

KOENIG SOLUTIONS • COURSE OUTLINE

Azure Integration Services

Learn to design, build and monitor enterprise integration solutions using Azure Functions, Logic Apps, Service Bus, API Management, Event Grid and Data Factory.

5 Days

40 HOURS

9

MODULES

89

TOPICS

7

HANDS-ON ACTIVITIES

COURSE OVERVIEW

This course covers Azure Integration Services, starting with core integration scenarios, enterprise integration patterns and foundational Azure AD and App Service concepts. It then examines Azure Functions and Durable Functions, Logic Apps and Integration Accounts, Service Bus messaging, API Management, Event Grid, and Data Factory for building ETL pipelines and moving data. It closes by looking at integration solution architecture, covering hybrid integration, monitoring with Azure Monitor and Application Insights, and DevOps practices for deployment automation.

WHO THIS COURSE IS FOR

Integration Developers

Cloud Solution Architects

API Developers

DevOps Engineers

Data Engineers

LEARNING OBJECTIVES

- Describe key Azure Integration Services and enterprise integration patterns
- Configure Microsoft Entra ID and Azure App Service settings
- Develop Azure Functions and Durable Functions for serverless workloads
- Build and manage Logic Apps and Integration Accounts for B2B scenarios
- Implement Service Bus queues and configure dead letter handling
- Configure API Management policies and publish APIs and products
- Apply Event Grid to capture and route events across services
- Build ETL pipelines and move data using Azure Data Factory

9 Modules, 89 Topics

00

Introduction to Azure Integration Services

TOPICS

Overview of Azure Integration Services · Integration Scenarios & Challenges

KEY INTEGRATION SERVICES

Logic Apps · Service Bus · API Management · Event Grid · Azure Functions · Data Factory

Enterprise Integration Patterns

01

Hands-on Lab

Explore Microsoft Entra (Azure AD) & Azure App Service

TOPICS

- Explore Microsoft Entra ID configuration options

UNDERSTANDING

- Users
- Tenant
- Subscriptions
- RBAC
- Explore Azure App Service (PaaS)

02

Hands-on Lab

Azure Functions

TOPICS

- Overview of Azure Functions

BENEFITS OF AZURE FUNCTION

- Overview of plans
- Scaling Options and limits in different plans
- Function app timeout duration in different plans
- Architecture of Azure Function
- Azure Function vs Web Jobs
- Developing Azure Functions

DEMO

- Creating Azure Function using Azure Portal
- Creating Azure Function programmatically
- Best practices for reliable Azure Functions
- Explore Durable Functions
- Benefit of Durable Function over Azure Function
- Components of Durable Function

DEMO

- Creating Durable Function

03**Hands-on Lab**

Azure Logic Apps and Integration Account

TOPICS

- What are Logic Apps?
- Logic Apps vs Functions vs Power Automate
- Triggers & Actions

CONNECTORS

- Control actions, conditional and parallel runs

CREATING AND MANAGING LOGIC APPS USING

- Azure Portal
- Visual Studio Code
- CLI & PowerShell

INTEGRATION ACCOUNT

- B2B Integration
- EDI Processing

04**Hands-on Lab**

Azure Service Bus

TOPICS

- What is a Service Bus?
- Need of Azure Service Bus
- Storage Account Queues vs Service Bus Queues
- Enterprise integration using message broker
- Explore Service Bus Features

DEMO

- Managing Service Bus Queues using Management Portal
- How to work with Service Bus Queues and Topics programmatically

- Working with Service Bus Queues
- Managing Service Bus Queues using Management Portal
- How Service Bus Handles Failures
- Configure Dead Letter Queue

05**Hands-on Lab**

API Management

TOPICS

- Why we need APIMS
- Overview of Azure API Management
- Working with APIs in APIM
- Components of API Management Service
- Creating new API in API Management Service Instance
- Adding and configuring methods in API

DEMO

- Import and publish your first API

CONFIGURE POLICIES

- Configure authentication policies
- Configure transformation policies
- Explore all other policies
- Explore stages of policy implementation
- Test the new API in the Azure portal
- Create and publish a product
- Monitor Published APIs

DEMO

- Working with products
- Monitoring Published APIs

06**Hands-on Lab**

Azure Event Grid

TOPICS

- Need of Event Grid Service?
- Scenario for using Event Grid
- Explore Event Grid

EVENT GRID COMPONENTS

- Topics
- Subscriptions

- Event Grid vs Event Hub
- Creating and Capturing Events in Azure Event Grid

DEMO

- Handling Events using Event Grid
- Send notifications about Azure Storage account events to Webhook and
- Send notifications using Event Grid to Logic Apps

07**Hands-on Lab**

Data Factory

TOPICS

Understand the need for a Data Factory · Overview of Azure Data Factory · Flow process of Data Factory · Introduction to Data Lake · Build ETL Pipelines using Azure Data Factory · Data Movement using Azure Data Factory

DEMO

Copying Data from Azure SQL to Data Lake · Load Data from Data Lake to Power BI · Creating Pipeline using Data Factory

Introduction to Azure Data Lake Analytics

08

Explore Integration Services Solution Architecture

ENTERPRISE INTEGRATION SOLUTION DESIGN

- Hybrid Integration Scenarios
- Best Practices for Secure & Scalable Integrations

MONITORING & TROUBLESHOOTING

- Azure Monitor, Application Insights

DEVOPS & CI/CD FOR INTEGRATION SERVICES

- Automating Deployments with Azure DevOps

Practise What You Learn

#	MODULE	ACTIVITY
01	Explore Microsoft Entra (Azure AD) & Azure App Service	Hands-on Lab
02	Azure Functions	Hands-on Lab
03	Azure Logic Apps and Integration Account	Hands-on Lab
04	Azure Service Bus	Hands-on Lab
05	API Management	Hands-on Lab
06	Azure Event Grid	Hands-on Lab
07	Data Factory	Hands-on Lab

WHAT IS INCLUDED

Everything You Need to Succeed

- Koenig course material for every module
- Delivery by certified instructors and subject matter experts
- Hands-on exercises throughout the course
- Course completion certificate from Koenig

Who We Are

Established in 1993, Koenig Solutions is a globally recognised training provider with 35+ technology partnerships, 5,000+ training programmes and a network of certified instructors and subject matter experts, supporting individuals and enterprise teams worldwide.

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