DANISH AHMED

TECHNICAL ARCHITECT

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Experienced Technical Architect specializing in Kubernetes, Docker, Terraform, and Azure DevOps. Adept at architecting cloud-native environments, driving efficiency, and scaling operations. Proven success in spearheading projects, ensuring cost savings, system reliability, and fostering innovation. Skilled in leading cross-functional teams and delivering results through advanced DevOps practices.

SKILLS AND COMPETENCIES

- Cloud computing platforms (Azure, AWS)
- CI/CD platforms (Azure DevOps, Jenkins)
- Disaster recovery planning and implementation
- PowerShell and Bash Scripting

- Containerization technologies (Docker, Kubernetes)
- Infrastructure as Code (Terraform)
- Version Control (Git)
- Configuration Management (Ansible)

EMPLOYMENT HISTORY

Technical Architect   Contour Software   July 2023 – Present   Karachi, Pakistan

As a Technical Architect, my role encompasses the design and development of intricate IT architectures for enterprise-level systems. Ensuring seamless implementation and conducting performance evaluations of new systems. Incorporating pipelines as code and utilizing Kubernetes are integral components of my daily responsibilities. These practices enable me to streamline workflows and enhance system efficiency.

Established a development environment using Azure Kubernetes Service (AKS), which enabled isolated testing of a .NET Core 6.0 web application. This involved designing a Kubernetes cluster with deployment groups and services. Furthermore, I implemented a Kubernetes Ingress controller to efficiently handle traffic and external access. Secure management of sensitive information was ensured through Kubernetes Secrets. Additionally, I employed horizontal pod scaling for dynamic deployment scaling and seamlessly rolled out new versions of the application using Kubernetes' rolling update strategy.

Presently engaged in migrating a desktop-based application to AKS. The objective is to ensure that not only does the application retain its seamless functionality, but it also fully embraces the potential of the cloud-native environment.

Senior DevOps Engineer   Spur Solutions   Aug 2022 – July 2023   Karachi, Pakistan

Supervised the disaster recovery execution. The strategy called for the automatic creation of infrastructure resources in Azure's secondary region if the primary region failed. The Azure automation account was used to host the Power Shell scripts, which were subsequently run through the recovery service vault. The disaster recovery plan was carried out successfully, resulting in the deployment of Azure firewall, load balancers, traffic managers, network security groups, and virtual machines. This helped in establishing RTO of 1 hour and RPO of 5 minutes. The successful implementation of the DR plan mitigated the impact of a catastrophic outage and ensured business continuity.

Took the lead in Containerizing .NET 6.0 APIs and hosting them on AKS. The goal was to reduce the number of virtual machines and the administrative overhead that comes with them. The APIs were successfully executed in the Azure Kubernetes cluster using Deployment sets, ConfigMaps, Secrets and Services. The transition to a container-based environment cleared the path for developers to deconstruct monolithic web applications into microservices.

Introduced Terraform in the company since the infrastructure was previously mostly built by hand. imported current infrastructure, incorporated modules, functions and variables to construct a powerful desired state plan. Consequently, creating and updating the infrastructure became much easier with an added benefit of version control.

Collaborated with technical teams to help organize and automate the delivery of applications from development to production. Integrated Azure DevOps with Jenkins to minimize build queues.
Created CI/CD pipelines for Angular and .NET 6.0 applications in production which helped to shorten the delivery time.

Redesigned infrastructure in Azure for staging and production to fulfill PCI compliance by using an Azure Firewall in a hub-and-spoke architecture. The idea was to utilize a single firewall and route traffic from other vnets through the firewall. Vnet peering was used along with custom route tables to achieve this goal. Formulated appropriate DNAT and SNAT rules for RDP and Web traffic.
The implementation of Azure firewall was a critical step in achieving PCI compliance and increasing customer trust.

IT Manager **Traffic Digital**   **Nov 2016 – Feb 2022**   **Karachi, Pakistan**

Led the project of migration of virtual machines and on-premises MSSQL databases to Azure. Using Data Migration Assistant and Azure Migrate, more than 500 MSSQL databases and 20 VMs were moved. SQL elastic pools were used to host the databases. High availability was achieved by incorporating the failover groups for SQL and site recovery for VMs. Furthermore, the traditional AD was decommissioned, and the users were moved to Azure AD to take advantage of single sign-on and multi-factor authentication.
The migration increased business continuity reduced monthly costs and ultimately resulted in satisfied consumers.

Provided a road map for hosting code repositories on Azure DevOps. The aim was to host the repositories on TFS with suitable branching techniques and project permissions. Built CI/CD pipelines for Asp.net 4.8 and .NET 5.0 for the staging, UAT, and production environments, significantly lowering total development time.
The switch to Azure DevOps gave the developers additional flexibility, as well as safe access to the environment from anywhere.

Assisted in the construction of a hybrid cloud network to link users to the Azure cloud. Site-to-site VPN was established between the Fortinet 100F firewall and the Azure VPN gateway. This enabled a secure connection to Azure resources.

Introduced the use of site24x7, a comprehensive monitoring system which provided application performance monitoring (APM) as well as deeper insights for the infrastructure. The system helped in identifying the usage and performance of individual web requests and application dependencies like databases, web services, caching etc.

Prior to the cloud move, I oversaw the company's on-premises infrastructure. Hyper-V was utilized as the virtual platform for hosting Windows and Linux servers. Configured Cisco switches and routers for LAN and WAN. Backups were performed using Veeam backup and replication, and high availability was achieved using Hyper-V replication. Other infrastructure services included the Zycoo IP PBX system, VPN connectivity between headquarters and branch offices, and redundant internet connections using BGP.

Server Analyst   **IBEX Global**   **May 2016 – Aug 2016**   **Karachi, Pakistan**

Managed VMware vSphere-based data centers, offering third-level support to clients across multiple countries. Collaborated on mission-critical tasks, including Exchange Server 2010, BackupExec, NAS, and antivirus systems, aligning with business SLAs for optimal results.

Systems Engineer   **ITSec**   **Oct 2011 – May 2016**   **Karachi, Pakistan**

Provided end-users with Tier 2 and Tier 3 technical support, addressing hardware, software, and network issues. Deployed CentOS servers on Linode, managed on-premises virtualized environment, and expertly handled VMware ESXi, Ubuntu, SonicWall, and Trixbox technologies.

EDUCATION

Masters in information technology   **2021**   **Virtual University**   **Karachi, Pakistan**

CERTIFICATIONS

Certified Kubernetes Administrator (CKA)	in-progress
AZ-400 Microsoft Certified: DevOps Engineer Expert	2022
AZ-303 Microsoft Azure Architect Technologies	2021
AZ-104: Microsoft Azure Administrator	2020
Aws Certified Solutions Architect Associate	2019
Microsoft Certified Systems Engineer	2008
Cisco Certified Network Professional	2010