

# Cloud-Based Integration Using Logic Apps

Duration	5 days	Remote Enabled	Yes
Skill level	Beginner	Guaranteed to Run	Yes
Audience	Developer		
Products and technologies	<p>The following products and technologies will be utilized in this course:</p> <ul style="list-style-type: none"> <li>• Logic Apps</li> <li>• Enterprise Integration Pack</li> <li>• Azure Resource Manager</li> <li>• API Apps</li> <li>• Azure App Service</li> <li>• Azure Service Bus</li> <li>• Azure Functions</li> </ul>		

## Course Description

Attendees of this course will learn how to build cloud-hosted integration solutions that utilize the power of Microsoft Azure. The Azure cloud platform offers a vast variety of diverse services to help enterprises build powerful solutions.

In this course, students learn how to create enterprise-grade integration solutions using *Logic Apps*, *API Apps*, the *Enterprise Integration Pack*, and *Azure Service Bus*.

At the core of the course is *Logic Apps* and how to use this cutting-edge technology to build integration workflows. However, *Logic Apps* primarily provide process orchestration and API integration. In order to build well-rounded enterprise integrations, you may desire publish-subscribe capabilities, hybrid connectivity, and VETER pipelines. As a result, you will see how to interact with other Azure services such as Azure Service Bus, as well as on-premises systems like SQL Server, and how you can add to the out-of-the-box tools in *Logic Apps* with the *Enterprise Integration Pack*.

This 5-day course offers the full picture for developers who need to build integration solutions using the Azure platform, and gives students about 20 hours of hands-on lab time in which they will build several integration solutions.

In this course, attendees will receive live instruction from one of our expert trainers, in-classroom demonstrations, challenging hands-on labs, and an electronic copy of the presentation materials and lab guide with hands-on activities.

Participants in this course will need an Azure subscription, or the ability to create a free trial subscription.

## Course Objectives

At the completion of this course, attendees will be able to:

- Manage the Application Lifecycle using Azure Resource Groups
- Create Azure resources using the Azure Resource Manager and Azure Portal
- Connect to on-premises systems using the on-premises data gateway
- Create schemas for Azure API Apps
- Build maps for the BizTalk Transform Service API App
- Manage Enterprise Integration Pack assets using an Integration Account
- Interact with Azure Service Bus topics, subscriptions, and queues manually and programmatically
- Build complex workflows using Logic Apps to perform forking, merging, loops, parallel execution, and exception handling
- Build custom API Apps including triggers and actions
- Included is a full day workshop where attendees will build a complete end-to-end integration using Logic Apps, API Apps, and Azure Service Bus

## Audience

This course is designed for experienced .NET developers with a strong desire to learn about Microsoft's new Integration options using Azure Logic Apps.

## Prerequisites

Attendees should be proficient with C# and have some familiarity with ASP.NET, MVC, and Web API.

## Module Listing

1	<b>Introduction to Logic Apps and Cloud-Based Integration</b> <ul style="list-style-type: none"><li>• Microsoft Integration Platform Vision</li><li>• Logic App Technology Primer</li><li>• Building a Simple Logic App</li></ul>	8	<b>Mapping Data Using Transforms</b> <ul style="list-style-type: none"><li>• Introduction to Maps</li><li>• Manipulating Data Using Functoids</li><li>• Getting the Most out of the Mapper</li></ul>
2	<b>Setting Up an Azure App Service Development Environment</b> <ul style="list-style-type: none"><li>• Components of Hybrid Integrations</li><li>• Setting Up a Development Environment</li></ul>	9	<b>Introduction to Microsoft Azure Service Bus</b> <ul style="list-style-type: none"><li>• What Is Service Bus?</li><li>• Working with Queues</li><li>• How Service Bus Handles Failures</li></ul>
3	<b>Introduction to Logic Apps</b> <ul style="list-style-type: none"><li>• Logic App Fundamentals</li><li>• Anatomy of a Logic App</li><li>• Configuring the Request Trigger</li><li>• Intro to Logic Apps Expressions</li><li>• Manual Testing and Troubleshooting</li></ul>	10	<b>Implementing a Publish/Subscribe Model Using Service Bus</b> <ul style="list-style-type: none"><li>• Theory of Topics and Subscriptions</li><li>• Interacting with Topics and Subscriptions Programmatically</li></ul>
4	<b>Using Azure Resource Groups as an Application Lifecycle Container</b> <ul style="list-style-type: none"><li>• Resource Groups Fundamentals</li><li>• Working with Resource Groups</li><li>• Managing Resource Deployments Using Team Foundation Server</li></ul>	11	<b>Architecting Cloud Integration Solutions</b> <ul style="list-style-type: none"><li>• Reviewing Core Technologies</li><li>• Workshop: Full Day Workshop</li><li>• Lab 11A: Building EAI Apps Using Azure App Service</li><li>• Lab 11B: Advanced Apps with Azure App Service</li><li>• Lab 11C: Building Request/Response Logic Apps</li></ul>
5	<b>Advanced Logic Apps</b> <ul style="list-style-type: none"><li>• Conditional Execution</li><li>• Calling External Logic</li><li>• Exception Handling</li><li>• Looping Through Data</li><li>• Tracking</li></ul>	12	<b>Building Custom API Apps</b> <ul style="list-style-type: none"><li>• Anatomy of an API App</li><li>• Fundamentals of Web API</li><li>• Hello API App World</li><li>• Debugging API Apps</li><li>• Creating Deployment Templates for Custom APIs</li></ul>
6	<b>Building Enterprise Application Integration (EAI) Apps Using Azure App Service</b> <ul style="list-style-type: none"><li>• EAI Concepts</li><li>• Implement VETERO Using Logic Apps</li><li>• How Logic Apps Handles Content Types</li><li>• Introducing the Enterprise Integration Pack</li><li>• Enabling Hybrid Integrations using the On-Premises Data Gateway</li></ul>	13	<b>Building Custom Triggers</b> <ul style="list-style-type: none"><li>• Concepts of Triggers</li><li>• Creating Polling Triggers</li></ul>
7	<b>Creating Schemas</b> <ul style="list-style-type: none"><li>• Introduction to Schemas</li><li>• Creating XML Schemas</li><li>• Schemas for Non-XML Messages</li><li>• Using XML Schemas in Logic Apps</li></ul>		

