DAT226x

Creating a Master Data Solution with SQL Server Master Data Services

Lab 1-1 | Getting Started

Estimated time to complete this lab is 60 minutes

Overview

In this lab, you will provision a Microsoft Azure Virtual Machine (VM) that will be used by all labs in this course. Once the VM is provisioned, you will complete the setup required to support the labs.

The labs in this course are accumulative. You cannot complete the following labs if this lab has not been successfully completed.

What You'll Need

To complete this lab, you will need the following:

- High-speed and reliable internet connectivity (for remote connections to the VM)
- A second monitor is recommended (for the Remote Desktop connection)
- A Microsoft account (such as one used for outlook.com, Hotmail, or other Microsoft services)
- A Microsoft Azure subscription
- The lab files for this course (available for download from GitHub, as described in this lab)

Creating a Free Trial Azure Subscription

If you already have an Azure subscription, you can skip this section. Otherwise, follow these steps to create a free trial subscription. You will need to provide a valid credit card number for verification, but you will not be charged for Azure services—for more information, refer to https://aka.ms/edx-dat226-faq-az. Note that the free trial is not available in all regions.

If you already have a Microsoft account that has not already been used to sign up for a free Microsoft Azure trial subscription, you're ready to get started. If not, don't worry—just create a new Microsoft account at https://aka.ms/edx-dat226-msa.

After you've created a Microsoft account, browse to https://aka.ms/edx-dat226-free-az and then click the **Start Free** link. Then follow the instructions to sign up for a free trial subscription to Microsoft Azure. You'll need to sign in with your Microsoft account if you're not already signed in. Then you'll need to:

- Enter your cellphone number and have Microsoft send you a text message to verify your identity
- Enter the verification code sent to you
- Provide valid payment details—don't worry, your credit card won't be charged for any services you use during the trial period, and the account is automatically deactivated at the end of the trial period, unless you expressly decide to keep it active.

Exercise 1: Provisioning an Azure VM

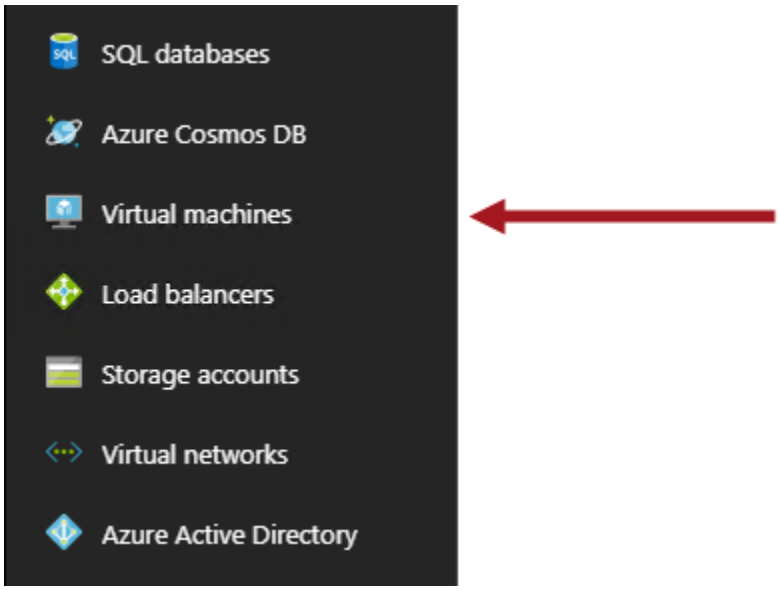
In this exercise, having signed in to the Azure Portal by using your Azure subscription, you will provision an Azure VM to support all labs for this course.

The Azure VM should be stopped when you have completed a lab so that your subscription is not charged (for free trial subscriptions, this will ensure you will have sufficient credits left to complete the labs over the duration of the course).

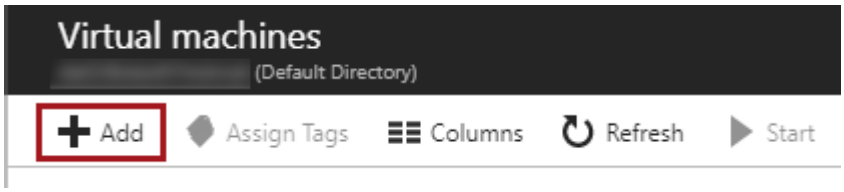
Provisioning an Azure VM

In this task, you will sign in to the Azure Portal, and then provision an Azure VM.

1. In a web browser, navigate to https://portal.azure.com.
2. Sign in to the **Azure Portal** by using your subscription.
3. In the left pane, select **Virtual Machines**.



