

AZ-2003: Deploy cloud-native apps using Azure Container Apps

Duration: 8 Hours (1 Day)

Overview

The AZ-2003: Deploy cloud-native apps using Azure Container Apps certification does not exist as of my knowledge cutoff in 2023. As certifications are regularly updated, it's possible that the mentioned certification might have been introduced after this date, or it could be a typographical error. However, if a certification around deploying cloud-native apps with Azure Container Apps were to exist, it would typically focus on the skills required to deploy, manage, and scale containerized applications on Microsoft Azure using Azure Container Apps—a serverless container service. Professionals would learn to leverage Azure's tools for container orchestration, Networking, Security, and Monitoring, thus enabling efficient application development in the cloud. Industries would use this knowledge to modernize their applications, ensure scalability, and improve deployment workflows for better resource utilization and cost efficiency.

Audience Profile

- Developers with experience in containerization technology
- DevOps professionals seeking to leverage Azure for app deployment
- IT professionals focusing on cloud-native application development
- Individuals preparing for Microsoft's Azure certification exams
- Technical team leads managing cloud application deployment projects

Course Syllabus

Chapter 1: Get started with cloud native apps and containerized deployments

- Introduction
- Examine cloud-native apps
- Examine deployment options for cloud-native apps
- Review an Azure Container Apps solution architecture and resources
- Knowledge check
- Summary

Chapter 2: Configure Azure Container Registry for container app deployments

- Introduction
- Review the Azure Container Registry service
- Create a container registry instance in the Azure portal
- Examine registry operations for image management
- Examine authentication with managed ident
- Examine Azure Container Registry roles and permissions
- Examine secure communications using virtual networks

- Knowledge check
- Summary

Chapter 3: Configure a container app in Azure Container Apps

- Introduction
- Review the Azure Container Apps service
- Examine Azure Container Apps containers and containers registries
- Create a container app and container app environment
- Examine managed identities in Azure Container Apps
- Examine ingress in Azure Container Apps
- Examine the management of secrets in Azure Container Apps
- Examine the storage mounts in Azure Container Apps
- Examine cloud service connections in Azure Container Apps
- Knowledge check
- Summary

Chapter 4: Configure continuous deployment for container apps

- Introduction
- Review continuous deployment options for container apps
- Examine Azure DevOps and Azure Pipelines
- Examine Azure Pipeline configuration and deployment tasks
- Examine agents and agent pools for pipelines
- Examine environment and secret variables for pipelines
- Knowledge check
- Summary

Chapter 5: Scale and manage deployed container apps

- Introduction
- Examine revisions in Azure Container Apps
- Examine application lifecycle management in Azure Container Apps
- Examine scaling options in Azure Container Apps
- Examine ingress settings for traffic-splitting and blue-green deployments
- Knowledge check
- Summary

Chapter 6: Guided project - Deploy and manage a container app using Azure Container Apps

- Introduction
- Prepare your app deployment tools and resources
- Exercise - Configure Azure Container Registry for a secure connection with Azure Container Apps
- Exercise - Create and configure a container app in Azure Container Apps
- Exercise - Configure continuous integration by using Azure Pipelines
- Exercise - Manage revisions in Azure Container Apps
- Knowledge check
- Summary