

# **Mohamed ElEmam**DevOps and Cloud Lead

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    - ∂ https://flowcv.me/mohamedelemam 

      □ Egyptian

# Profile

I am a **DevOps/SRE Lead and Consultant** with over 15 years of experience in **IT, Systems Engineering**, and **DevOps transformation**, specializing in driving **digital transformation** and **infrastructure modernization**.

In 2020, I led the **modernization of Banque Du Caire's IT infrastructure**, achieving a **20% reduction in operational costs** and a **35% boost in system performance**. As **Head of DevOps**, I spearheaded the institution's digital transformation initiatives.

In 2023, as **Principal DevOps Manager at Banque Misr**, I automated the entire SDLC, reducing deployment times by **40%** and increasing team productivity by **30%**. I also led the modernization of the bank's mobile app, implementing a cloud-native architecture that significantly improved efficiency.

In 2024, as **SRE Service Delivery Manager at iVolve Tech**, I led a team of 21 engineers, boosting productivity by **35%** and improving project delivery times by **20%**. By fostering a collaborative work environment and providing mentorship, I enhanced employee retention by **25%** and improved skill sets by **40%**. I excel in architecting scalable infrastructures on **AWS**, achieving **99.99% uptime**, reducing costs by **25%**, and implementing **CI/CD pipelines** that improved deployment frequency by **50%** and reduced failures by **30%**.

Additionally, I have successfully managed **end-to-end project delivery** for **RedHat**, **Microsoft**, and **multi-cloud solutions** (**AWS**, **Azure**, **Alibaba**), enhancing system performance by **30**%. Through strategic collaboration with project managers and clients, I've improved client satisfaction by **15**% and driven a **10**% **boost in revenue** through upselling opportunities.

With expertise in **Azure**, **AWS**, **Kubernetes**, **OpenShift**, **DevSecOps**, and **CI/CD** automation, I build scalable, secure, and high-performing infrastructures. I am skilled at aligning technology with business goals, improving operational efficiency, and delivering agile, forward-thinking solutions.

Let's connect to discuss how I can help you **optimize your IT infrastructure** and drive **unparalleled digital innovation**.



May 2024 – present Lisbon, Portugal

## Senior Consultant - SRE, Aubay Portugal - TLS Contact ☑

- Architected, designed, and implemented a highly available, scalable infrastructure on AWS, incorporating security best practices and ensuring 99.99% uptime while adhering to compliance standards.
- Led the design and implementation of CI/CD pipelines using GitLab CI, integrating security checks that reduced deployment times by 40% and improved security compliance.
- Defined and enforced security policies for containerization with Kubernetes/OpenShift, leading to a 35% reduction in security vulnerabilities.
- Developed and implemented identity and access management strategies using Keycloak, ensuring secure authentication across 100% of services.
- Designed and implemented secure object storage solutions with MinIO, incorporating encryption and access controls, safeguarding sensitive data with zero data breaches.
- Established comprehensive security monitoring using DataDog, Prometheus, and Grafana, creating custom dashboards that reduced incident response times by 25%.
- Led the implementation of secure artifact repositories with Nexus, ensuring version-controlled, secure storage and distribution of software artifacts.
- Collaborated closely with development and security teams, conducting security reviews and threat modeling, resulting in a 30% reduction in security risks.
- Utilized DevSecOps tools like SonarQube, Trivy, and Prisma Cloud for continuous security posture management, improving code quality by 20%.
- Evaluated and recommended emerging security technologies, adopting new tools and techniques that enhanced security posture by 15%.

