MICROSOFT TRAINING

AZ-2003: Deploy Cloud-Native Apps Using Azure Container Apps

Master deploying cloud-native apps with Azure Container Apps and prepare for your AZ-2003 exam.

DURATION
24 hours

LEVEL
Intermediate

FORMAT
Instructor-Led

- Globally Recognized Certification
- Expert-Led Hands-On Training
- Flexible Scheduling

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COURSE OVERVIEW

This intermediate-level course, AZ-2003: Deploy Cloud-Native Apps Using Azure Container Apps, is meticulously designed for developers and cloud professionals looking to master the deployment and management of modern microservices and containerized applications on Azure. You'll dive deep into Azure Container Apps, Microsoft's fully managed serverless platform, learning how to leverage its capabilities for building highly scalable and resilient cloud-native solutions. The course emphasizes practical skills in containerization, orchestration concepts, and the efficient deployment lifecycle, ensuring you can design, implement, and operate cutting-edge applications with confidence. Participants will gain hands-on experience with core technologies essential for cloud-native development. This includes understanding Docker for containerization, grasping fundamental Kubernetes concepts as they relate to Container Apps, and exploring advanced features like Dapr for building portable, event-driven microservices, and KEDA for event-driven autoscaling. By the end of this 24-hour program, you'll be adept at developing robust, scalable, and cost-effective cloud applications, making you an invaluable asset in any modern IT organization seeking to accelerate their cloud adoption and innovation. The skills acquired directly contribute to optimizing application performance, improving development velocity, and reducing operational overhead.

Duration	24 hours
Level	Intermediate
Vendor	Microsoft
Exam Code	AZ-2003

COURSE CURRICULUM

01 Module 1: Getting Started with Azure Container Apps

- Introduction to Cloud-Native Development and Microservices
- Overview of Azure Container Apps (ACA)
- Comparing ACA with AKS and App Service
- Setting up your development environment
- Creating your first container app

02 Module 2: Deploying and Managing Containerized Applications

- Containerizing applications with Docker
- Deploying existing containers to ACA
- Managing revisions and rollbacks
- Environment variables and secrets management
- Custom domains and SSL/TLS

03 Module 3: Scaling and Network Configuration

- Understanding autoscaling with KEDA (Kubernetes Event-Driven Autoscaling)
- Configuring scaling rules based on HTTP, Azure Service Bus, and more
- Ingress and traffic management
- Virtual Network (VNet) integration and secure networking
- Internal and external environments

04 Module 4: Integrating with Advanced Features and Services

- Implementing Dapr for building portable microservices
- State management, pub/sub, and service invocation with Dapr

- Integrating with Azure services (e.g., Azure Cosmos DB, Azure Storage, Azure Event Hubs)
- Implementing background processing and long-running tasks

05 Module 5: Monitoring, Troubleshooting, and Security

- Logging and monitoring with Azure Monitor and Log Analytics
- Tracing and distributed tracing concepts
- Troubleshooting common deployment and runtime issues
- Implementing authentication and authorization
- Security best practices for Container Apps

06 Module 6: CI/CD and Best Practices

- Automating deployments with Azure DevOps or GitHub Actions
- Implementing blue/green deployments and canary releases
- Best practices for developing and deploying cloud-native apps on ACA
- Cost optimization strategies

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

> **Cloud-Native Application Developer (Azure Specialist)**

> **Azure DevOps Engineer (Containerization Focus)**

> **Microservices Architect (Azure Platform)**

FREQUENTLY ASKED QUESTIONS

Q: What specific challenges will I be able to solve after completing the AZ-2003 course regarding cloud-native deployments on Azure?

Upon completing AZ-2003, you will be proficient in overcoming common challenges such as achieving seamless autoscaling for fluctuating workloads, implementing secure and private networking for your containerized applications within Azure, simplifying inter-service communication using Dapr, and effectively monitoring and troubleshooting complex microservices architectures. You'll gain the skills to build resilient, cost-optimized, and highly available cloud-native solutions on Azure Container Apps.

Q: Is prior experience with Kubernetes or Docker required to benefit from this AZ-2003 course?

While not strictly a prerequisite, a foundational understanding of containerization concepts, particularly Docker, and basic familiarity with microservices architecture will significantly enhance your learning experience in AZ-2003. The course covers the specifics of Azure Container Apps, which abstracts away much of the underlying Kubernetes complexity, but a general grasp of container technology will help you appreciate the benefits and capabilities of ACA more deeply.

Q: How does the AZ-2003 certification specifically enhance my ability to design and implement event-driven architectures on Azure?

This course heavily focuses on integrating event-driven patterns. You will learn to leverage KEDA (Kubernetes Event-Driven Autoscaling) within Azure Container Apps to automatically scale your applications based on various event sources like Azure Service Bus, Kafka, or HTTP traffic. Furthermore, the course delves into Dapr, enabling you to build resilient, stateful, and event-driven microservices with capabilities like pub/sub messaging and state management, directly

empowering you to design and implement robust event-driven architectures efficiently.

ABOUT COMPUTER PRIDE

East Africa's Premier IT Training Center

With over 15 years of excellence, Computer Pride delivers globally recognized certification programs from leading technology vendors. Located on Kenyatta Avenue in Nairobi's CBD, our state-of-the-art facilities and expert instructors have empowered thousands of professionals across East Africa.

15+	10,000+	50+
Years of Excellence	Professionals Trained	Vendor Certifications

READY TO ENROL?

Take the next step in your technology career.

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