

Module 12: Configuring user profiles

Lab A: Configuring user profiles

Exercise 1: Configuring the User Profile Service Application

► Task 1: Create a service account for the service application

1. On NYC-DC1, on the **Start** screen, type **Active Directory Administrative Center**, and then press Enter.
2. In Active Directory Administrative Center, click **Contoso (local)**.
3. In the **Tasks** pane, under **Managed Service Accounts**, click **New**, and then click **User**.
4. In the **Create User** dialog box, in the **Full name** text box, type **Profile Service**.
5. In the **User UPN logon** text box, type **ProfileService**, verify that the **User SamAccountName logon** text boxes have automatically populated with the corresponding domain and user name.
6. In the **Password** and **Confirm password** text boxes, type **Pa\$\$w0rd**.
7. Click **Other password options**, select **Password never expires**, and **User cannot change password**, and then click **OK**.

► Task 2: Grant the SPFarm user account the Replicating Directory Changes permission

1. Right-click **Contoso (local)**, and then click **Properties**.
2. In the **Contoso** dialog box, in the **Extensions** panel, on the **Security** tab, click **Add**.
3. In the **Select Users, Computers, Service Accounts, or Groups** dialog box, in the **Enter the object names to select** text box, type **SPFarm**, and then click **OK**.
4. Under **Permissions for SPFarm**, locate the **Replicating Directory Changes** permission, in that row, select **Allow**, and then click **OK**.
5. Close the **Active Directory Administrative Center**.

► Task 3: Register the service account as a SharePoint managed account

1. Switch to **NYC-SP1**, and on the **Start** screen, type **SharePoint 2016 Central Administration**, and then press Enter.
2. In the SharePoint 2016 Central Administration site, click **Security**, and then under **General Security**, click **Configure managed accounts**.
3. On the **Managed Accounts** page, click **Register Managed Account**.
4. On the **Register Managed Account** page, in the **User name** text box, type **CONTOSO\ProfileService**, in the **Password** text box, type **Pa\$\$w0rd**, and then click **OK**.

► Task 4: Start the User Profile Service instance

1. Click **System Settings**.
2. On the **System Settings** page, under **Servers**, click **Manage services on server**.
3. Locate the **User Profile Service** service, and then in that row, click **Start**.
4. Check the status of the **User Profile Service** service, refresh the page, until the status changes to **Started**.

► Task 5: Create a new User Profile Service Application instance

1. Click **Application Management**.
2. On the **Application Management** page, under **Service Applications**, click **Manage service applications**.
3. On the **Manage Service Applications** page, on the ribbon, click **New**, and then click **User Profile Service Application**.
4. In the **Create New User Profile Service Application** dialog box, in the **Name** text box, type **Contoso UPSA**.
5. In the **Application pool name** text box, type **ContosoUPSAppPool**.
6. In the **Select a security account for this application pool** list, select **CONTOSO\ProfileService**, and then click **Create**.
7. In the **Create New User Profile Service Application** dialog box, click **OK**.
8. Refresh the **Manage Service Applications** page, and then verify that the list of service applications includes the **Contoso UPSA** service application and **Contoso UPSA** service application proxy.

Results: After completing this exercise, you should have created a new instance of the User Profile Service Application.

Exercise 2: Configuring directory import and synchronization

► Task 1: Configure the User Profile Service to use SharePoint Active Directory import

1. On the **Manage Service Applications** page, click **Contoso UPSA** (you must click the name in the **User Profile Service Application** row, and not in the **User Profile Service Application Proxy** row).
2. If the **Sorry, something went wrong** page appears, click **Back to Manage Service Applications** (the Internet Explorer **Back** button), and repeat step 1.



Note: If this occurs more than once, wait for five minutes and then retry.

3. On the **Manage Profile Service: Contoso UPSA** page, under **Synchronization**, click **Configure Synchronization Settings**.
4. On the **Configure Synchronization Settings** page, under **Synchronization Options**, make sure **Use SharePoint Active Directory Import** is selected, and then click **OK**.