Jan 2024 – Jul 2024

## **Service Delivery Manager,** *iVolve Technologies* □

- Lead, inspire, and manage a team of 21 engineers, fostering a collaborative and innovative work environment, resulting in a 35% increase in team productivity and a 20% improvement in project delivery times.
- Provide mentorship, and coaching, contributing to a 25% increase in employee retention and a 40% improvement in team skill sets.
- Drive the team to exceed project delivery targets, achieving a 95% on-time delivery rate while maintaining high-quality standards.
- Oversee end-to-end project delivery, ensuring the successful implementation and migration of RedHat, Microsoft, and Cloud Solutions (AWS, Azure, Alibaba, Oracle), enhancing system performance by 30%.
- Collaborate with project managers and engineers to define project scope, objectives, and deliverables, ensuring 100% alignment with business goals.
- Architect and design a scalable infrastructure on AWS, achieving 99.99% uptime and reducing costs by 25%, and security best practices.
- Lead the design and implementation of CI/CD pipelines using GitLab CI, improving deployment frequency by 50% and reducing release failures by 30% through integrated security checks.
- Define and enforce security policies for containerization and orchestration using Kubernetes/OpenShift, resulting in a 40% reduction in security vulnerabilities.

- Monitor project progress, identifying and mitigating risks to ensure on-time and within-budget delivery, reducing project costs by 20%.
- Establish and maintain strong client relationships, leading to a 15% increase in client satisfaction scores through tailored solutions.
- Collaborate with the sales and pre-sales teams, identifying upselling and cross-selling opportunities, contributing to a 10% increase in revenue.
- Stay up-to-date with the latest trends in RedHat, Microsoft, AWS, Azure, and DevOps.
- Design and execute training programs focused on RedHat, Cloud solutions, and automation, improving team expertise by 50%.

Jan 2023 – Dec 2023 Egypt

## **Princpal DevOps Manager,** Banque Misr

- Owns products and services from conception to continuous operation, ensuring 99.9% uptime and efficient performance across all systems.
- Plays a key role as embedded within teams, focusing on the operational aspects of services, resulting in a 20% improvement in service reliability.
- Automates systems and architectures, reducing manual interventions by 40% and improving deployment speed by 30%.
- Provide the team with a roadmap for implementing software engineering practices, improving code quality by 25%, and reducing technical debt.
- Responsible for hiring and managing DevOps Engineers, building and mentoring a team that delivered 95% on-time project completion, and improved the automation of the software development pipeline by 50%.
- Reports directly to the Head of Engineering, aligning architecture decisions and technology stack implementations, ensuring 100% alignment with business objectives.
- Drives automation across the organization, utilizing the cloud, automation tools, and IaC (Infrastructure as Code), resulting in a 35% reduction in deployment times.
- Automation-oriented and agile-focused, leading the organization's shift to more agile processes, improving team productivity by 25%.
- Develops and maintains scalable architecture solutions, increasing system scalability by 30% and reducing downtime.
- Coaches DevOps team members as a subject matter expert, increasing the team's efficiency by 20% through continuous knowledge sharing and training.

Sep 2022 – Dec 2022 Egypt

## **DevOps Manager,** *Geidea - GSSC* ☑

- Responsible for hiring and managing DevOps Engineers, overseeing the development, deployment, maintenance, and automation of the software pipeline, resulting in a 35% increase in deployment efficiency from source control to production.
- Collaborated closely with engineering leadership, ensuring 100% alignment with business objectives and strategic initiatives.
- Developed and delivered automation scripts and tools for building, integrating, and deploying software releases across multiple platforms, reducing manual efforts by 30% and increasing deployment speed by 25%.
- Ensured solutions were built in line with company standards, successfully
  deploying across Development, Test, Pre-Prod, and Prod environments with zero
  major incidents.

- Directly managed DevOps Leads and indirectly the DevOps engineers, driving a 20% improvement in team productivity and fostering a culture of collaboration and accountability.
- Defined DevOps strategies and KPIs, leading to 15% measurable improvements in operational efficiency and process optimization.
- Set objectives and assessed the performance of the DevOps team, resulting in a 10% reduction in turnover and increased team satisfaction.

