



Azure Dev Days

for developers, by developers

A photograph of a classroom scene. In the foreground, a young man with dark hair, wearing a blue and white striped long-sleeved shirt, is seated at a light-colored wooden desk. He is looking down at a tablet computer on the desk, which displays a colorful diagram of a human heart. He is holding a black pen over the tablet. To his right, another student, a young man with dark skin and short dark hair, is looking towards the camera with a slight smile. In the background, other students are visible, including a woman with long brown hair and a man with long blonde hair. The text "Hands-On-Labs" is overlaid in white on a semi-transparent dark blue rectangular background in the center of the image.

Hands-On-Labs

Common Prerequisites

- Free Azure Subscription click [here](#)
- Install Azure CLI [click here](#)
- Install Visual Studio [click here](#)
- Install VS Code [click here](#)
- Install [Git](#)

Azure App Services



Azure App Services

Beginner

Title

Create an ASP.NET Core web app in Azure

Azure Web Apps provides a highly scalable, self-patching web hosting service. This lab shows how to deploy your first ASP.NET Core web app to Azure Web Apps. When you're finished, you'll have a resource group that consists of an App Service plan and an Azure web app with a deployed web application.

Prerequisites

- To complete this tutorial:
- Install [Visual Studio 2017](#) with the **ASP.NET and web development** workload.
- If you've installed Visual Studio already, add the workload in Visual Studio by clicking **Tools > Get Tools and Features**.

[Click here to start](#)

Azure App Services

Intermediate

Title

Build a .NET Core and SQL Database web app in Azure App Service

App Service provides a highly scalable, self-patching web hosting service in Azure. This tutorial shows how to create a .NET Core web app and connect it to a SQL Database. When you're done, you'll have a .NET Core MVC app running in App Service.

Prerequisites

To complete this tutorial:

- [Install Git](#)
- [Install .NET Core](#)

[Click here to start](#)

Azure Serverless



Azure Function

Beginner

Title

Create your first function in the Azure portal.

Azure Functions lets you execute your code in a serverless environment without having to first create a VM or publish a web application. In this lab, learn how to use Functions to create a "hello world" function in the Azure portal.

Prerequisites

None

[Click here to start](#)

Azure Function

Intermediate

Title

Create your first function using Visual Studio.

Azure Functions lets you execute your code in a serverless environment without having to first create a VM or publish a web application.

In this lab, you learn how to use the Visual Studio 2017 tools for Azure Functions to locally create and test a "hello world" function. You then publish the function code to Azure. These tools are available as part of the Azure development workload in Visual Studio 2017.

Prerequisites

- Install [Visual Studio 2017](#) and ensure that the **Azure development** workload is also installed.
- Make sure you have the [latest Azure Functions tools](#).

[Click here to start](#)

Azure Logic App

Beginner

Title

Create your first automated workflow with Azure Logic Apps - Azure portal

This lab introduces how to build your first automated workflow with Azure Logic Apps. In this article, you create a logic app that regularly checks a website's RSS feed for new items. If new items exist, the logic app sends an email for each item

Prerequisites

None

[Click here to start](#)

Azure Logic App

Intermediate

Title

Create a function that integrates with Azure Logic Apps.

This lab shows you how to use Functions with Logic Apps and Microsoft Cognitive Services on Azure to analyze sentiment from Twitter posts. An HTTP triggered function categorizes tweets as green, yellow, or red based on the sentiment score. An email is sent when poor sentiment is detected.

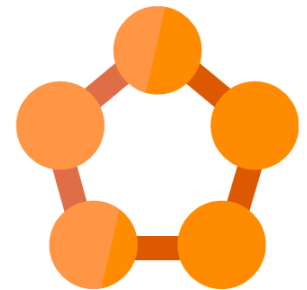
Prerequisites

- An active [Twitter](#) account.
- An [Outlook.com](#) account (for sending notifications).
- This topic uses as its starting point the resources created in [Create your first function from the Azure portal](#).

If you haven't already done so, complete these steps now to create your function app.

[Click here to start](#)

Container and Microservices



Azure Container Instance

Beginner

Title

Create your first container in Azure Container Instances

Azure Container Instances makes it easy to create and manage Docker containers in Azure, without having to provision virtual machines or adopt a higher-level service. In this lab, you use the Azure portal to create a container in Azure and expose it to the internet with a fully qualified domain name (FQDN).

Prerequisites

None

[Click here to start](#)

Azure App Service Container

Beginner

Title

Deploy a Docker/Go web app in Web App for Containers

App Service Linux provides pre-defined application stacks on Linux with support for languages such as .NET, PHP, Node.js and others. You can also use a custom Docker image to run your web app on an application stack that is not already defined in Azure. This lab shows how to create a web app and deploy a Go image from Docker Hub.