4. In the **Virtual Machines** blade, click **Add**.



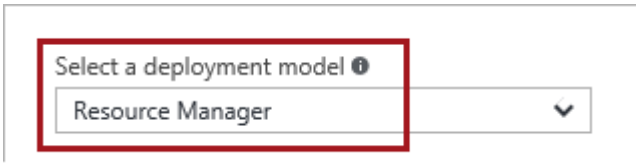
5. In the **Compute** blade, in the search box, enter the search text **Free SQL Server 2017**, and then press **Enter**.

6. Select the
Free SQL Server License: SQL Server 2017 Developer on Windows Server 2016 image.

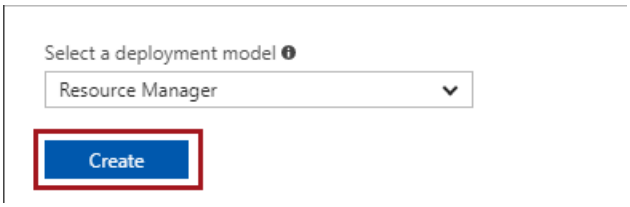
NAME	PUBLISHER	CATEGORY
Free SQL Server License: SQL Server 2017 Developer on Ubuntu Server 16.04 LTS	Microsoft	Linux based
Free SQL Server License: SQL Server 2017 Developer on Red Hat Enterprise Linux 7.4 (RHEL)	Microsoft	Linux based
Free SQL Server License: SQL Server 2017 Express on Windows Server 2016	Microsoft	Windows based
Free SQL Server License: SQL Server 2017 Developer on Windows Server 2016	Microsoft	Windows based
Free SQL Server License: SQL Server 2017 Developer on SUSE Linux Enterprise Server (SLES) 12 SP2	Microsoft	Linux based
Free SQL Server License: SQL Server 2017 Express on SUSE Linux Enterprise Server (SLES) 12 SP2	Microsoft	Linux based
Free SQL Server License: SQL Server 2017 Express on Ubuntu Server 16.04 LTS	Microsoft	Linux based
Free SQL Server License: SQL Server 2017 Express on Red Hat Enterprise Linux 7.4 (RHEL)	Microsoft	Linux based

7. In the image blade, review the text that describes the virtual machine setup.

8. In the lower section of the blade, in the **Select a Deployment Model** dropdown list, ensure that **Resource Manager** is selected.



9. To provision the virtual machine, click **Create**.



10. Notice that the **Create Virtual Machine** blade opens, and that also the **Basics** blade (step 1) opens.

11. In the **Basics** blade, in the **Name** box, enter a name for the virtual machine (this will become the name of the machine to which you will connect).

12. In the **VM Disk Type** dropdown list, select **HDD**.

13. In the **User Name** box enter **VM-Admin**.

14. In the password boxes, enter and confirm an appropriate password.

    This will become the machine administrator account password. Note that the password must be at least 12 characters in length, and must have three of the following: one lower case character, one upper case character, one number, or one special character.

    Be sure to permanently record these credentials, as you will be required to use them to sign in every time you will connect to the VM.

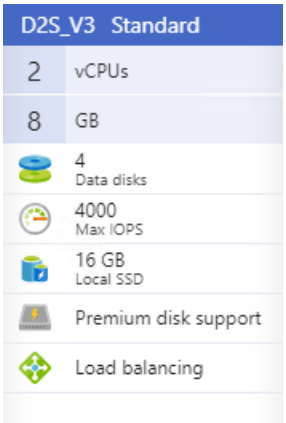
15. In the **Resource Group** box, enter **Lab**.

16. In the **Location** box, select a data center that is near you.

17. Click **OK**.

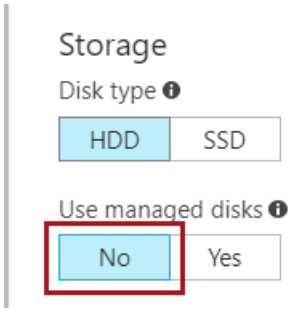
18. In the **Size** blade (step 2), scroll down to locate and select a **Standard** size VM which provides at least 2 vCPUs and 8GB RAM (like **D2S_V3**, if available).

    The labs in this course will not require excessive storage, memory or processing. Also, you will be prompted to deallocate your VM between labs, and so the monthly cost you see will only apply when the VM is running.



19. Click **Select**.

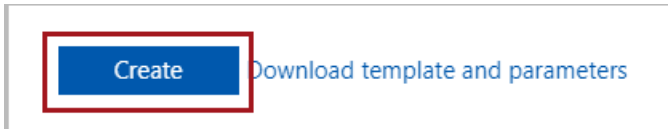
20. In the **Settings** blade (step 3), for **Use Managed Disks**, select **No**.