Jul 2021 – Aug 2022 Egypt

## **DevOps and Cloud Lead,** *TPAY Mobile* □

- Led the DevOps team in an agile environment, driving a 30% improvement in deployment speed and enhancing collaboration across teams.
- Accountable for designing, building, and optimizing automation systems, improving business web and data infrastructure performance by 25% and reducing manual processes by 40%.
- Architected enterprise-wide technology solutions, utilizing industry best practices and ensuring 99.99% system uptime.
- Led technology evolution initiatives, resulting in continuous improvement of services and a 20% increase in overall system efficiency.
- Led project planning and execution for infrastructure-focused projects, achieving 95% on-time delivery.
- Collaborated with multiple teams to design, develop, and support software, improving the performance of the automation framework by 30%.
- Collaborated with all areas of IT, designing and implementing solutions that enhanced operational efficiency by 20%.
- Built and maintained infrastructure in the Azure cloud, improving the CI/CD process and QA testing, ensuring 24/7 uptime and zero service disruptions in production environments.
- Provisioned Azure environments using Terraform and ARM templates, reducing setup time by 35%.
- Managed the day-to-day operation and support of IaaS & PaaS offerings, including preventative maintenance, monitoring, and incident management, reducing incidents by 20% and improving response times by 15%.

Jun 2020 – Jun 2021 Egypt

#### **DevOps Team Leader,** Banque Du Caire

- Acting as Head of DevOps, leading the DevOps team in an agile environment, improving deployment efficiency by 35% and team productivity by 20%.
- Took ownership of managing large-scale infrastructure, enhancing reliability and automation, which resulted in a 40% reduction in system downtime.
- Installed, configured, and managed VMware vSphere 6.x and 7 Infrastructure (ESXi, VCenter, Clustering, HA, DRS, etc.), ensuring 99.99% system uptime.
- Designed and implemented cluster applications via Docker/Kubernetes with high availability, increasing system performance by 30%.
- Built and administered VMs & Containers using Docker, Vagrant, and Kubernetes, optimizing resource allocation and reducing server costs by 25%.
- Installed and configured load balancers via Nginx, improving load distribution and system responsiveness by 20%.
- Installed and configured web servers (Apache, Tomcat, NGINX), ensuring 24/7 availability for mission-critical applications.

- Implemented and managed CI/CD pipelines (Git, GitLab, Jenkins), improving code deployment speed by 50% and reducing errors by 30%.
- Managed Linux-based infrastructure and VMs (Ubuntu, CentOS, Redhat) on ESXi with vCenter, ensuring 99.9% infrastructure availability.
- Managed Kubernetes clusters for development, testing, and staging environments, writing manifests to deploy platform components, reducing setup times by 25%.
- Responsible for creating infrastructure VMs in staging, testing, and UAT environments, reducing downtime and increasing system reliability.
- Collaborated closely with developers to optimize the application stack and implement new technologies, improving overall performance by 30%.
- Maintained and supported production applications, ensuring a 100% uptime SLA for all critical systems.
- Maintained the availability of applications hosted on UNIX and Windows servers, ensuring smooth and efficient operations.
- Automated system tasks using Bash scripts, Python, and PowerShell, reducing manual work by 40% and enhancing team productivity.
- Created detailed documentation for projects that adopted DevOps transformation, ensuring 100% adherence to best practices.
- Delivered DevOps awareness training to all IT teams, increasing overall team efficiency by 25% and fostering a DevOps-centric culture.

Jan 2020 – May 2020 Egypt

## Senior Infra/DevOps Engineer, Banque Du Caire ☑

Working as second and third-level Administrator for Microsoft Infrastructure Environment as I Implement, administrate, and manage a large Infrastructure Environment (+10000 Employees) with different Applications (Exchange, Skype for Business, Active Directory, KMS, GPO, DNS, DHCP, CA, IIS, DFS, FSRM, SCCM, SCOM, and SharePoint).

