Module 8: Managing users and permissions, and securing content

Lab A: Managing users and groups

Exercise 1: Creating a web-application policy

▶ Task 1: Create Active Directory security groups

1. Sign in to the **20339-1A-NYC-DC1-E** virtual machine as **Contoso\administrator** with the password **Pa$$w0rd**.

2. On the **Start** screen, type **Active Directory Administrative Center**, and then press Enter.

3. In Active Directory Administrative Center, click **Contoso (local)**.

4. In the **Contoso (local) management list**, select the **IT** organizational unit.

5. In the **Tasks** pane, under **IT**, click **New**, and then click **Group**.

6. In the **Create Group** dialog box, in the **Group name** box, type **SharePoint Content Auditors**.

7. Verify that the **Group (SamAccountName) name** box has populated correctly.

8. Under **Group type**, verify that **Security** is selected.

9. Under **Group scope**, verify that **Global** is selected.

10. Under **Members**, click **Add**.

11. In the **Select Users, Contacts, Computers, Service Accounts, or Groups** dialog box, in the **Enter the object names to select** text box, type **lela@contoso.com**, and then click **OK**.

12. In the **Create Group** dialog box, click **OK**.

13. In the **Tasks** pane, under **IT**, click **New**, and then click **Group**.

14. In the **Create Group** dialog box, in the **Group name** text box, type **SharePoint Deny Access**.

15. Verify that the **Group (SamAccountName) name** text box has populated correctly.

16. Under **Group type**, verify that **Security** is selected.

17. Under **Group scope**, verify that **Global** is selected.

18. Under **Members**, click **Add**.

19. In the **Select Users, Contacts, Computers, Service Accounts, or Groups** dialog box, in the **Enter the object names to select** text box, type **megan@contoso.com**, and then click **OK**.

▶ Task 2: Create a Content Auditor web-application permission policy

1. Sign in to the **20339-1A-NYC-SP1-E** virtual machine as **Contoso\administrator** with the password **Pa$$w0rd**.

2. On the **Start** screen, type **Central Administration**, and then press Enter.

3. In Central Administration, click **Manage web applications**.

4. On the **Web Application Management** page, **click SharePoint - sharepoint.contoso.com80**, and then on the ribbon, click **Permission Policy**.

5. In the **Manage Permission Policy Levels** dialog box, click **Add Permission Policy Level**.

6. In the second **Manage Permission Policy Levels** dialog box, in the **Name** text box, type **Content Auditors**, under **Site Collection Permissions**, select the **Site Collection Auditor** check box.

7. Under **Site Permissions**, locate the **Edit Personal User Information** row, and in that row, select the **Grant** check box, and then click **Save**.

8. In the **Manage Permission Policy Levels** dialog box, click **OK**.

📋 **Note:** When you grant Edit Personal User Information permission, you will see that the Browse User Information and Open permissions are both granted automatically because Edit Personal User Information is dependent on those other abilities.

▶ Task 3: Create web-application user policies

1. Click **SharePoint - sharepoint.contoso.com80**, and then on the ribbon, click **User Policy**.

2. In the **Policy for Web Application** dialog box, click **Add Users**.

3. In the second **Policy for Web Application** dialog box, from the **Zones** drop-down list, select **(All zones)** and click **Next**.

4. Under **Choose Users**, in the **Users** text box, type **CONTOSO\SharePoint Content Auditors**.

5. Under **Choose Permissions**, select the **Content Auditors** check box, and then click **Finish**.

6. In the **Policy for Web Application** dialog box, click **Add Users**.

7. In the second **Policy for Web Application** dialog box, from the **Zones** drop-down list, select **(All zones)**, and click **Next**.

8. Under **Choose Users**, in the **Users** text box, type **CONTOSO\Harriet**.

9. Under **Choose Permissions**, select the **Full Read- Has full read-only access** check box, and then click **Finish**.

10. In the **Policy for Web Application** dialog box, click **Add Users**.

11. In the second **Policy for Web Application** dialog box, from the **Zones** drop-down list, select **(All zones)**, and click **Next**.