► Task 2: Create a user profile connection to AD DS

1. On the **Manage Profile Service: Contoso UPSA** page, under **Synchronization**, click **Configure Synchronization Connections**.
2. On the **Synchronization Connections** page, click **Create New Connection**.
3. On the **Add new synchronization connection** page, in the **Connection Name** text box, type **Contoso Domain**.
4. Under **Connection Settings**, in the **Fully Qualified Domain Name** text box, type **contoso.com**.
5. In the **Account name** text box, type **CONTOSO\SPFarm**.

6. In the **Password** and **Confirm password** text boxes, type **Pa\$\$w0rd**.
7. Under **Containers**, click **Populate Containers**, wait for the containers to load before you proceed to the next step.
8. Click **Select All**, and then, when the containers are selected, click **OK**.

► **Task 3: Confirm that the synchronization timer job is enabled**

1. Click **Application Management**.
2. On the **Application Management** page, under **Service Applications**, click **Manage service applications**.
3. On the **Manage Service Applications** page, click **Contoso UPSA** (you must click the name in the **User Profile Service Application** row, and not in the **User Profile Service Application Proxy** row).
4. On the **Manage Profile Service: Contoso UPSA** page, under **Synchronization**, click **Configure Synchronization Timer Job**.
5. On the **Edit Timer Job** page, if the timer job is disabled, click **Enable**, otherwise click **OK**.

► **Task 4: Start a full profile synchronization**

1. Click **Application Management**.
2. On the **Application Management** page, under **Service Applications**, click **Manage service applications**.
3. On the **Manage Service Applications** page, click **Contoso UPSA** (you must click the name in the **User Profile Service Application** row, not the **User Profile Service Application Proxy** row).
4. On the **Manage Profile Service: Contoso UPSA** page, under **Synchronization**, click **Start Profile Synchronization**.
5. On the **Start Profile Synchronization** page, click **Start Full Synchronization**, and then click **OK**.
6. On the **Manage Profile Service: Contoso UPSA** page, under **Profile Synchronization Settings**, verify that the **Profile Synchronization Status** is set to **Synchronizing**. Periodically refresh the page until the status changes from **Idle** to **Synchronizing**.



Note: Depending on the speed of your host computer, you might not see the **Synchronizing** status; if the status is **Idle**, and the number of profiles is more than zero, you can continue.

► **Task 5: Verify that user profiles are imported**

1. On the **Manage Profile Service: Contoso UPSA** page, under **People**, click **Manage User Profiles**.
2. On the **Manage User Profiles** page, in the **Find profiles** text box, type **Wilson**, and then click **Find**.
3. Under **Account name**, click **CONTOSO\Wilson**, and then click **Edit My Profile**.
4. On the **Edit User Profile** page, note that the **Work email** field is not populated.

► **Task 6: Change the user profile property mapping for Work email**

1. Click **Application Management**.
2. On the **Application Management** page, under **Service Applications**, click **Manage service applications**.
3. On the **Manage Service Applications** page, click **Contoso UPSA** (you must click the name in the **User Profile Service Application** row, and not in the **User Profile Service Application Proxy** row).
4. On the **Manage Profile Service: Contoso UPSA** page, under **People**, click **Manage User Properties**.
5. On the **Manage User Properties** page, click the **Work email** property, and then click **Edit**.
6. On the **Edit User Profile Property** page, under **Add New Mapping**, in the **Attribute** text box, type **mail**, and then click **Add**.
7. On the **Edit User Profile Property** page, click **OK**.
8. Close **Internet Explorer**.

► **Task 7: Change attributes in AD DS**

1. Switch to **NYC-DC1**, and on the **Start** screen, type **Active Directory Administrative Center**, and then press Enter.
2. In Active Directory Administrative Center, click **Contoso (local)**.
3. Double click the **IT** container, and then select user object **Wilson Chew**.
4. In the **Tasks** pane, click **Properties**.
5. In the **Properties** dialog box, in the **E-mail** text box under **Organization**, type **wilson@contoso.com**, and then click **OK**.
6. Close the **Active Directory Administrative Center**.

