BLUESHIFT

Azure Migration Project Website

Team Members

Mohamed Ayman

Cloud Engineer | Smart Grids Undergrad

Ahmed Mansour

Cloud Engineer | Communication Engineering Undergrad

Youssef Elmansy

Cloud Administrator | Solutions Architect

Mohamed Adel

Cloud Engineer | DevOps Enthusiast | Huawei Cloud Ambassador

What the project solves ?

Scalability

Azure App Service Provides Manual-Scale to handle traffic variations efficiently.

Maintenance

Cloud-Based Hosting reduces operational costs by eliminating physical infrastructure needs "PaaS".

Security

Microsoft Entra Authentication enhances security with identity and access management.

Reliability

High Availability & Redundancy in Azure ensures minimal downtime and disaster recovery options.

Management

Automated Management & Monitoring with Azure tools simplifies updates and performance tracking.

Accessibility

Cloud Accessibility allows secure remote access from anywhere, improving productivity and collaboration.

BLUESHIFT

Week one process

" Creating the source environment on Azure "

Creating a "VM" on Azure

A fully configured VM with IIS services ready to host the "on-premises" website.

Landing on "WS 2022"

Windows Server 2022 image with IIS (Internet Information Services) enabled.

Scaling Availability

Three fault domains and two update domains for high availability.

BLUESHIFT

Week two process

" Building the Landing Zone Website "

Creating an Azure App Service

Standard Plan (Standard S1) and ASP.NET 4.8 framework and using Microsoft Entra authentication for secure access
.

Scaling Out

Manual scaling with a maximum of three instances for flexibility. Creating a Staging Slot.

Verifying Reachability

Verified website reachability from a local machine.

BLUESHIFT

Week three process

" Import Website into IIS Server (Source Server) "

Downloading "Blue Shift" Website files

Instead of downloading a sample website, a custom website was built from scratch. It includes:

- Project overview
- Timeline
- Team members

Publishing the Website

Published from Visual Studio Code using `Self-contained` deployment

Creating a Website in "IIS" server & checking it

Create new Website in IIS server

Copy published project files

Paste them into: `C:\inetpub\wwwroot`

Open a browser and access the local/public IP

Microsoft Cloud Adopt for Azure:

1. Define strategy
2. Plan
3. Ready
4. Adopt
5. Govern
6. Manage

Week four process

" Migration From On-Premises to cloud "

Create Azure Migration project

Create a Database project through Azure migrate.

Migrate the website and check reachability

Create assessment for On-prims website.

Check reachability after migration.

Add a domain name and certificate

Add a custom domain name on app service.

Thanks