12. Under **Choose Users**, in the **Users** text box, type **CONTOSO\SharePoint Deny Access**.

13. Under **Choose Permissions**, select the **Deny All - Has no access** check box, and then click **Finish**.

14. In the **Policy for Web Application** dialog box, click **OK**.

▶ Task 4: Verify the behavior of the SharePoint web-application policies

1. In Internet Explorer, browse to **http://sharepoint.contoso.com**.

2. In the **Windows Security** dialog box, in the **User name** box, type **Harriet**, in the **Password** box, type **Pa$$w0rd**, and then click **OK**.

3. Click the user name **Harriet Aguirre**, and then click **My Settings**.

4. Verify that the **Edit Item** button does not appear, and then click **Documents**.

5. Verify that the **Add Item** button does not appear.

6. Close Internet Explorer.

7. In Internet Explorer, browse to **http://sharepoint.contoso.com**.

8. In the **Windows Security** dialog box, in the **User name** box, type **Lela**, in the **Password** box, type **Pa$$w0rd**, and then click **OK**.

9. Click the user name **Lela Henderson**, and then click **My Settings**.

10. Verify that the **Edit item** button does not appear.

11. Click **Documents**.

12. Verify that the **Add Item** button does not appear.

📝   **Note:** Note that Harriet's Full Read permissions are very similar to Lela's Content Auditor permissions. However, content auditors were granted the ability to edit personal information.

13. Close Internet Explorer.

14. In Internet Explorer, browse to **http://sharepoint.contoso.com**.

15. In the **Windows Security** dialog box, in the **User name** box, type **megan**, in the **Password** box, type **Pa$$w0rd**, and then click **OK**.

16. Verify you receive the message **Sorry, this site hasn't been shared with you**.

17. Close Internet Explorer.

Results: After completing this exercise, you should have created a new web application policy, and associated Active Directory security groups with web application policies.

Exercise 2: Creating and managing SharePoint groups

▶ **Task 1: Add a user to a site's Members group**

1. In Internet Explorer, browse to **http://sharepoint.contoso.com**.

2. In the **Windows Security** dialog box, in the **User name** box, type **administrator**, in the **Password** box, type **Pa$$w0rd**, and then click **OK**.

3. Click **Settings**, and then click **Site settings**.

4. On the **Site Settings** page, under **Users and Permissions**, click **People and groups**.

5. On the **Contoso Intranet Portal Members** page, click **New**.

6. In the **Share 'Contoso Intranet Portal'** dialog box, in the **Enter names, email addresses, or 'Everyone'** text box, type **lela@contoso.com**, and then click **Share**.

7. Close Internet Explorer.

▶ **Task 2: Verify that the member has the permissions required to edit content**

1. In Internet Explorer, browse to **http://sharepoint.contoso.com**.

2. In the **Windows Security** dialog box, in the **User name** box, type **lela**, in the **Password** box, type **Pa$$w0rd**, and then click **OK**.

3. Navigate to the **Documents** library.

4. Verify that you are able to add a new document (the **new document** link appears in the document library).

5. Click **New**.

6. In the **Add a document** dialog box, click **Browse**.

7. In the **Choose File to Upload** dialog box, browse to the **E:\LabFiles\Mod08** folder, click **SampleDocument.docx**, and then click **Open**.

8. In the **Add a document** dialog box, click **OK**.

9. In the **Sample Document** row, click the ellipsis (**…**) button, and verify that the **EDIT** option is available.

10. In the **SampleDocument** row, click the ellipsis (**…**) button, in the **Sample Document.docx** dialog box, click the ellipsis (**…**) button, click **Properties**, and then verify you can edit the properties.

11. Close Internet Explorer.

▶   Task 3: Add a user to a site's Visitors SharePoint group

1. In Internet Explorer, in the address bar, type **http://sharepoint.contoso.com**, and then press Enter.

2. In the **Windows Security** dialog box, in the **User name** box, type **administrator**, in the **Password** box, type **Pa$$w0rd**, and then click **OK**.

3. Click **Settings**, and then click **Site settings**.

4. On the **Site Settings** page, under **Users and Permissions**, click **People and groups**.

5. On the **People and Groups** page, click **Contoso Intranet Portal Visitors**.

6. On the **Contoso Intranet Portal Visitors** page, click **New**.

7. In the **Share 'Contoso Intranet Portal'** dialog box, in the **Enter names, email addresses, or 'Everyone'** text box, type **teresa@contoso.com**, and then click **Share**.

