Module16

Deploying ASP.NET MVC 4 Web Applications

Module Overview

- Deploying a Web Application
- Deploying an ASP.NET MVC 4 Web Application

Lesson 1: Deploying a Web Application

- ASP.NET MVC 4 Dependencies
- Deploying Web Applications to Web Servers
- Deploying Web Applications to Multi-Server Farms
- Deploying Web Applications on Windows Azure
- Demonstration: How to Create a Windows Azure Website

ASP.NET MVC 4 dependencies include:

- The ASP.NET Framework 4.0 Common Language Runtime (CLR)
- The MVC 4 runtime
- A Database server
- Entity Framework
- Membership Providers

To deploy an application on a single server farm:

- Set up the web application in IIS

- Configure application pools
  - You can run many applications in the same application pool
  - You can install an application in a specific isolated application pool

- Copy the web application files to IIS

Characteristics of deploying applications to multi-server farms:

- Multi-server web farms help increase performance, resilience, and reliability
- It has greater capacity than a single server farm

To deploy your web application to a multi-server farm:

1. Create IIS applications and application pools on each server
2. Create a matching IIS configuration on each server
3. Use external hosted session state or session affinity
4. Configure the **machineKey** element in the Web.config file

Deploying Web Applications on Windows Azure

To deploy an application on Windows Azure:

1. Create a new web application in the Windows Azure management portal
2. Download a publishing profile
3. Start the Publish wizard and import the publishing profile
4. Configure connection strings
5. Observe that Microsoft Visual Studio publishes the web application on Windows Azure

Demonstration: How to Create a Windows Azure Website

In this demonstration, you will see how to:

1. Create a new empty website in Windows Azure
2. Create a new empty database, associated with a website, in Windows Azure SQL Database

Lesson 2: Deploying an ASP.NET MVC 4 Web Application

- Reviewing Configuration for Production

- Using Bin Deploy

- Using Visual Studio 2012 Deployment Tools

- Demonstration: How to Deploy a Website to Windows Azure

While reviewing the configuration for production:

- Include the transformation elements in the following Web.config transformation files for generating resultant Web.config files:
  - Web.release.config
  - Web.debug.config

- Modify the Web.config file by using the **debug**, **xdt:Transform**, and **Insert** attributes

Characteristics of the Bin Deploy feature:

- It allows developers to copy all depending .NET assembly files into a folder within the deployed web application

- The _bin_deployableAssemblies folder includes the following libraries:

  - Microsoft.Web.Infrastructure
  - System.Web.Helpers
  - System.Web.Mvc
  - System.Web.Razor
  - System.Web.WebPages
  - System.Web.WebPages.Deployment
  - System.Web.WebPages.Razor

The Publish feature:

- Generates a copy of the web application, when the application is ready for deployment in the production environment

- Provides three methods to deploy the application
  - File Share
  - FTP
  - Web Deploy

Demonstration: How to Deploy a Website to Windows Azure

In this demonstration, you will see how to:

1. Obtain a publish profile for a website from Windows Azure

2. Use the Publish wizard in Visual Studio to publish a website

Lab: Deploying ASP.NET MVC 4 Web Applications

- Exercise 1: Deploying a Web Application to Windows Azure

- Exercise 2: Testing the Completed Application

Estimated Time: 45 minutes

You have completed the development and testing of the photo sharing application. Your managers and senior developers have signed off the project, and have requested you to deploy the application to the Adventure Works Windows Azure account.

Lab Review

- Why is it unnecessary to use bin deployment in this lab?

- In the labs for this course, you used the same Windows Azure SQL Database for both development and production. If you wanted to use separate databases for development and production, but did not want to reconfigure the web application every time you deployed to the development and production web servers, how would you configure the web application?

Module Review and Takeaways

- Review Question(s)

Course Evaluation