

Module 4

Azure Web Apps

Module Overview

- Creating and configuring Azure web apps
- Deploying and monitoring Azure web apps

Lesson 1: Creating and configuring Azure web apps

- Web Apps as a component of Azure App Service
- Comparing Web Apps with other Azure services providing web app–hosting functionality
- Creating and maintaining web apps
- Configuring and scaling web apps
- Demonstration: Creating and scaling a web app

Web Apps as a component of Azure App Service

- App Service:
 - Web Apps
 - Mobile Apps
 - API Apps
 - Logic Apps
- Web Apps features:
 - Marketplace-based solutions
 - Autoscaling
 - Continuous integration and deployment
 - Deployment slots
 - Testing in production
 - Azure WebJobs
 - Hybrid connections
 - Azure virtual network integration
 - Authentication and authorization
 - Logs and alerts

Comparing Web Apps with other Azure services providing web app–hosting functionality

- Azure Virtual Machines
- Web Apps
- Azure Cloud Services
- Azure Service Fabric
- Azure Container Instances
- Azure Kubernetes Service

Creating and maintaining web apps

Tier	Free	Shared	Basic	Standard	Premium	PremiumV2	Isolated
Web apps	10	100	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited
Storage	1 GB	1 GB	10 GB	50 GB	250 GB	500 GB	1 TB
Compute instance	Shared	Shared	Dedicated	Dedicated	Dedicated	Dedicated	Dedicated
Custom domains	No	Yes	Yes	Yes	Yes	Yes	Yes
SSL for custom domains	No	No	Yes	Yes	Yes	Yes	Yes
Network isolation	No	No	No	No	No	No	Yes
SLA	None	None	99.95%	99.95%	99.95%	99.95%	99.95%
Staged publishing	No	No	No	Yes	Yes	Yes	Yes

Configuring and scaling web apps

- Application settings:
 - General
 - Debugging
 - App settings
 - Connection strings
 - Default documents
 - Handler mappings
 - Virtual applications and directories
- Authentication / Authorization
- Managed service identity
- Backups
- Custom domains
- SSL Settings
- Scale up
- Scale out
- WebJobs

Demonstration: Creating and scaling a web app

In this demonstration, you will see how to:

- Create an Azure web app by using the Azure portal
- Configure the Azure web app by using the Azure portal

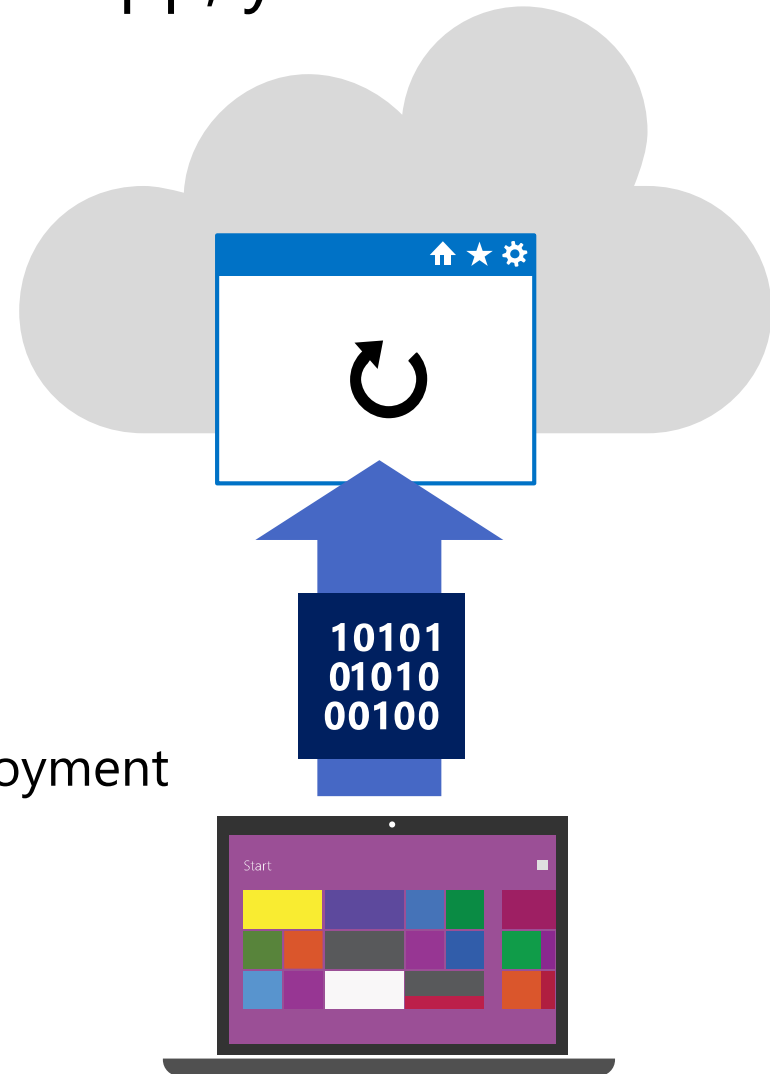
Lesson 2: Deploying and monitoring Azure web apps

- Options for building, publishing, and deploying Azure web apps
- Publishing a web app from Visual Studio
- Performing staged deployments
- Monitoring Azure web apps
- Demonstration: Monitoring Azure web apps by using the Azure portal