▶   Task 4: Verify that the visitor has permissions to view the site but not create or edit content

1. Switch to the **20339-1A-NYC-DB1-E** virtual machine. If you are not signed out, sign out.

2. Sign in as **Contoso\teresa** with the password **Pa$$w0rd**.

3. On the **Start** screen, click **Internet Explorer**.

4. In Internet Explorer, browse to **http://sharepoint.contoso.com**.

5. In the **Windows Security** dialog box, in the **User name** box, type **teresa**, in the **Password** box, type **Pa$$w0rd**, and then click **OK**.

6. On the SharePoint site, in the current navigation, click **Documents**.

7. Verify that you are unable to add a new document (the **new document** and **upload** links do not appear in the document library).

8. In the **SampleDocument** row, click the ellipsis (**…**) button.

9. In the **Sample Document.docx** dialog box, click the ellipsis (**…**) button, click **Properties**, and then verify you cannot edit the properties.

▶   Task 5: Create a new SharePoint group, and assign the group the Design permission level

1. Switch to the **20339-1A-NYC-SP1-E** virtual machine.

2. Click **Settings**, and then click **Site settings**.

3. On the **Site Settings** page, under **Users and Permissions**, click **People and groups**.

4. On the **People and Groups** page, click **Groups**, and then click **New**.

5. On the **Create Group** page, in the **Name** text box, type **Editors**.

6. Under **Give Group Permission to this Site**, select **Design - Can view, add, update, delete, approve, and customize**, and then click **Create**.

▶ **Task 6: Add a user to the new Designers SharePoint group**

1. On the **Editors** page, click **New**.

2. In the **Share 'Contoso Intranet Portal'** dialog box, in the **Enter names, email addresses, or 'Everyone'** text box, type **wiley@contoso.com**, and then click **Share**.

▶ **Task 7: Verify that the designer can customize the appearance of the site by using SharePoint Designer 2013**

1. Sign out of SharePoint and close Internet Explorer.

2. On the **Start** screen, click **Internet Explorer**.

3. In Internet Explorer, browse to **http://sharepoint.contoso.com**.

4. Sign in as **Contoso\wiley** with the password **Pa$$w0rd**.

5. On the **Start** screen, type **SharePoint Designer 2013** and press Enter.

6. In SharePoint Designer 2013, click **Open Site**.

7. In the **Open Site** dialog box, in the **Site Name** text box, type **http://sharepoint.contoso.com**, and then click **Open**.

8. In the **Windows Security** dialog box, in the **User name** box, type **wiley**, in the **Password** box, type **Pa$$w0rd**, and then click **OK**.

9. Verify that the Contoso SharePoint Portal site opens in SharePoint Designer 2013.

10. Close SharePoint Designer 2013.

11. On the **Start** screen, type **SharePoint Designer 2013** and press Enter.

12. In SharePoint Designer 2013, click **Open Site**.

13. In the **Open Site** dialog box, in the **Site Name** text box, type **http://sharepoint.contoso.com**, and then click **Open**.

14. In the **Windows Security** dialog box, in the **User name** box, type **megan**, in the **Password** box, type **Pa$$w0rd**, and then click **OK**.

15. Verify that the Contoso SharePoint Portal site does not open in SharePoint Designer 2013.

Results: After completing this exercise, you should have created a new SharePoint group, and added users to both the default and custom SharePoint groups.

Exercise 3: Creating custom permission levels

▶ **Task 1: Create a custom permission level that enables users to view usage data**

1. Sign out of SharePoint and close Internet Explorer.

2. On the **Start** screen, click **Internet Explorer**.

3. In Internet Explorer, browse to **http://sharepoint.contoso.com**.

4. In the **Windows Security** dialog box, in the **User name** box, type **administrator**, in the **Password** box, type **Pa$$w0rd**, and then click **OK**.