- Set up Git, GitLab repositories, and SSH Keys for Agile teams.
- Setting up Jenkins master, adding the necessary plugins, and adding more slaves to support scalability and agility.
- Set up CI/CD pipelines for Microservices and integrated tools such as Maven, Gradle, SonarQube, Nexus, Docker, Kubernetes, and Slack for providing immediate feedback to DEV teams after code check-in.
- Downloading SDN packages into created repositories and using Jenkins to orchestrate build and deployments.
- Scripting and automating system tasks to reduce manual repetitive work (Bash script, Python, PowerShell).
- Automated infrastructure provisioning on VMWare vSphere using Terraform and Ansible.
- Install, configure, and Manage File Servers "DFS, Clusters File Servers" "backup & restore permissions and quota".
- Administering Messaging Environment (Exchange, Skype, and Teams).
- Managing Trend Micro Scan Mail for Exchange (SMEX).
- Administrate and Manage Skype for Business 2015 and Microsoft Teams (O365).
- Integrated on-premises Active Directory with Azure AD (using Azure AD Connect)
- Configure and Manage Identity access BDC Azure subscription.

- Managing SCCM deployment (downloading and deploying Software Updates/ deploying applications and packages)
- Managing Patch Management using SCCM.
- Managing Backups, Policies, Restoration, Storage, and Hosts in NetBackup.
- Monitoring the day-by-day Veritas Backup Exec Backup and restoration.
- Overall, I'm working on (MS servers (AD, GPO, DNS, DHCP, FSRM, SCCM, SCOM, SharePoint, and Exchange), PowerShell V5, SCCM 2012, VMware vSphere 6.7, and MS Azure/O365).

## Jan 2019 – Dec 2019 Egypt

## Senior System Engineer (DevOps), IDP EDUCATION LTD ☑

- Install and configure web servers (Apache, Tomcat, and NGINX).
- Implementing and managing CI/CD (Git, Gitlab, and Jenkins) pipelines for code changes and deployments in different environments.
- Working on ways to automate reports, improve development and release processes
- Working in Software development life cycle
- Working in AGILE.
- Development Tools: VS Code, WAMP, Git, GitLab, Docker, Vagrant.
- Project 1: Using Docker to containerize a web app
- Project 2: Build CI/CD automation with GitLab for web app
- Project 3: Manage all build and deploy tools, and oversee all deployments (Kubernetes, Ansible & Jenkins)
- Install, configure, and manage a large server farm (HP, DELL) Multi-Site Datacenter, with different Applications (Active Directory, DNS, DHCP, SCCM, VMware vSphere).
- Install, configure, and manage VMware Infrastructure including (ESXi, VCenter, Clustering HA Configuration, DRS, Distributed-Switch, VMware Converter, etc.)
- Install, configure and Manage Active Directory 2008/2012 R2/2016 R2, including SCCM, Group Policy (GPO), File Server, Accounts Management, and Troubleshooting
- Install, configure and Manage File Servers "DFS, Clusters File Servers" "backup & restore permissions and quota"
- Managing Trend Micro Cloud-Based Management Antivirus Server, push antivirus Client's maintaining up to date on all machines.
- Install, configure and Manage Veeam Backup Server 9.
- Managing FortiGate firewall and user's VPN Access.
- Managing IT HW/SW Assets and Communicating with Vendors/Partners to get the right needs for the company of Hardware and software
- Vendor management for all local ISP (Telecom Egypt, TE-DATA, and Vodafone
- Configure and manage the Panasonic PBX IP Phone System.
- Configure and Manage HP and Canon Multifunction Printer Services.
- Configure and Manage CCTV Security Camera System.
- Overall, I am working on (MS servers (DCs, DNS, DHCP), PowerShell V4, SCCM 2012, Hyper-V, VMware vSphere, MS Azure, and Office 365)

Sep 2016 – Dec 2018 Egypt

## Senior IT Support Engineer, Vodafone International Services 🖂

- Providing IT technical support to All Vodafone-Egypt staff, VIS and Vodafone partners, TKAs, & dealers.
- Administering and maintaining Active Directory.
- Installing and upgrading software, implementing file backups, and configuring systems and applications.
- Working on Windows Server 2008 & 2012 & 2016 and Linux RedHat Enterprise 7.
- Own and manage the relationship with all users by resolving calls effectively and efficiently.
- Working on BMC Remedy (Ticketing System).
- Inform IMS (Incident Management and Support Team) via phone about Critical Incidents.
- Have familiarity with NAS and SAN storage management, and MS DFS.
- Administrating DSS & FollowMe (Print Servers), File Server.
- Manage and administrate print and file servers.
- Manage and support the Citrix XenApp and Dell RSA Token.
- Manage and administrate the user's accounts on O365