21. Click **OK**.

22. In the **SQL Server Settings** blade (step 4), to accept the default settings, click **OK**.

23. In the **Summary** blade, click **Create**.



*While the VM is being provisioned, you are directed to the **Azure Portal** dashboard.*

24. On the **Azure Portal** dashboard, notice the tile displaying the status of the deployment process.

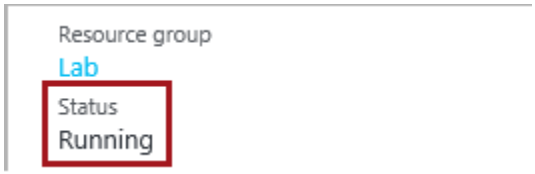
The deployment usually takes 15-20 minutes to complete, and this time depends largely on the VM size selected. The VM blade will open when the deployment completes.

You cannot proceed to the next task until the deployment completes.

Connecting to the VM

In this task, once the VM has successfully deployed, you will connect to the VM.

1. In the **Azure Portal**, notice that the VM blade automatically opens, and that the VM status is **Running**.



*You are charged when the VM status is **Running**, but you are not charged—except for a relatively smaller storage cost—when the VM status is **Stopped (Deallocated)**.*

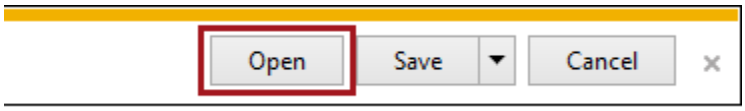
At the end of this lab, there will be instructions to guide you on how to stop and optionally deallocate the VM. You should consider doing this if you choose to commence the next lab at a much later time.

2. To connect to the VM, click **Connect**.

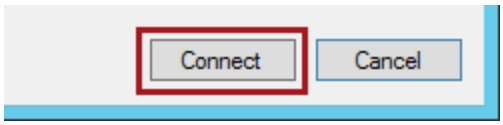
A Remote Desktop File (.rdp) file is downloaded to your computer.

This file can be used to reconnect to the remote desktop session, but note that if you deallocate the VM and later re-start the VM, it will be likely that a different IP address will be assigned.

3. If prompted by the web browser to open the Remote Desktop File, click **Open**, otherwise, locate the downloaded file, and then double-click it.



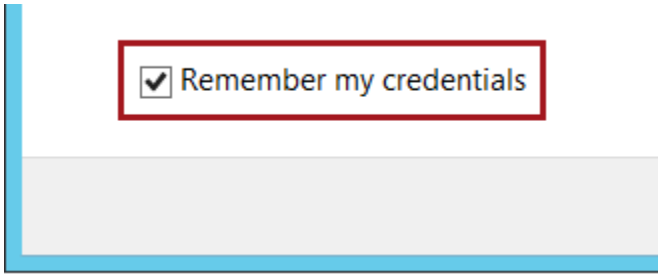
4. If prompted to connect to the unknown publisher, click **Connect**.



*You need to enter the VM administrator credentials. If the authentication window defaults to an existing account, you will need to select **More Choices**, and then select **Use a Different Account**.*

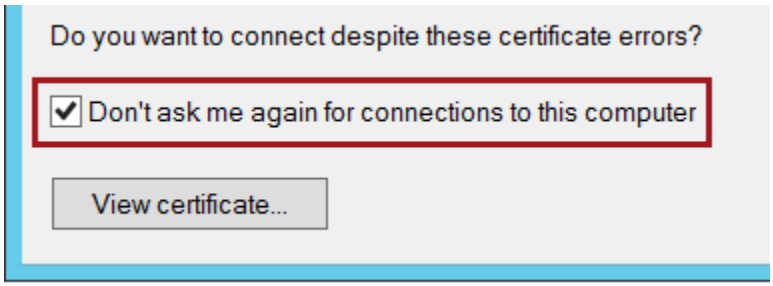
5. In the **Windows Security** window, enter the VM admin credentials (retrieved from **MySolution.txt**: VM admin user name, and VM admin password).

6. Check the **Remember My Credentials** checkbox.



7. Click **OK**.

8. In the **Remote Desktop Connection** window, check the **Don't Ask Me Again for Connections to This Computer** checkbox.



9. Click **Yes**.

10. If you have a second monitor, maximize the Remote Desktop window inside a single monitor.

Exercise 2: Setting Up the Azure VM

In this exercise, you will complete several VM installation and configuration tasks.

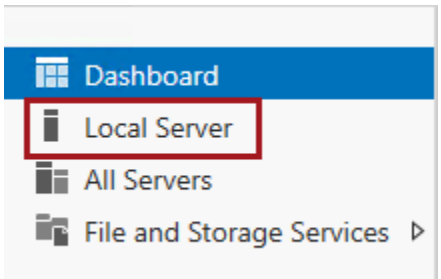
Configuring the Server

In this task, you will configure the server to support the lab experience. This will involve configuring the server as web server in preparation for installing Master Data Services.

