



MICROSOFT TRAINING

Serverless Architecture Microsoft Cloud Workshop

Master serverless architecture on Microsoft Cloud. Design and deploy highly scalable, cost-effective applications with Azure services.

DURATION

2 hours

LEVEL

Intermediate

FORMAT

Instructor-Led

- Globally Recognized Certification

- Expert-Led Hands-On Training

- Flexible Scheduling

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COURSE OVERVIEW

The Serverless Architecture Microsoft Cloud Workshop, offered by Computer Pride, is an intensive 2-hour intermediate-level course designed to immerse you in the world of cloud-native application development using Microsoft Azure's powerful serverless ecosystem. This workshop provides a hands-on experience, guiding you through the process of designing, building, and deploying highly scalable, cost-effective, and event-driven applications without the need to manage underlying infrastructure. You will explore core Azure serverless technologies such as Azure Functions, Logic Apps, Event Grid, and Cosmos DB, understanding how they integrate to create robust and resilient solutions.

Participants will gain practical skills in implementing serverless functions for API backends, automating workflows, processing real-time data streams, and building intelligent applications that respond to events. This course emphasizes best practices for serverless security, monitoring, and deployment, ensuring you can confidently transition from traditional architecture to a modern serverless approach. By mastering these cutting-edge tools, you'll be equipped to optimize cloud resource utilization, accelerate development cycles, and deliver innovative solutions that drive business value.

Unlock the potential of modern cloud computing and elevate your development expertise. This workshop is perfect for developers, architects, and IT professionals looking to leverage the full power of Azure's serverless capabilities to build agile, scalable, and efficient applications, preparing them for the demands of contemporary cloud environments.

Duration	2 hours
Level	Intermediate
Vendor	Microsoft

COURSE CURRICULUM

01 Module 1: Introduction to Serverless on Azure

- Understanding Serverless Computing Principles
- Benefits and Use Cases of Serverless Architectures
- Overview of Azure Serverless Services (Functions, Logic Apps, Event Grid)
- Key Differentiators: PaaS vs. Serverless
- Cost Management and Optimization in Serverless

02 Module 2: Building Event-Driven Applications with Azure Functions

- Azure Functions Concepts: Triggers, Bindings, and Durable Functions
- Developing HTTP-triggered and Blob-triggered Functions
- Implementing Data Processing and Backend APIs with Azure Functions
- Local Development and Debugging of Azure Functions
- Deployment Strategies for Azure Functions

03 Module 3: Orchestrating Workflows with Azure Logic Apps

- Introduction to Azure Logic Apps for Workflow Automation
- Designing and Building Complex Workflows with Connectors
- Integrating Logic Apps with other Azure Services and External APIs
- Handling Conditional Logic, Loops, and Error Management
- Monitoring and Management of Logic App Workflows

04 Module 4: Real-time Event Handling with Azure Event Grid

- Understanding Event-Driven Architectures with Azure Event Grid
- Publishing Custom Events and Subscribing to System Events
- Event Grid Topics, Event Subscriptions, and Handlers
- Building Reactive Serverless Solutions with Event Grid and Azure Functions
- Fan-out and Filtering Strategies with Event Grid

05 Module 5: Serverless Data Storage and Integration

- Introduction to Azure Cosmos DB for Serverless Applications
- Integrating Azure Functions with Cosmos DB for Data Operations
- Using Storage Queues and Service Bus for Asynchronous Communication
- Best Practices for Data Management in Serverless Solutions
- Securing Serverless Applications: Managed Identities and Azure Key Vault

06 Module 6: Monitoring, Troubleshooting, and Best Practices

- Monitoring Serverless Applications with Azure Application Insights
- Logging and Tracing for Azure Functions and Logic Apps
- Performance Optimization Techniques for Serverless
- DevOps Principles for Serverless Deployments (CI/CD)
- Review of Serverless Design Patterns and Anti-Patterns

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

- > **Azure Serverless Developer**
- > **Cloud Solutions Architect specializing in Azure**
- > **DevOps Engineer focusing on Azure Functions and Logic Apps deployment**

FREQUENTLY ASKED QUESTIONS

Q: What foundational Azure knowledge should I have before taking this Serverless Architecture Microsoft Cloud Workshop?

To get the most out of this intermediate workshop, participants should have a basic understanding of Azure services, including familiarity with creating resources in the Azure portal, basic networking concepts, and experience with at least one programming language (e.g., C#, JavaScript, Python) for Azure Functions development. Prior exposure to cloud computing concepts will also be beneficial.

Q: Will this workshop cover strategies for migrating existing applications to a serverless architecture on Azure?

While the primary focus of this workshop is on building new serverless applications and understanding the core components, we will touch upon design patterns and architectural considerations that are highly relevant when planning to refactor or migrate existing applications to leverage Azure's serverless capabilities. You'll learn how to break down monolithic applications into smaller, event-driven functions and workflows.

Q: What practical skills will I be able to demonstrate immediately after completing this Serverless Architecture workshop?

Upon completion, you will be able to confidently design and implement event-driven serverless solutions using Azure Functions, automate business processes with Azure Logic Apps, and integrate various Azure services like Event Grid and Cosmos DB. You'll gain hands-on experience in deploying, monitoring, and troubleshooting serverless applications, enabling you to build highly scalable and cost-efficient cloud-native solutions.

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+

Years of Excellence

10,000+

Professionals Trained

50+

Vendor Certifications

READY TO ENROL?

Take the next step in your technology career.

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