5. Click the **Settings** icon, and then click **Site settings**.

6. On the **Site Settings** page, under **Users and Permissions**, click **Site permissions**.

7. On the ribbon, under **Manage**, click **Permission Levels**.

8. On the **Permissions Levels** page, click **Add a Permission Level**.

9. On the **Add a Permissions Level** page, in the **Name** text box, type **View Usage Data**.

10. Under **Site Permissions**, select the **View Web Analytics Data** check box, and then click **Create**.

▶ **Task 2: Create a new SharePoint group, and assign the group the Read permission**

1. Click the **Settings** icon, and then click **Site settings**.

2. On the **Site Settings** page, under **Users and Permissions**, click **People and groups**.

3. On the **People and Groups** page, click **Groups**, and then click **New**.

4. On the **Create Group** page, in the **Name** text box, type **Usage Monitors**.

5. Under **Give Group Permission to this Site**, select the **View Usage Data** check box, and then click **Create**.

▶ **Task 3: Add a user to the new Usage Monitors SharePoint group**

1. On the **Usage Monitors** page, click **New**.

2. In the **Share 'Contoso Intranet Portal'** dialog box, in the **Enter names, email addresses, or 'Everyone'** text box, type **marta@contoso.com**, and then click **Share**.

▶ **Task 4: Verify that the usage monitor cannot view usage reports**

1. Switch to the **20339-1A-NYC-DB1-E** virtual machine. If you are not signed out, sign out.

2. Sign in as **Contoso\marta** with the password **Pa$$w0rd**.

3. On the **Start** screen, click **Internet Explorer**.

4. In Internet Explorer, browse to **http://sharepoint.contoso.com**.

5. If you are presented with a **Set up Internet Explorer** dialog, accept the defaults, and click **OK**.

6. In the **Windows Security** dialog box, in the **User name** box, type **marta**, in the **Password** box, type **Pa$$w0rd**, and then click **OK**. Verify that you are denied access to the site.

7.   In Internet Explorer, browse to **http://sharepoint.contoso.com/_layouts/usage.aspx**. Verify that you are denied access to the page.

📝   **Note:** Viewing the usage reports SHOULD fail. Although you have granted the CONTOSO\marta account access to the analytics data, you have not granted permissions to view the default application pages that present the data. In the next task, you will add additional permissions to resolve this problem

▶ **Task 5: Add additional permissions to the View Usage Data permission level**

1.   Switch to the **20339-1A-NYC-SP1-E** virtual machine.

2.   Click **Settings**, and then click **Site settings**.

3.   On the **Site Settings** page, under **Users and Permissions**, click **Site permissions**.

4.   On the **Permissions** page, on the ribbon, click **Permission Levels**.

5.   On the **Permissions Levels** page, click **View Usage Data**.

6.   On the **Edit Permission Level** page, under **List Permissions**, select the **View Application Pages** check box, and then click **Submit**.

▶ **Task 6: Verify that the usage monitor displays usage reports**

1.   Switch to the **20339-1A-NYC-DB1-E** virtual machine.

2.   In Internet Explorer, browse to **http://sharepoint.contoso.com**. Verify that you are denied access to the site.

3.   In Internet Explorer, browse to **http://sharepoint.contoso.com/_layouts/usage.aspx**. Verify that you can access the page.

📝   **Note:** Accessing the root site SHOULD fail. You have not given the user permissions to view the site. However, you have given them permissions to view the application pages, so viewing the site usage reports will work.

▶ **Task 7: Prepare for the next lab**

•   When you are finished with the lab, keep all of the virtual machines running. The virtual machines in their current state are required for the next lab.

Results: After completing this exercise, you should have created a custom permission level, assigned that permission to a user group, and then tested the user group by using a non-administrative user account.

Lab B: Securing content in SharePoint sites

Exercise 1: Managing permissions and inheritance

▶ **Task 1: Create a new folder in the Documents library, and verify that site members and visitors can view the folder**

1. Switch to the **20339-1A-NYC-SP1-E** virtual machine.

2. On the SharePoint site, click **Documents**.

3. In the **Documents** document library, on the ribbon, on the **FILES** tab, click **New Folder**.

4. In the **Create a folder** dialog box, in the **Name** text box, type **Reports**, and then click **Create**.

5. Switch to the **20339-1A-NYC-DB1-E** virtual machine.

6. On the **Start** screen, click **Internet Explorer**.

7. In Internet Explorer, browse to **http://sharepoint.contoso.com**.

8. In the **Windows Security** dialog box, in the **User name** box, type **wiley**, in the **Password** box, type **Pa$$w0rd**, and then click **OK**.