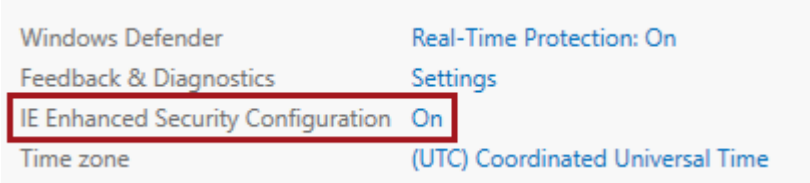
1. In the Remote Desktop window, when the **Networks** panel opens at the right, to ensure that the machine is not discoverable by other machines, click **No**.

2. Wait until **Server Manager** opens (it will open automatically).

3. In **Server Manager**, in the left pane, select **Local Server**.

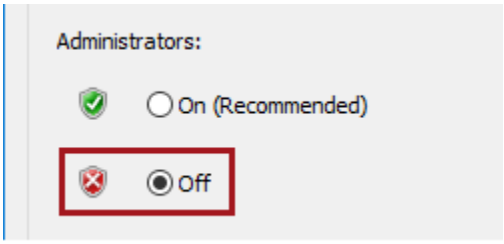


4. In the **Properties** pane, notice that **IE Enhanced Security Configuration** is set to **On**.



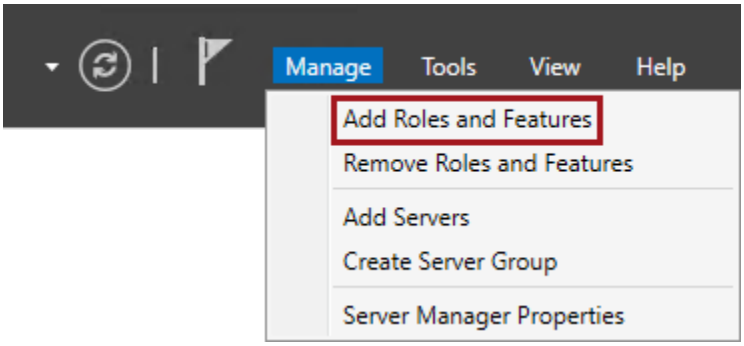
5. Click the **On** link.

6. In the window, for **Administrators**, select the **Off** option.

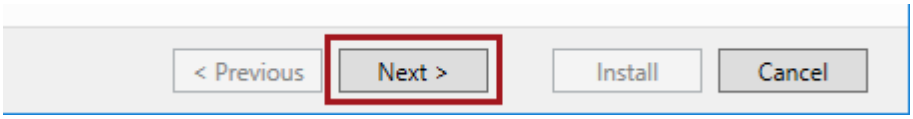


7. Click **OK**.

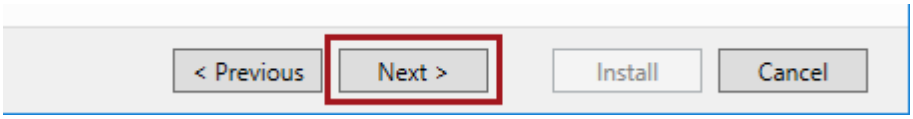
8. Located at the top-right corner, click **Manage**, and then select **Add Roles and Features**.



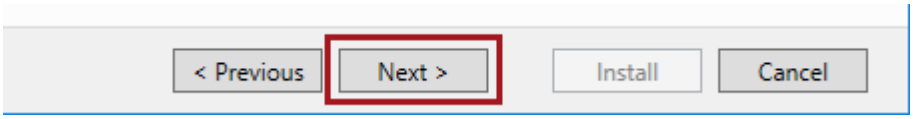
9. In the **Add Roles and Features Wizard** window, click **Next**.



10. At the **Select Installation Type** step, to accept the default option, click **Next**.

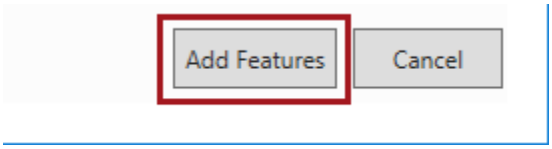


11. At the **Select Destination Server** step, to accept the current server instance, click **Next**.

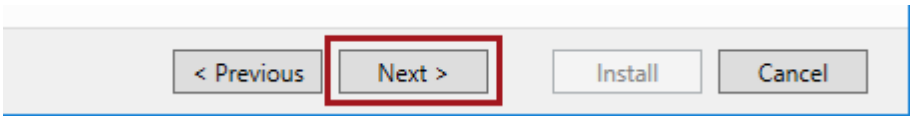


12. At the **Select Server Roles** step, check the **Web Server (IIS)** role.

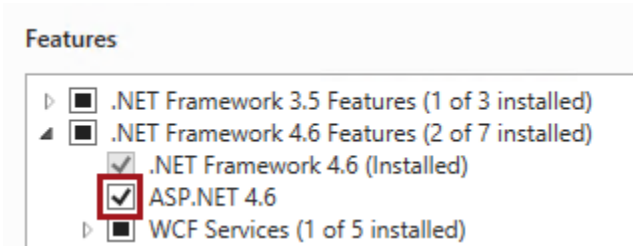
13. When the **Add Roles and Features Wizard** dialog window opens, click **Add Features**.