Dec 2012 - Sep 2016 Egypt

**Technical Support Senior Specialist,** *Vodafone Egypt* □

Jul 2007 - Oct 2012

Egypt

IT System Admin, Noor Data Network □



#### Education

Sep 2004 – May 2007

Egypt

**Bachelor of Information Technology,** *Alsun Higher Institute* □

Information Systems Department



#### **Courses**

#### **Certificates** 🗗

- ITIL Foundation V3 (Certified by AXELOS Ref ID: GR750388788ME)
- ITIL Service Operation
- Cloud-Native Operations BootCamp
- Certified Kubernetes Administrator
- Build local development environments using Docker containers
- Udemy Learn DevOps Infrastructure Automation with Terraform
- Hands-On Infrastructure Automation with Ansible
- Introduction to Git and GitHub {Certified by Google Ref ID: C2EHND7XALB9}
- Fundamentals of Kubernetes Deployment {Certified by Coursera Ref ID: MFXY5AESP3AZ}
- Containerization Using Docker (Certified by Coursera Ref ID: DVM96BAYRLQ7)
- VMware Certified Professional 6 DCV (Certified by Pluralsight-ID: 4127)
- VMware NSX-T Data Center Install, Configure and Manage V3.1 (Global Knowledge Training)
- Citrix Xenserver 6.1 (Certified by Pluralsight Ref ID: 4127)

- Managing Infrastructure with Microsoft Azure (Certified by Pluralsight-ID: 4127)
- Managing Office 365 Identities and Requirements (70-346) {Certified by Pluralsight Ref ID: 4127}
- G Suite Administration (Certified by Pluralsight Ref ID: 4127)
- Active Directory Administration 2016 (Certified by Pluralsight Ref ID: 4127)
- SharePoint Server 2013 Administration (Certified by Pluralsight Ref ID: 4127)
- SQL Server Administration 2016 (Certified by Microsoft Online)
- Linux System Administrator (LFCS) {Certified by Pluralsight Ref ID: 4127}
- Command-Line in Linux {Certified by Coursera Ref ID: NWXUYEPCRK7H}
- Linux RHCSA
- Python Fundamentals (Certified by Pluralsight Ref ID: 4127)
- Cloud Computing Core Concepts {Certified by LinkedIn Learning Ref ID: AW28yHmQrAxIzpiZt1UPSR31\_GEA}
- Cloud Computing Public Cloud Platforms {Certified by LinkedIn Learning Ref ID: AVvc0sJBfTBoxkxjEPApE0\_L8qK0}
- Cloud Computing Private Cloud Platforms {Certified by LinkedIn Learning Ref ID: AaaEOjcjIMsZs-aFgJn32YNeWeEH}
- Digital Payments Ecosystem (Certified by Egyptian Bank Institute Ref ID: uR1XXMIW25)
- AWS Certified DevOps Engineer {Certified by AWS Ref ID: u1V9VzsinUqR9lFMFcTipw2}
- MCSE 2012
- MCITP 2008
- Microsoft Exchange Server 2013/2016 (20345 1B 20345 2B)
- AD services with windows server (10969B) {Attend in IT-Egypt MCT}
- SCCM 2012 Deploying and Administration
- SCOM 2012 Deploying and Administration
- CCNA
- Windows 7, 8.1, 10
- MTA, CompTIA (A Plus, Network Plus, Server Plus, Linux Plus)
- Effective leadership {Certified from HP life e-learning Ref ID: 1439520-36885}