9. On the SharePoint site, in the current navigation, click **Documents**. Verify that you can see the **Reports** folder.

10. Sign out of SharePoint and close Internet Explorer.

11. On the **Start** screen, click **Internet Explorer**.

12. In Internet Explorer, browse to **http://sharepoint.contoso.com**.

13. In the **Windows Security** dialog box, in the **User name** box, type **teresa**, in the **Password** box, type **Pa$$w0rd**, and then click **OK**.

14. On the SharePoint site, in the current navigation, click **Documents**. Verify that you can see the **Reports** folder.

▶ **Task 2: Disable permission inheritance, and define custom permissions for a folder**

1. Switch to the **20339-1A-NYC-SP1-E** virtual machine.

2. Next to **Reports**, click the ellipsis (**...**) button, in the **Reports** dialog box, click the ellipsis (**...**) button, and then click **Share**.

3. In the **Share 'Reports'** dialog box, click **Shared With**.

4. In the **Shared With** dialog box, click **ADVANCED**.

5. On the **Permissions: Reports** page, on the ribbon, click **Stop Inheriting Permissions**.

6. In the **Message from webpage** dialog box, click **OK**.

7. Select all check boxes, and then, on the ribbon, click **Remove User Permissions**.

8. In the **Message from webpage** dialog box, click **OK**.

9. On the ribbon, click **Grant Permissions**.

10. In the **Share 'Reports'** dialog box, in the **Enter names, email addresses, or 'Everyone'** text box, type **teresa@contoso.com**.

11. Click **SHOW OPTIONS**, clear the **Send an email invitation** check box if it appears, and then click **Share**.

▶ **Task 3: Verify that the site members cannot see the folder with custom permissions**

1. Switch to the **20339-1A-NYC-DB1-E** virtual machine.

2. Sign out of SharePoint and close Internet Explorer.

3. On the **Start** screen, click **Internet Explorer**.

4. In Internet Explorer, browse to **http://sharepoint.contoso.com**.

5. In the **Windows Security** dialog box, in the **User name** box, type **wiley**, in the **Password** box, type **Pa$$w0rd**, and then click **OK**.

6. On the SharePoint site, in the current navigation, click **Documents**. Verify that you cannot see the **Reports** folder.

7. Sign out of SharePoint and close Internet Explorer.

8. On the **Start** screen, click **Internet Explorer**.

9. In Internet Explorer, browse to **http://sharepoint.contoso.com**.

10. In the **Windows Security** dialog box, in the **User name** box, type **teresa**, in the **Password** box, type **Pa$$w0rd**, and then click **OK**.

11. On the SharePoint site, in the current navigation, click **Documents**. Verify that you can see the **Reports** folder.

Results: After completing this exercise, you should have defined custom permissions for a folder in a document library, and tested those permissions by using non-administrative user accounts.

Exercise 2: Managing site-collection security

▶ **Task 1: Attempt to access a site with a nonauthorized account**

1. On the 20339-1A-NYC-DB1-E virtual machine, if you are not signed out of SharePoint, sign out, and then close Internet Explorer.

2. On the **Start** screen, click **Internet Explorer**.

3. In Internet Explorer, browse to **http://sharepoint.contoso.com**.

4. In the **Windows Security** dialog box, in the **User name** box, type **tim**, in the **Password** box, type **Pa$$w0rd**, and then click **OK**. Verify that you are denied access to the site and cannot request access to the site.

▶ **Task 2: Enable access requests for the sharepoint.contoso.com site**

1. Switch to the **20339-1A-NYC-SP1-E** virtual machine.

2. In Internet Explorer, browse to **http://sharepoint.contoso.com**.

3. On the SharePoint site, click **Settings**, and then click **Site settings**.

4. On the **Site Settings** page, under **Users and Permissions**, click **Site permissions**.

5. On the **Permissions: Contoso Intranet Portal** page, on the ribbon, click **Access Request Settings**.

6. In the **Access Requests Settings** dialog box, select the **Allow access requests** check box, in the **Send all access requests to the following e-mail address** text box, type **sharepointsiteadmin@contoso.com**, and then click **OK**.