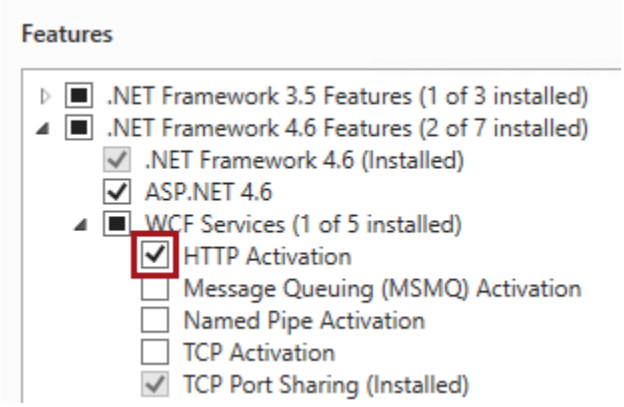
14. In the **Add Roles and Features Wizard** window, click **Next**.



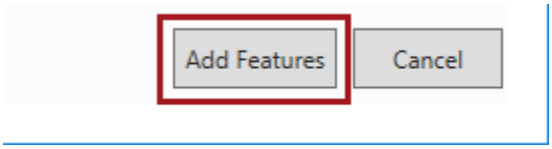
15. At the **Select Features** step, expand **.NET Framework 4.6 Features**, and then check **ASP.NET 4.6**.



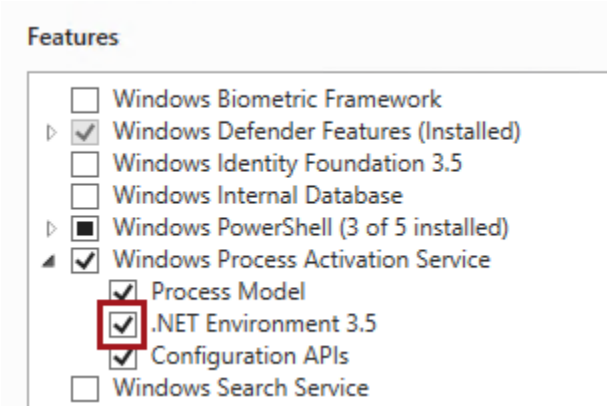
16. Expand **WCF Services**, and then check **HTTP Activation**.



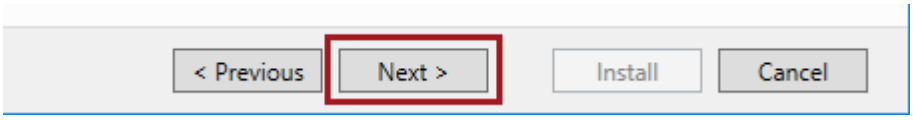
17. When the **Add Roles and Features Wizard** dialog window opens, click **Add Features**.



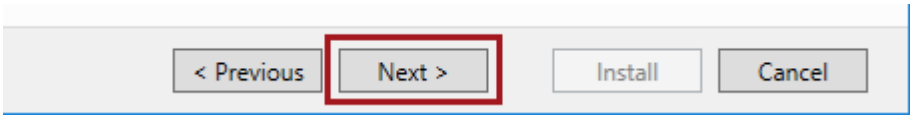
18. Scroll down the list, expand **Windows Process Activation Service**, and then check **.NET Framework 3.5**.



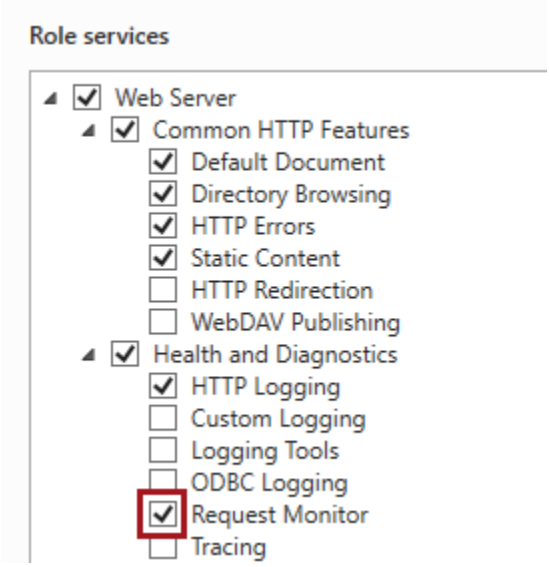
19. In the **Add Roles and Features Wizard** window, click **Next**.