► **Task 8: Run an incremental profile synchronization**

1. Switch to **NYC-SP1**, and on the **Start** screen, type **Central Administration**, and then press Enter.
2. In Central Administration, click **Application Management**.
3. On the **Application Management** page, under **Service Applications**, click **Manage service applications**.
4. On the **Manage Service Applications** page, click **Contoso UPSA** (you must click the name in the **User Profile Service Application** row, and not in the **User Profile Service Application Proxy** row).
5. On the **Manage Profile Service: Contoso UPSA** page, under **Synchronization**, click **Start Profile Synchronization**.
6. On the **Start Profile Synchronization** page, click **Start Incremental Synchronization**, and then click **OK**.
7. On the **Manage Profile Service: Contoso UPSA** page, under **Profile Synchronization Settings**, verify that the **Profile Synchronization Status** is set to **Synchronizing**. You might need to refresh the page. Periodically refresh the page and do not continue until the status returns to **Idle**. Depending on the speed of your host computer, you might not see the **Synchronizing** status; if the status is **Idle**, you can continue.

► **Task 9: Verify the changes in the user profile**

1. On the **Manage Profile Service: Contoso UPSA** page, under **People**, click **Manage User Profiles**.
2. On the **Manage User Profiles** page, in the **Find profiles** text box, type **Wilson**, and then click **Find**.
3. Under **Account name**, click **CONTOSO\Wilson**, and then click **Edit My Profile**.
4. On the **Edit User Profile** page, note that the **Work email** field is populated with the previous change.
5. Close **Internet Explorer**.

► **Task 10: Prepare for the next lab**

- When you complete the lab, keep all 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 configured and validated a SharePoint Active Directory import.

Lab B: Configuring My Sites and audiences

Exercise 1: Configuring My Sites

► Task 1: Configure a DNS record for the My Site web application

1. Switch to **NYC-DC1**, and on the **Start** screen, type **DNS**, and then press Enter.
2. In DNS Manager, expand **NYC-DC1** and then expand **Forward Lookup Zones**, and then click **Contoso.com**.
3. Right-click **Contoso.com**, and then click **New Host (A or AAAA)**.
4. In the **New Host** dialog box, in the **Name** box, type **mysites**, in the **IP address** box, type **172.16.1.21**, and then click **Add Host**.
5. In the **DNS** dialog box, click **OK**.
6. In the **New Host** dialog box, click **Done**.
7. Close **DNS Manager**.

► Task 2: Create an application pool service account for the My Sites web application

1. On the **Start** screen, type **Active Directory Administrative Center**, and then press Enter.
2. In Active Directory Administrative Center, click **Contoso (local)**.
3. In the **Tasks** pane, under **Managed Service Accounts**, click **New**, and then click **User**.
4. In the **Create User** dialog box, in the **Full name** box, type **My Sites Web Application Service Account**.
5. In the **User UPN logon** box, type **SPMySitesWebApp**, verify that the **User SamAccountName logon** boxes have automatically populated with the corresponding user name.
6. In the **Password** and **Confirm password** boxes, type **Pa\$\$w0rd**.
7. Click **Other password options**, select the **Password never expires**, and **User cannot change password** check boxes, and then click **OK**.
8. Close the **Active Directory Administrative Center**.

► Task 3: Register the service account as a SharePoint managed account

1. Switch to **NYC-SP1**, and on the **Start** screen, type **SharePoint 2016 Central Administration**, and then press Enter.
2. In SharePoint 2016 Central Administration, click **Security**.
3. On the **Security** page, under **General Security**, click **Configure managed accounts**.
4. On the **Managed Accounts** page, click **Register Managed Account**.
5. On the **Register Managed Account** page, in the **User name** box, type **CONTOSO\SPMySitesWebApp**, in the **Password** box, type **Pa\$\$w0rd**, and then click **OK**.