▶ **Task 3: Request access to a site**

1. Switch to the **20339-1A-NYC-DB1-E** virtual machine.

2. In Internet Explorer, navigate to **http://sharepoint.contoso.com**. Verify that you are still denied access but that you can now request access to the site.

3. In the **Type your message here** text box, type **I need access to this site**, and then click **Send request**.

▶ **Task 4: Approve an access request for a site**

1. Switch to the **20339-1A-NYC-SP1-E** virtual machine.

2. On the SharePoint site, click **Settings**, and then click **Site settings**.

3. On the **Site Settings** page, under **Users and Permissions**, click **Access requests and invitations**.

4. On the **Access Requests** page, next to **Tim Tindall**, click the ellipsis (**...**) button to view the full details of the request, and then click **APPROVE**.

▶ **Task 5: Attempt to access a site with the approved account**

1. Switch to the **20339-1A-NYC-DB1-E** virtual machine.

2. In Internet Explorer, navigate to **http://sharepoint.contoso.com**. Verify that you now have access to the site.

▶ **Task 6: Configure HTML field security**

1. Switch to the **20339-1A-NYC-SP1-E** virtual machine.

2. On the SharePoint site, click **Settings**, and then click **Site settings**.

3. On the **Site Settings** page, under **Site Collection Administration**, click **HTML Field Security**.

4. On the **HTML Field Security** page, click **Do not permit contributors to insert iframes from external domains into pages on this site**, and then click **OK**.

5. Click **Home**, and then on the **Home** page, click **Page**.

6. On the **Page** ribbon, click **EDIT**.

7. In the **Edit** view, on the ribbon, click **Edit Source**.

8. In the **HTML Source** dialog box, on a new line before all existing content, type the following code:

```
<iframe src="http://www.blocked.contoso.com"></iframe>
```

9. In the **HTML Source** dialog box, click **OK**, and then verify that SharePoint informs you that some markup has been removed.

10. On the ribbon, click **Edit Source**.

11. In the **HTML Source** dialog box, verify that the code you added has been removed, and then click **OK**.

12. Close all open windows, saving any changes, by clicking **OK**.

Results: After completing this exercise, you should have enabled access requests and configured HTML field security for a SharePoint site.

Exercise 3: Enabling anonymous access to a site

▶ **Task 1: Configure a DNS record for the www.contoso.com web application**

1. Switch to the **20339-1A-NYC-DC1-E** virtual machine. If you are not logged on, sign in as **Contoso\administrator** with the password **Pa$$w0rd**.

2. On the **Start** screen, type **DNS**, and then select **DNS** in the search results.

3. In DNS Manager, expand **Forward Lookup Zones**, and then click **Contoso.com**.

4. Right-click **Contoso.com**, and then click **New Host (A or AAAA)**.

5. In the **New Host** dialog box, in the **Name** text box, type **www**, in the **IP address** text box, type **172.16.1.21**, and then click **Add Host**.

6. In the **DNS** dialog box, click **OK**.

7. In the **New Host** dialog box, click **Done**.

▶ **Task 2: Create a service account for the www.contoso.com web-application application pool**

1. On the **Start** screen, type **Active Directory Administrative Center**, and then press Enter.

2. In Active Directory Administrative Center, click **Contoso (local)**.

3. Select the **IT** Organizational Unit.

4. In the **Tasks** pane, under **IT**, click **New**, and then click **User**.

5. In the **Create User** dialog box, in the **Full name** text box, type **WWW Application Pool**.

6. In the **User UPN logon** text box, type **WWWAppPool**, and then verify that the **User SamAccountName logon** text boxes have populated automatically with the corresponding user name.

7. In the **Password** and **Confirm password** boxes, type **Pa$$w0rd**.

8. Click **Other password options**, select the **Password never expires** and **User cannot change password** check boxes, and then click **OK**.