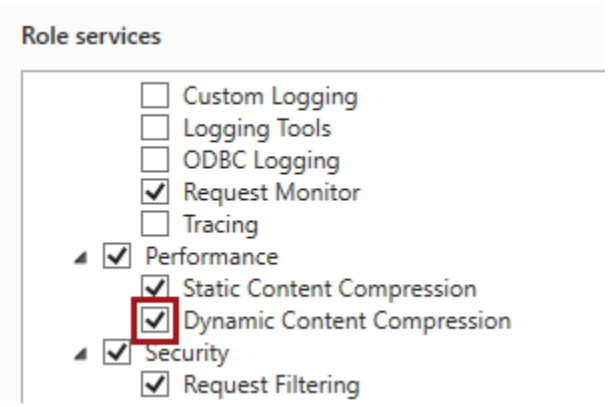
20. To configure the web server role, click **Next**.



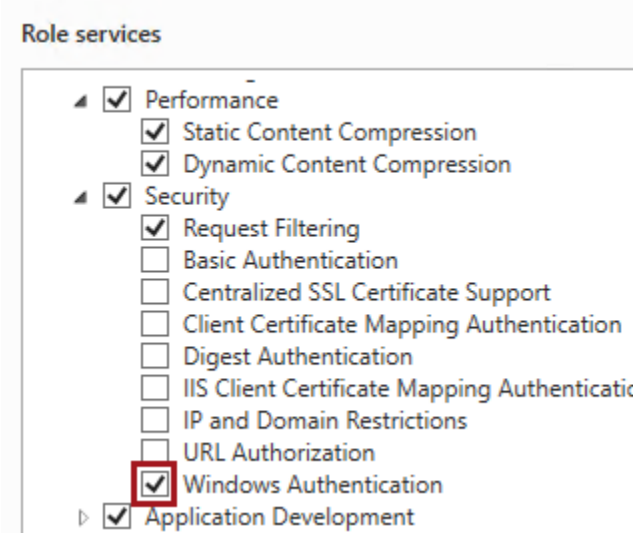
21. At the **Select Role Services** step, from inside the **Health and Diagnostics** group, check **Request Monitor**.



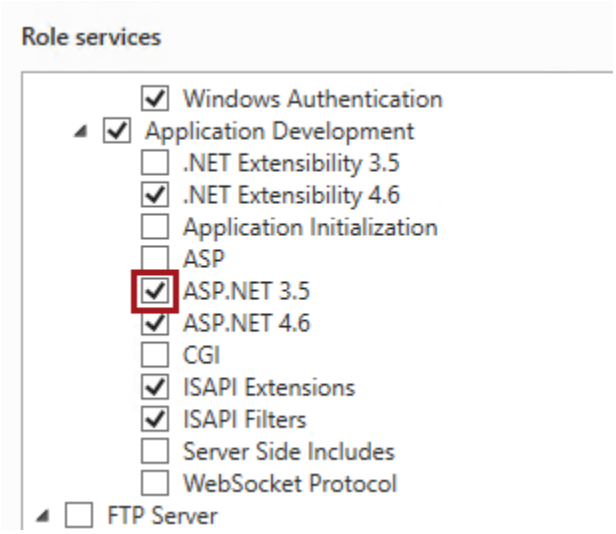
22. From inside the **Performance** group, check **Dynamic Content Compression**.



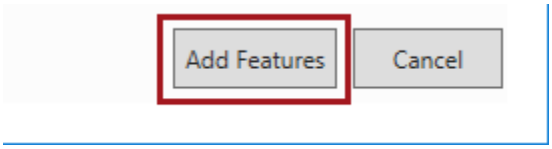
23. From inside the **Security** group, check **Windows Authentication**.



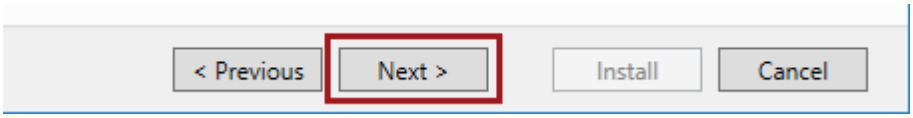
24. Expand the **Application Development** group, and then check **ASP.NET 3.5**.



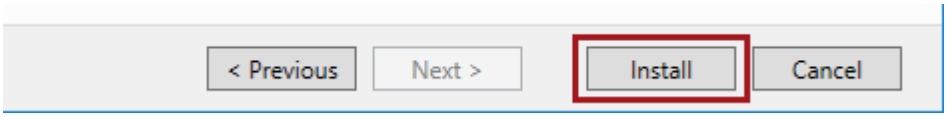
25. When the **Add Roles and Features Wizard** dialog window opens, click **Add Features**.