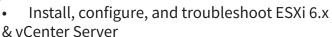
#### **DevOps**

- Proficiency in DevOps stacks like; Git, Docker, Kubernetes, Jenkins, Ansible, Terraform, SonarQube, Selenium, JFrog Artifactory, Nexus, Gitlab, GitHub, GitHub actions, GitOps (FluxCD), ELK Stack, Prometheus and Grafana and others.
- Proficiency in Azure Cloud services like;
   Virtual Machines, Web App, Azure Function,
   Managed Databases, API Management, App
   Gateway, Logic Apps, Azure Event Hub, Active
   Directory, Exchange, Storage Account,
   Kubernetes service, Container Registry, Azure
   DevOps and Others.
- Proficiency in AWS Cloud products like; EC2, S3, RDS, IAM, Route53, DynamoDB, CloudFormation, EKS, ECR, CodePipeline, Cloudwatch and others.
- CI/CD tools Jenkins, Gitlab, GitHub Actions Azure DevOps and AWS Coe Deploy.
- Automated infrastructure provisioning on Azure, and AWS using Terraform, ARM, CloudFormation and Ansible.
- Automation and scripting using Bash and PowerShell.
- Agile methodology

#### **Personal**

- Good communication with colleagues
- Teamwork & Service Improvement
- Hard Worker & Fast Learning
- Analytics Mentality
- Ability to think out of the box
- Excellent internet surfing for issues
- Time management.
- Ability to multi-task and prioritize work as per deadlines.

## **Systems Administration**



- Administering and Monitoring MS, Linux and VMWare Servers
- Knowledge of data backup and restoration (Veeam and NetBackup)
- Hands-on with Veeam backup solution (virtual and physical)
- Administering IT infrastructure (switches, firewalls, routers, and servers)
- Designing, Deploying, and Managing Microsoft AD DS 2008/2012/2016/2019
- Designing, Deploying, and Managing Microsoft Exchange Server 2013/2016
- Deploying, and Managing Linux Servers.



## **Publication**

2021	Ansible Automation, Mohamed ElEmam ☑ Mini-Book about Ansible Automation
2020	<b>Jenkins From Scratch,</b> <i>Mohamed ElEmam</i> ☑ Mini-Book about Jenkins CI/CD
2020	Git from scratch (version control system), Mohamed ElEmam ☑ Mini-Book about Git and version control systems
2020	<b>Kubernetes From Scratch,</b> <i>Mohamed ElEmam</i> ☑ Mini-Book about Kubernetes
2020	Extensive introduction to Container Technology - Docker,  Mohamed ElEmam   Mini-Book about the Container Technology and Docker
2020	Microsoft Exchange Server 2013/2016, Mohamed ElEmam ☑ Mini-Book about Microsoft Exchange Server 2013 and 2016
2020	System Center Configuration Manager Current Branch,  Mohamed ElEmam  Mini-Book about SCCM 2012 and Current Branch Edition
2020	Microsoft SQL Server Administration 2014, Mohamed ElEmam ☑ Mini-Book about MSSQL Server 2014
2023	Comprehensive Guide to High Availability and Disaster Recovery for OpenShift Clusters in Multi-Site, Mohamed ElEmam  Article
2023	Boosting Your DevOps Workflow with Azure DevOps REST API,  Mohamed ElEmam  Article
2022	Kubernetes Backup & Restore as a Service, Mohamed ElEmam Article
2022	Deploy a Highly Available Kubernetes Cluster using Rancher RKE,  Mohamed ElEmam ☑  Article
2022	Build Docker Images in Kubernetes POD Without Docker -Kaniko,  Mohamed ElEmam  Article
2021	What is Software Testing and What is SonarQube ?!, Mohamed ElEmam 🛮

2021	Backup and restore Gitlab in docker, Mohamed ElEmam ☑ Article
2021	<b>GitLab Container/Docker Registry,</b> <i>Mohamed ElEmam</i> ☑ Article
2021	<b>How to Configure GitLab Webhook in Jenkins,</b> <i>Mohamed ElEmam</i> ☑ Article
2020	Create View Only User on Kubernetes Cluster, Mohamed ElEmam 🗵 Article
2020	<b>DevOps ?!,</b> <i>Mohamed ElEmam</i> ☑ Article
2020	SED/AWK Basics, Mohamed ElEmam 🗵 Article