Prerequisites

None

[Click here to start](#)

Azure Kubernetes

Intermediate

Title

Deploy an Azure Kubernetes Service (AKS) cluster.

In this lab, you deploy an AKS cluster using the Azure portal. A multi-container application consisting of web front end and a Redis instance is then run on the cluster. Once completed, the application is accessible over the internet.

Prerequisites

- None

[Click here to start](#)

Azure Service Fabric Mesh

Intermediate

Title

Deploy Hello World to Service Fabric Mesh

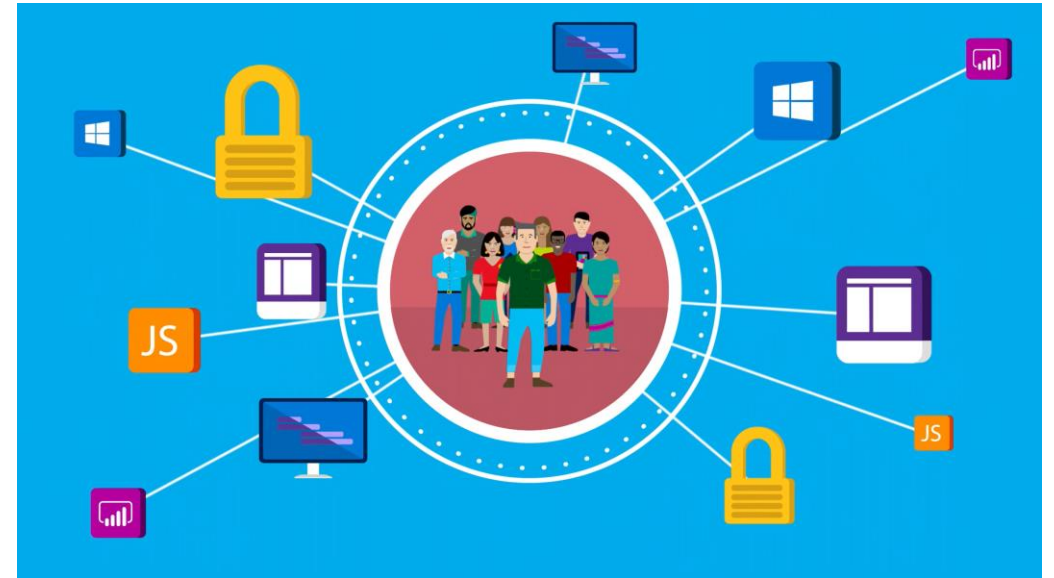
Service Fabric Mesh makes it easy to create and manage microservices applications in Azure, without having to provision virtual machines. In this lab, you will create a Hello World application in Azure and expose it to the internet.

Prerequisites

- Install the [Service Fabric Mesh CLI](#)

[Click here to start](#)

Azure DevOps



Azure DevOps Project .NET

Intermediate

Title

Create a CI/CD pipeline for .NET with the Azure DevOps Project

Configure continuous integration (CI) and continuous delivery (CD) for your .NET core or ASP.NET application with The Azure DevOps Project. The Azure DevOps project simplifies the initial configuration of a VSTS build and release pipeline.

Prerequisites

None

[Click here to start](#)

Azure DevOps Project Node.js

Intermediate

Title

Create a CI/CD pipeline for Node.js with the Azure DevOps Project.

The Azure DevOps Project presents a simplified experience which creates Azure resources and sets up a continuous integration (CI) and continuous delivery (CD) pipeline for your Node.js app in Visual Studio Team Services (VSTS), which is Microsoft's DevOps solution for Azure.

Prerequisites

- None

[Click here to start](#)

Azure DevOps AKS

Advance

Title

Deploy your ASP.NET Core App to Azure Kubernetes Service (AKS) with the Azure DevOps Project

The Azure DevOps Project presents a simplified experience where you bring your existing code and Git repository, or choose from one of the sample applications to create a continuous integration (CI) and continuous delivery (CD) pipeline to Azure. The DevOps project automatically creates Azure resources such as AKS, creates and configures a release pipeline in VSTS that includes a build definition for CI, sets up a release definition for CD, and then creates an Azure Application Insights resource for monitoring.

Prerequisites

- None

[Click here to start](#)

Azure DevOps Azure SfB

Advance

Title

Deploy your ASP.NET Core App to Azure Service Fabric with the Azure DevOps Project

The Azure DevOps Project presents a simplified experience where you bring your existing code and Git repository, or choose from one of the sample applications to create a continuous integration (CI) and continuous delivery (CD) pipeline to Azure. The DevOps project automatically creates Azure resources such as Azure Service Fabric, creates and configures a release pipeline in VSTS that includes a build definition for CI, sets up a release definition for CD, and then creates an Azure Application Insights resource for monitoring.

Prerequisites

- None

[Click here to start](#)