► Task 4: Create and configure a new web application to host My Sites

1. Click **Application Management**.
2. On the **Application Management** page, under **Web Applications**, 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 **MySites - 80**.
5. In the **Port** box, type **80**.
6. In the **Host Header** box, type **mysites.contoso.com**.
7. Under **Application Pool**, in the **Application pool name** box, type **MySitesWebApp**.
8. In the **Select a security account for this application pool** list, select **CONTOSO\SPMySitesWebApp**, and then click **OK**.
9. In the **Application Created** dialog box, click **OK**.

► **Task 5: Create a managed path for My Sites**

1. On the **Web Application Management** page, click **MySites - 80**, and then on the ribbon, click **Managed Paths**.
2. In the **Define Managed Paths** dialog box, under **Add a New Path**, in the **Path** text box, type **personal**.
3. In the **Type** list, ensure **Wildcard inclusion** is selected, click **Add Path**, and then click **OK**.

► **Task 6: Create a My Site host 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, under **Web Application**, verify that **http://mysites.contoso.com** is selected. If it is not currently selected, click the current web application, click **Change Web Application**, and then click **MySites - 80**.
4. Under **Title and Description**, in the **Title** text box, type **MySite Host**.
5. Under **Web Site Address**, in the **URL** list, click **/**.
6. Under **Template Selection**, on the **Enterprise** tab, click **My Site Host**.
7. Under **Primary Site Collection Administrator**, in the **User name** text box, type **CONTOSO\Administrator**, and then click **OK**.
8. On the **Top-Level Site Successfully Created** page, click **OK**.

► **Task 7: Enable Self-Service Site Creation for the My Site host web application**

1. On the **Application Management** page, under **Web Applications**, click **Manage web applications**.
2. On the **Web Applications Management** page, click **MySites - 80**, and then on the ribbon, click **Self-Service Site Creation**.
3. In the **Self-Service Site Creation Management** dialog box, under **Site Collections**, click **On**, and then click **OK**.

► **Task 8: Configure My Site settings for the User Profile Service Application instance**

1. Click **Application Management**.
2. On the **Application Management** page, under **Service Applications**, click **Manage service applications**.
3. On the **Manage Service Applications** page, click **Contoso UPSA** (you must click the name in the **User Profile Service Application** row, but not in the **User Profile Service Application Proxy** row).

4. On the **Manage Profile Service: Contoso UPSA** page, under **My Site Settings**, click **Setup My Sites**.
5. On the **My Site Settings** page, in the **My Site Host Location** text box, type **http://mysites.contoso.com**, and then click **OK**.

► **Task 9: Confirm that the Contoso UPSA - Activity Feed Job is enabled**

1. Click **Monitoring**.
2. On the **Monitoring** page, under **Timer Jobs**, click **Review job definitions**.
3. On the **Job Definitions** page, click **Contoso UPSA - Activity Feed Job**.
4. On the **Edit Timer Job** page, if the timer job is disabled, click **Enable** (if the timer job is already enabled, the page will contain a **Disable** button instead of the **Enable** button. If the job is already enabled, click **OK**).

► **Task 10: Test My Site creation by using a non-administrative user account**

1. Switch to **NYC-DB1**, and on the **Start** screen, click **Internet Explorer**.
2. In Internet Explorer, go to **http://sharepoint.contoso.com**.
3. In the **Windows Security** dialog box, in the **User name** text box, type **wilson@contoso.com**, in the **Password** text box, type **Pa\$\$w0rd**, and then click **OK**.
4. On the **SharePoint** site, click **Wilson Chew**, then click **About Me**.
5. In the **Windows Security** dialog box, in the **User name** text box, type **wilson@contoso.com**, in the **Password** box, type **Pa\$\$w0rd**, and then click **OK**.



Note: Setting up a user's My Site can take a few minutes. When the task is complete, the **We're almost ready!** message disappears. If the message does not disappear after 5 minutes, click **Newsfeed**, wait for the newsfeed to set up, and then click **About me**. This finishes the user's My Site setup.

