

# Course AZ-300T04-A: Creating and Deploying Apps

## About this course

This course teaches IT Professionals how to build Logic App solutions that integrate apps, data, systems, and services across enterprises or organizations by automating tasks and business processes as workflows. Logic Apps is cloud service in Azure that simplifies how you design and create scalable solutions for app integration, data integration, system integration, enterprise application integration (EAI), and business-to-business (B2B) communication, whether in the cloud, on premises, or both.



You will also see how Azure Service Fabric is a distributed systems platform that makes it easy to package, deploy, and manage scalable and reliable microservices and containers. Service Fabric also addresses the significant challenges in developing and managing cloud native applications. Developers and administrators can avoid complex infrastructure problems and focus on implementing mission-critical, demanding workloads that are scalable, reliable, and manageable. Service Fabric represents the next-generation platform for building and managing these enterprise-class, tier-1, cloud-scale applications running in containers.

Lastly, you'll see how Azure Kubernetes Service (AKS) makes it simple to deploy a managed Kubernetes cluster in Azure. AKS reduces the complexity and operational overhead of managing Kubernetes by offloading much of that responsibility to Azure. As a hosted Kubernetes service, Azure handles critical tasks like health monitoring and maintenance for you.

## Audience profile

Successful Cloud Solutions Architects begin this role with practical experience with operating systems, virtualization, cloud infrastructure, storage structures, billing, and networking.

## Course Outline

### Module 1: Creating Web Applications using PaaS

This module provides an overview of Azure App Service Web Apps for hosting web applications, REST APIs, and a mobile back end. Topics include the following:

- Using shell commands to create an App Service Web App
- Creating Background Tasks
- Using Swagger to document an API

As well as an explanation of how Logic Apps help to build solutions that integrate apps, data, systems, and services across enterprises or organizations by automating tasks and business processes as workflows.

After completing this module, students will be able to:

- Use shell commands to create an App Service Web App
- Create Background Tasks
- Use Swagger to document an API

### Module 2: Creating Apps and Services Running on Service Fabric

This module provides an overview of Azure Service Fabric as a distributed systems platform that makes it easy to package, deploy, and manage scalable and reliable microservices and containers. This module also addresses the challenges in developing and managing cloud native applications. Additional topics include:

- Creating a reliable service
- Creating a Reliable Actors app
- Working with Reliable collections

After completing this module, students will be able to:

- Create a reliable service
- Create a Reliable Actors app
- Hands-on with Reliable collections

### Module 3: Using Azure Kubernetes Service This module focuses on the Azure

Kubernetes Service (AKS) for deploying and managing a Kubernetes cluster in Azure. Topics include how to reduce operational overhead of managing Kubernetes by offloading much of that responsibility to Azure, such as health monitoring and maintenance. Additional topics include:

- Azure Container Registry
- Azure Container Instances

After completing this module, students will be able to:

- Understand the Azure Container Registry
- Use Azure Container instances