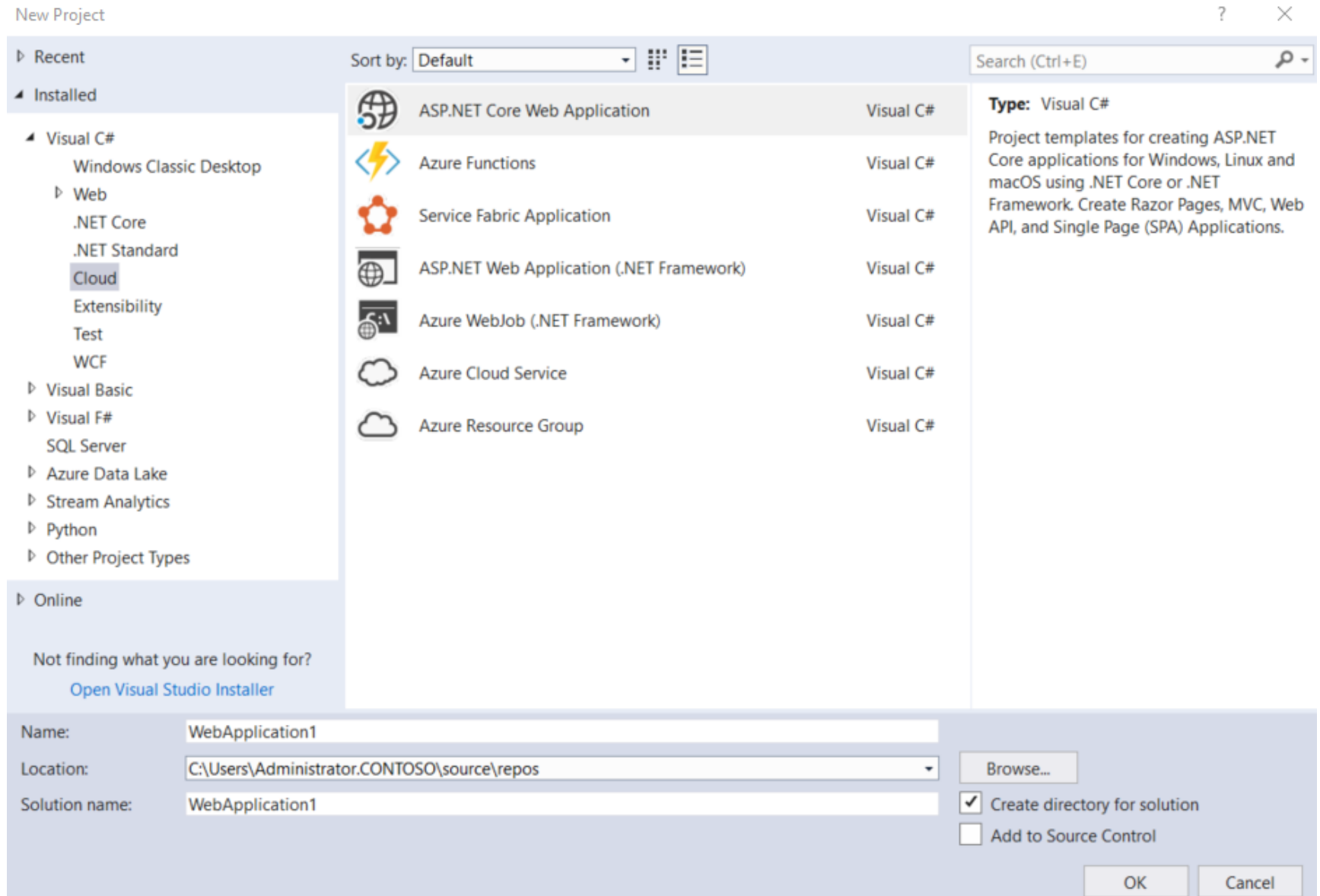
Options for building, publishing, and deploying Azure web apps

To deploy/publish an Azure web app, you can use:

- Microsoft Visual Studio
- Visual Studio Team Services
- Microsoft WebMatrix
- Azure Marketplace
- Web Deploy
 - Visual Studio
 - MSDeploy.exe
 - WebMatrix
 - New-AzureRmResourceGroupDeployment
- FTP
 - No support for advanced features



Publishing a web app from Visual Studio



Performing staged deployments

Continuous integration and deployment:

- Connect a source control repository to an Azure web app
- Check in the changes to trigger automatic build and deployment to the staging slot
- Swap the staging slot with the production slot
- Adjust (if needed):
 - General settings
 - App settings
 - Connection strings
 - Handler mappings
 - Monitoring and diagnostic settings
 - WebJobs content

Monitoring Azure web apps

- Monitor Azure web apps:
 - Adding metrics:
 - Azure web app blade
 - Azure Monitor
 - Configuring alerts:
 - Azure web app blade (classic)
 - Azure Monitor
 - Enabling and viewing Application Insights telemetry
- Configure Azure web apps diagnostics:
 - Web server logging
 - Detailed error messages
 - Failed request tracing
 - Application logging
- Store logs in Azure web app file system or Azure Storage

Demonstration: Monitoring Azure web apps by using the Azure portal

In this demonstration, you will see how to:

- Configure Azure web app monitoring
- Configure Azure web app diagnostics
- Configure Azure web app alerts
- Configure Azure web app Application Insights

Lab: Creating and managing Azure web apps

- Exercise 1: Creating and configuring an Azure web app

Logon Information

Virtual machine:

10979F-MIA-CL1

User name:

Admin

Password:

Pa55w.rd

Estimated Time: 30 minutes

Lab Scenario

You were asked to deploy a web app for the Adatum Corporation public relations team. You have decided to use the Web Apps feature of Azure App Service for this purpose.

Lab Review

- In the lab, you used an Azure web app to host your website. What do you think are the most important benefits of Azure web apps when compared with running web apps in Azure VMs?

Module Review and Takeaways

- Review Question
- Real-world Issues and Scenarios
- Tools
- Best Practice