6. Close **Internet Explorer**.

Results: After completing this exercise, you should have configured My Sites and tested My Site creation for non-administrative users.

Exercise 2: Configuring audiences

► **Task 1: Create and configure a new audience**

1. Switch to NYC-SP1, and on the **Start** screen, type **SharePoint 2016 Central Administration**, and then press Enter.
2. Click **Application Management**.
3. On the **Application Management** page, under **Service Applications**, click **Manage service applications**.
4. On the **Manage Service Applications** page, click **Contoso UPSA** (you must click the name in the **User Profile Service Application** row, but not in the **User Profile Service Application Proxy** row).

5. On the **Manage Profile Service: Contoso UPSA** page, under **People**, click **Manage Audiences**.
6. On the **View Audiences** page, click **New Audience**.
7. On the **Create Audience** page, in the **Name** text box, type **Sales Team**, in the **Owner** text box, type **CONTOSO\Administrator**, and then click **OK**.
8. On the **Add Audience Rule: Sales Team** page, in the **Operator** list, click **Member Of**, in the **Value** text box, type **Sales**, and then click **OK**.
9. On the **View Audience Properties: Sales Team** page, click **Compile audience**.
10. Verify that under **Audience Properties**, the **Last compilation** value is updated.
11. On the **View Audience Properties: Sales Team** page, click **View membership**.
12. On the **View Audience Membership: Sales Team** page, verify the Account Name **CONTOSO\lda** is listed.

► **Task 2: Create a compilation schedule**

1. Click **Application Management**.
2. On the **Application Management** page, under **Service Applications**, click **Manage service applications**.
3. On the **Manage Service Applications** page, click **Contoso UPSA** (you must click the name in the **User Profile Service Application** row, and not in the **User Profile Service Application Proxy** row).
4. On the **Manage Profile Service: Contoso UPSA** page, under **People**, click **Schedule Audience Compilation**.
5. On the **Specify Compilation Schedule** page, ensure **Enable scheduling** is selected.
6. In the **Start at** list, ensure **1:00 AM** is selected, click **Every day**, and then click **OK**.
7. Close **Internet Explorer**.

► **Task 3: Enable audience targeting for an announcements list**

1. On the **Start** screen, click **Internet Explorer**.
2. In Internet Explorer, go to **http://sharepoint.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. On the **http://sharepoint.contoso.com** site, in the current navigation, click **Announcements**.
5. On the **Announcements** page, on the ribbon, on the **LIST** tab, click **List Settings**.
6. On the **List Settings** page, click **Audience targeting settings**.
7. On the **Modify List Audience Targeting Settings** page, select **Enable audience targeting**, and then click **OK**.

► **Task 4: Create an announcement that targets the sales team audience**

1. On the **http://sharepoint.contoso.com** site, in current navigation, click **Announcements**.
2. On the **Announcements** page, click **new announcement**.
3. On the **New Item** page, in the **Title** text box, type **Sales Announcement**.
4. In the **Body** text box, type **This is a sales announcement**.
5. In the **Target Audiences** text box, type **Sales Team**, and then click **Save**.

► Task 5: Test the audiences

1. Close all Internet Explorer windows.
2. On the **Start** screen, click **Internet Explorer**.
3. In Internet Explorer, go to **http://sharepoint.contoso.com**.
4. In the **Windows Security** dialog box, in the **User name** text box, type **ida@contoso.com**, in the **Password** text box, type **Pa\$\$w0rd**, and then click **OK**.
5. On the SharePoint site, verify that the **Sales Announcement** appears on the home page.

Results: After completing this exercise, you should have created audiences and configured audience targeting.

► Task 6: 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-SP1-E**, and then click **Revert**.
3. In the **Revert Virtual Machine** dialog box, click **Revert**.
4. Repeat steps 2 and 3 for **20339-1A-NYC-DB1-E** and **20339-1A-NYC-DC1-E**.