# Projects

#### Aug 2020 – present

## Designed and Implemented OpenShift Environment,

For Many Banks/Organizations

- Designed and Implemented OpenShift multi Environments from scratch for many banks in the Middle East and Europe
- Designed and Implemented OpenShift Clusters for multiple environments on different platforms.
- Configured OpenShift Clusters.
- Implemented Quay/Harbor Registry.
- Integrated Harbor Registry to OpenShift Clusters.
- Deliver Training to the Org Tech Team for K8s and OpenShift administration.
- Support the team in deploying infinity.

#### Jun 2023 - Oct 2023

## Design and Led Implementation of Bank's Mobile App on AWS,

Banque Misr

- Design a highly available solution for Bank's Mobile App on AWS.
- Led the Implementation on AWS for 3 Environments Dev, UAT and Prod.
- Tools: Terraform Modules, EKS, ECR, RDS, ElasticCache, EC2, EBS, EFS, S3, VPC, Subnets, Security Groups, EIPs, Routes, Route53, NLB, ELB, IGW, NGW, VGW, F5 CIS integration, CloudWatch, Log Trail, SQS, SNS, Azure DevOps, SonarQube, Neuvector, PrismaCloud, GitHub Advanced Security

#### Jan 2023 - Dec 2023

## **Redesign Banque Misr DevOps Environment and Practice,** Banque Misr

- Introduced and used GitOps with ArgoCD.
- Redesigned the DevOps process for more agile results.
- Contributed with the RedHat Team to Design multiple OpenShift Cluster.
- Contributed with InfoSec Team to Design and Apply DevSecOps across Banque Misr Environment.

• Introduced Zero Touch and adopted Automation in almost everything.

#### Oct 2022 - Dec 2022

## **Design and Implement Kafka Cluster,** *Gedia - GSSC*

Design and Implement Kafka Cluster

- Design and Implement a highly available Kafka Cluster to support all Geidea APIs.
- Use Case: generating reports, real-time streaming, and ETL Jobs by the Big Data Team.

#### Jan 2022 – Jun 2022

#### **Migrating SMS Gateway Service,** TPAY Mobile

- Implemented and configured Jasmin SMS Gateway a highly available solution to be used by TPAY Mobile APIs to send SMSs to the customers.
- Landing any new operator in the new SMS Gateway Solution
- Migrating Old SMS connections from vendor SMS Gateway to our new SMS Gateway service.

#### Nov 2021 – Aug 2022

# Shift and Lift TPAY Mobile Apps to Azure Cloud Uses Terraform Modules,

TPAY Mobile

Created Terraform Modules for Azure to be used with TPAY Environments

https://github.com/EngMohamedElEmam/terraform-azure-modules

#### Aug 2021 – Dec 2021

#### GitOps - Flux CD, TPAY Mobile

Implemented FluxCD as the GitOps tools used in TPAY Environments

https://github.com/EngMohamedElEmam/GitOps-FluxCD

#### Jul 2021 – Dec 2021

#### Redesign TPAY Mobile Cloud and DevOps Environment, TPAY Mobile

- Evaluated the current cloud resources and resized a lot of services and removed other orphaned ones utilizing industry best practices and cost optimisation.
- Introduced Terraform and ARM templates for Azure resources provisioning and Integrated them into Azure DevOps CI/CD pipeline.
- Deployed SonarQube Kubernetes Production and Staging clusters to be used as a part of the CI/CD pipeline.
- Deployed Prometheus/Grafana in (Kubernetes Services AKS) Production and Staging clusters for the environment as monitoring solutions.
- Deployed Elastic Stack (Elastic Search, Logstash/Fluentd and Kibana) in (Kubernetes Services - AKS) Production and Staging clusters for the environment as logging solutions.
- Deployed RabbitMQ cluster in (Kubernetes Services AKS) Production and Staging clusters for the environment as messaging queue solutions.
- Introduced Az Automation Runbooks to schedule shutdown and start-up virtual machines during off-business hours.