▶ **Task 3: Register the service account as a SharePoint managed account**

1. Switch to the **20339-1A-NYC-SP1-E** virtual machine.

2. On the **Start** screen, type **Central Administration**, and then press Enter.

3. In Central Administration, click **Security**.

4. On the **Security** page, under **General Security**, click **Configure managed accounts**.

5. On the **Managed Accounts** page, click **Register Managed Account**.

6. On the **Register Managed Account** page, in the **User name** box, type **CONTOSO\WWWAppPool**, in the **Password** box, type **Pa$$w0rd**, and then click **OK**.

▶ **Task 4: Create and configure a new web application**

1. Click **Application Management**.

2. On the **Application Management** page, click **Manage web applications**.

3. On the **Web Applications Management** page, on the ribbon, click **New**.

4. In the **Create New Web Application** dialog box, under **IIS Web Site**, in the **Name** box, type **WWW - 80**.

5. In the **Port** text box, type **80**.

6. In the **Host Header** text box, type **www.contoso.com**.

7. Under **Allow Anonymous**, select **Yes**.

8. Select **Create new application pool**.

9. In the **Application pool name** text box, type **WWW - 80**.

10. In the **Select a security account for this application pool** list, click **CONTOSO\WWWAppPool**, and then click **OK**.

11. In the **Create New Web Application** dialog box, click **OK**.

▶ Task 5: Create a root site collection

1. Click **Application Management**.

2. On the **Application Management** page, under **Site Collections**, click **Create site collections**.

3. On the **Create Site Collection** page, in the **Web Application** menu, select **WWW – 80 http://www.contoso.com**.

4. Under **Title and Description**, in the **Title** text box, type **Internet Site**.

5. Under **Template Selection**, on the **Publishing** tab, click **Publishing Portal**.

6. Under **Primary Site Collection Administrator**, in the **User name** text box, type **CONTOSO\Administrator**, and then click **OK**.

7. On the **Top-Level Site Successfully Created** page, click **OK**.

▶ Task 6: Enable anonymous access for the www.contoso.com web application

1. On the **Application Management** page, under **Web Applications**, click **Manage web applications**.

2. On the **Web Applications Management** page, click **WWW-80**, and then, on the ribbon, click **Authentication Providers**.

3. In the **Authentication Providers** dialog box, click **Default**.

4. View the settings in the **Authentication Providers** dialog box. Note that **Enable anonymous access** is already selected because it was enabled during web application creation.

5. Close the **Authentication Providers** dialog box.

6. On the ribbon, click **Anonymous Policy**.

7. In the **Anonymous Access Restrictions** dialog box, click **Deny Write**, and then click **Save**.

▶ Task 7: Enable anonymous access for the www.contoso.com site collection

1. Switch to the **20339-1A-NYC-DB1-E** virtual machine.

2. In Internet Explorer, browse to **http://www.contoso.com**.

3. In the **Windows Security** dialog box, in the **User name** box, type **administrator**, in the **Password** box, type **Pa$$w0rd**, and then click **OK**.

4. Click **Settings**, and then click **Site settings**.

5. On the **Site Settings** page, under **Users and Permissions**, click **Site permissions**.

6. On the **Permissions** page, on the ribbon, click **Anonymous Access**.

7. In the **Anonymous Access** dialog box, click **Entire Web site**, and then click **OK**.

▶ **Task 8: Test the www.contoso.com web application to ensure that you can access it without providing credentials**

1.   Close all open windows.

2.   In Internet Explorer, navigate to **http://www.contoso.com**. Verify that you can access the site without providing credentials.

3.   Close all open windows.

▶ **Task 9: Prepare for the next module**

When you are finished with the lab, revert all virtual machines to their initial state:

1.   On the host computer, start **Hyper-V Manager**.

2.   In the **Virtual Machines** list, right-click **20339-1A-NYC-DC1-E**, and then click **Revert**.

3.   In the **Revert Virtual Machine** dialog box, click **Revert**.

4.   Repeat step 2 and 3 for **20339-1A-SP1-E** and **20339-1A-DB1-E**.

Results: After completing this exercise, you should have configured a site for anonymous access.