implementing the solution for different components that form a new payroll solution.

My Responsibilities also includes mapping and defining current payroll solution and architect cloud-based solution.

**Job Perimeter**

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| **Responsibilities Given** | **Approach /Assessment** | **Deliverables** |
| Provide technical advice to select and procure cloud payroll solution. | **-** Listed all UK Payroll business process.  Compared a list of cloud payroll solutions against GSK UK Payroll process and weightage given to each business process that are satisfied by the cloud payroll solutions.  **-** Compared costs and technical capability of these solutions. | **Cost-Benefit Analysis report** produced based on weightage and presented in Programme stakeholders meeting. |
| Create an Architectural Landscape. | **-** Identified the key problems in existing solution and gathered business requirements from stakeholders.  **-** Discussed, Reviewed and confirmed what is IN and OUT of scope.  **-** Confirmed business goals, drivers, constraints, capability and developed an architecture vision, also identified gaps, risks and mitigations. | Delivered **‘Statement of Architectural work’** that includes Scope, resources, KPI, Metrics and communication plan).  Created **‘Solution Concept Diagram’** to provide high level picture of cloud solution. |
| Design System and Technology Architecture. | **-** Documented current (AS IS) Technology and Data structures.  **-** Developed (TO BE) architecture based on ‘Statement of Architectural work’.  **-** Identified the gaps between AS IS and TO BE architectures. | Created **TOBE solution architecture** document.  Designed **End-To-End Integration architecture** definitions.  Defined **Architecture Roadmap** including implementation and migration plan. |
| Coordinate with project team and external vendors. | **-** Conducted regular review meetings with project team and vendors.  **-** Participated in Test Design meetings providing technical inputs for Unit, SIT and UAT test cycles. | Minutes of Meeting (MOM) and ‘Action Items’ are recorded and remediated ensuring project timelines were met. |
| Support Go Live Implementation and Handover to Services team. | **-** Involved Support and Services team from UAT test cycle and gathered service requirements for POST Go Live support. | Delivered **‘Access Management Plan**’ and ‘**Service Design Package**’ for smooth transition of the solution to services and support team.  Implemented **SARBOX** controls in the Production environment. |

**Solution Architect**

**GlaxoSmithKline** – Stockley Park, Brentford - Oct 11 to Dec 15

**Key Projects**

**- WORKDAY** Transformation programme (Gemini).

**- ORGPLUS** - (Succession planning and Talent Management).

**- ITAG** (Time and Attendance).

**Job Perimeter**

* I was part of enterprise architecture team to define modular solutions for HCM modules.
* Delivered technical design documents following the requirements mapping of existing systems with WORKDAY.
* Delivered a complete data mapping document and **micro solutions** for the data interaction, import and refresh between upstream / downstream systems and WORKDAY.
* Designed the **architecture for phase wise solution** implementation.
* Defined **End to End integration architecture** between upstream (WORKDAY) and downstream (UK PAYROLL) systems.
* Defined **data and security architecture** between upstream and downstream systems, as part of 'WORKDAY Transformation programme' and 'UK Payroll Replacement' projects.

**BAU changes and infrastructure change projects & RFC (Request for Changes)**

* HR ODS (Operational Data Store) - (Centralized HR data) -**Data mapping** for all upstream and downstream HR systems.
* DCM - **Datacentre Migration** –Defined test scheme and plans for applications in the HR portfolio.
* MHD & RAMS (Material Hazard and Radiation Management System) business changes.
* Medgate (Employee Health Management)**,** MSDS (Material Safety Data Sheet)
* Tech Refresh Project that includes - Windows upgrade, Database upgrades and remediation.

**Senior Service Consultant** Aug 09 to Oct 11

**Service Consultant** Apr 07 to Jul 09

**GlaxoSmithKline** – Stockley Park, Brentford

**Job Perimeter**

**-** Incident Management, Problem Management, Managed Stakeholders & Escalations, Process Quality, Risk & Compliance and Service Improvements.

**Technical Consultant,**

**William Reed**, Crawley - Nov 06 to Mar 07

**Projects**

**-** International Wine Challenge (IWC).

**Senior Developer**

**The Automobile Association**, Basingstoke - Oct 05 to Oct 06

**Projects**

**-** AAdvance , **-** AMOS (Accident Management System).

**Senior Developer**

**KPMG**, Watford - Jun 02 to Aug 05

**Projects**

**-** Flextra (Flexible Benefit Management System). **-** Packman (Tax Documents Management System).