#### Feb 2021 - Apr 2021

#### **Azure ARM Templates,** Banque Du Caire

Azure ARM Template to create a full production AKS

https://github.com/EngMohamedElEmam/Azure-ARM-Template

Apr 2020 - Dec 2020

## Design and Implement Banque Du Caire DevOps Environment,

#### Banque Du Caire

- GitLab (Git Repository)
- Jenkins and GitHub Actions(CI/CD Pipeline)
- JFrog Artifactory (Build Artifacts)
- Nexus Repository (Build Artifacts)
- Private Docker Registry (Container Images)
- Docker Environment (Containerization)
- Kubernetes Environment (Containers Orchastraion)
- Ansible and Terraform for Infrastructure as Code

May 2020 - Jul 2020

#### **Implementation of NexThink in Banque Du Caire**, Banque Du Caire

- Prepared NexThink AD Accounts, Certificate and servers (Production and Test).
- Contributed with the vendor in configuration and fine-tuning of NexThink servers.
- Deployed NexThink collector on more than 8000 windows devices.
- Configured role-based access control for all Teams (SysAdmins, ITSecOps, InfoSec, IT Governance, HelpDesk).
- Contributed to organising training for all Teams (SysAdmins, ITSecOps, InfoSec, IT Governance, HelpDesk).

Feb 2020 - Jun 2020

## **Redesign Banque Du Caire Microsoft Infrastructure,** Banque Du Caire

- Installed and configured 3 Additionals AD Domain Controller WS2016 for Bank Domain.
- Installed and configured an Additional AD Domain Controller WS2016 for SWIFT Domain.
- Installed and configured an Additional AD Domain Controller WS2016 for UAT Domain.
- Installed and configured an Exchange Server 2016 for UAT Domain.
- Cleaned up the old Exchange environment 2010 from HQ and DR.
- Demoted Old DC 2008 R2 from UAT Domain.
- Raised UAT forest and Domain Unction level from 2008 to 2016.
- Demoted two Old DC 2008 R2 from BDC Domain to prepare the forest to raise the function level.
- Implemented DR Replication and Failover server for File Server for more reliability and availability.
- Implemented a new test environment (Active directory Domain, KMS and Exchange (4 servers)).
- Implemented a new SWIFT Domain test environment.
- Implemented a new DHCP server for Stone-soft (Force Point) VPN clients.
- Redesign and reconfigure SCOM Environment to enhance alerts and reports output for Microsoft production servers.
- Redesign and reconfigure Skype for Business Environment.

Mar 2020 - Apr 2020

## **Creation of Banque Du Caire MS Office 365 Accounts,** Banque Du Caire

- Azure AD sync with On-premises AD.
- Deleted all orphaned users in Azure AD.
- Created 5000 accounts on Azure AD.

• Assigned Microsoft teams license for the AD Azure user accounts.

#### Jul 2019 - Oct 2019

## **IDP Cloud Migration**

Implemented an Office 365 Cloud Solution and migrated from On-Premises to O365 for ( 500 users )

- Creating an account on O365.
- Verifying Domain.
- Creating Mailboxes.
- Create Users & assign License.
- Creating Groups and adding Users.
- Synchronize the Outlook.
- Create PST backup.
- Add MX-Record to manage the mails flow from Network\_Solution to O365 Exchange.
- Configure Outlook for new Exchange.
- Attach PSTs to Outlook.

#### Aug 2018 - Sep 2018

## Migrating Print Server (Vodafone International Services),

**Vodafone International Services** 

Contributed to migration of Print Server from 2008 R2 to 2012 R2

#### Apr 2018 - Jul 2018

# Contributed in Converting physical data center into virtual using

vSphere environment, Freelance

Deployed and Configured ESXi Hosts

Deployed and Configured vCenter

Configured SAN storage

Configured VNetwork

Configured AD integration with VSphere

Deployed VMs

**Exported VM templates** 



# Languages

Arabic



**English** 



# **References**

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