26. In the **Add Roles and Features Wizard** window, click **Next**.

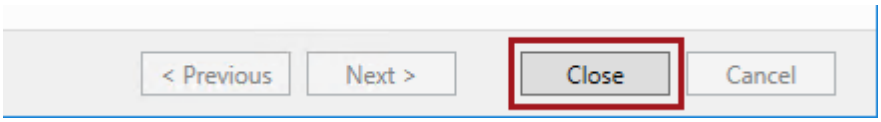


27. Click **Install**.

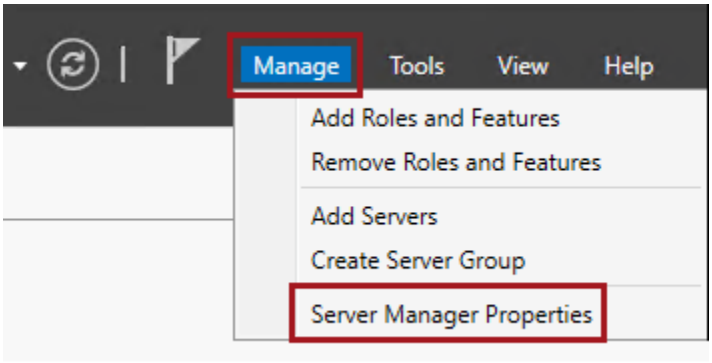


The installation process takes approximately 3-4 minutes to complete. You cannot proceed to the next task until it completes.

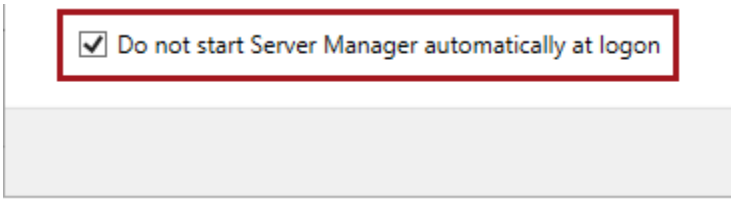
28. When the installation has completed, in the **Add Roles and Features Wizard** window, click **Close**.



29. In **Server Manager**, click **Manage**, and then select **Server Manager Properties**.

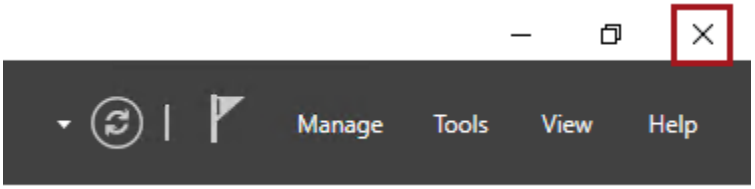


30. In the window, check the **Do Not Start Server Manager Automatically at Logon** checkbox.



31. Click **OK**.

32. To close Server Manager, located at the top-right corner, click **X**.

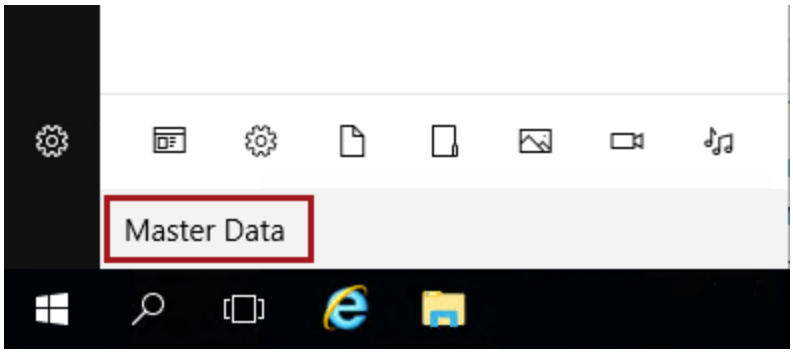


Configuring Master Data Services

In this task, you will configure SQL Server 2017 Master Data Services.

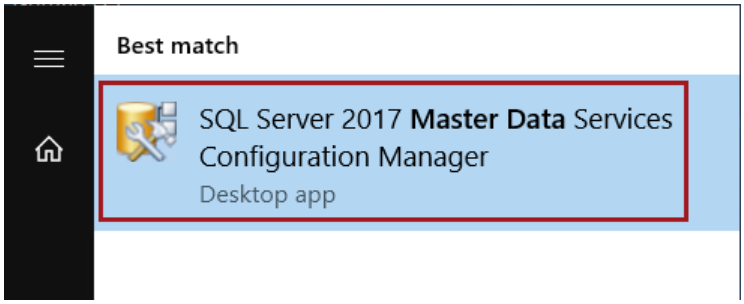
In this pre-configured VM, the SQL Server Setup has already installed Master Data Services, however the service has not yet been configured.

