

Microsoft Azure: Serverless Infrastructure

WorkshopPLUS

Focus Area: Performance and Scalability

Duration: 3 Days

Difficulty: 300 - Advanced

Overview

Understand what serverless computing is and apply IT architectural models/scenarios to solve business problems, be efficient, and be flexible. Learn the fundamental tools to use in Azure to empower workforce to focus on the code, not the plumbing. Gain experience through a combination of hands-on exercises combined with expert instruction on tools and techniques.

Objectives

After completing this training, students will be able to:

- Explain the benefits of serverless computing
- Understand the architecture and design principles of serverless computing
- Learn the key components of Azure Serverless Computing and their key usage scenarios
- Calculate the Azure operational costs of serverless design
- Know the different components of a serverless application platform
- Understand how azure serverless computing can be used to compose and augment solutions

Key Takeaways

Course Material

- 5 Module plan:
 - Introduction to serverless computing
 - Logic Apps use cases and scenarios
 - Azure Functions use cases and scenarios
 - Event Grid use cases and scenarios
 - Serverless decision framework

Hands-on Labs

- Most of the concepts covered above will be supported by hands-on labs and demos.
- Attendees have access to resources and labs for up to 6 months after workshop completion.

Agenda

Day 1

- Introduction to Azure Serverless Infrastructure
- Logic App Fundamentals

Day 2

- Azure Functions

Day 3

- Event Grid
- Serverless Usage Scenarios

Plan for three full days. Early departure on any day is not recommended.

Course Details

Module 1: Introduction to Azure Serverless

- Overview
- Architecture and Design Principles
- Key Components and usage scenarios
- Operational Costs
- Platform components
- Knowledge Check
- Lab

Module 2: Logic App Fundamentals

- Workflow Engine
- Logic Apps architecture
- Integration Service Environments
- Workflow Patterns
- Messaging patterns
- Security
- Monitoring and Diagnostics
- Costs
- Knowledge Check
- Lab

Module 3: Azure Functions

- Introduction to Azure Functions
- Triggers and Bindings
- Durable Functions
- Integration
- Building a pipeline
- Create, Deploying and Managing
- Knowledge Check
- Lab

Module 4: Event Grid

- Introduction to Event Grids
- Event Grid components
- Event-based Architecture
- Costs
- Security
- Knowledge Check
- Lab

Module 5: Serverless Usage Scenarios

- Usage Scenarios

Recommended Qualifications

This course is designed for IT staff who have designed, deployed, administered, or managed a Serverless environment for at least one full year. In addition, we recommend the following qualifications:

- Microsoft Certified IT Professionals for Serverless
- Microsoft Certified System Engineers

The basic concepts of the product will not be covered in this course. It is expected that the attendees will already possess this knowledge.

For more information

Contact your Microsoft Account Representative for further details.

Requirements

- Microsoft/Windows Live ID to connect to the virtual environment
- Azure Subscription (non-trial)
- Internet access with at least 1 Mbps bandwidth per student.