1. At the bottom-left corner, click the **Windows** icon, and then commence typing **Master Data**.

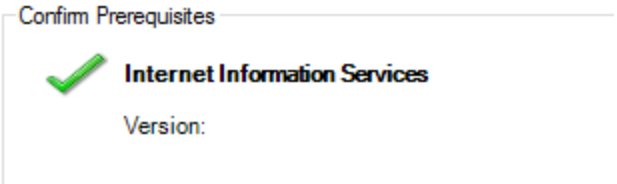


2. In the **Best Match** section, when the search result appears, select **SQL Server 2017 Master Data Services Configuration Manager**.

3. TODO IMAGE FIX

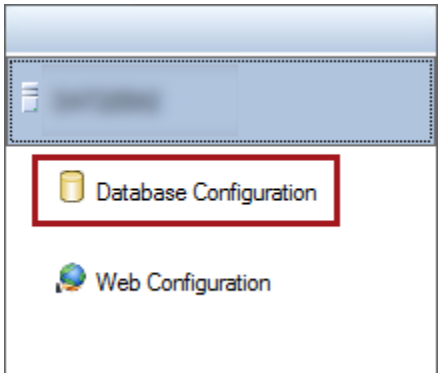


4. In the **Master Data Services Configuration Manager** window, verify that the Internet Information Services (IIS) prerequisites have been installed.

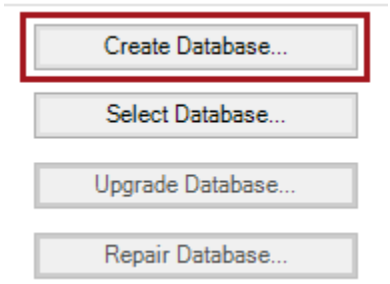


You completed the installation of IIS in the previous task.

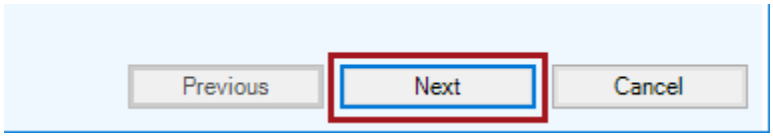
5. In the left pane, select **Database Configuration**.



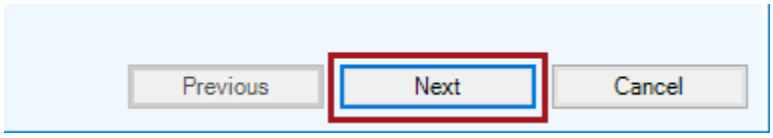
6. Located the right, click **Create Database**.



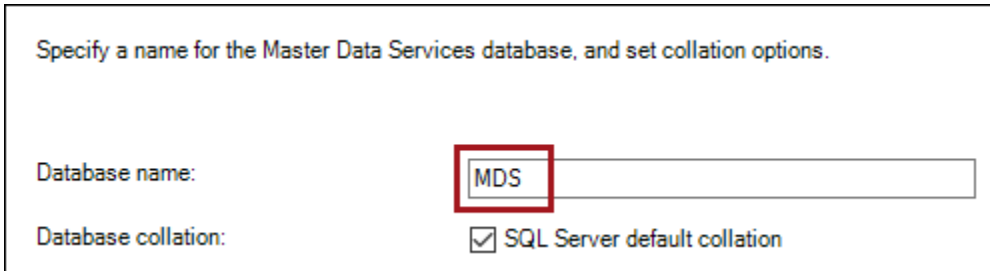
7. In the **Create Database Wizard** window, click **Next**.



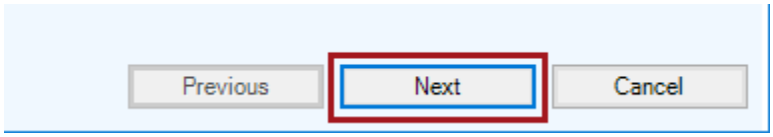
8. At the **Database Server** step, to accept creating an MDS repository database on the default SQL Server instance, click **Next**.



9. At the **Database** step, in the **Database Name** box, enter **MDS**.

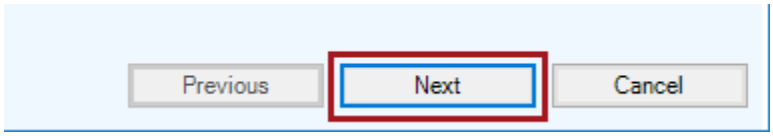


10. Click **Next**.

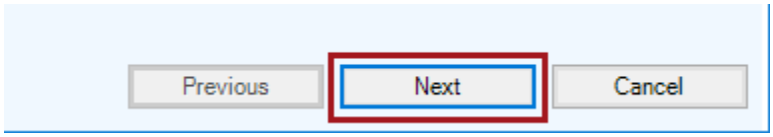


11. At the **Administrator Account** step, in the **User Name** box, notice that your account is selected, and then click **Next**.

    This assigns your Windows account as an MDS administrator.



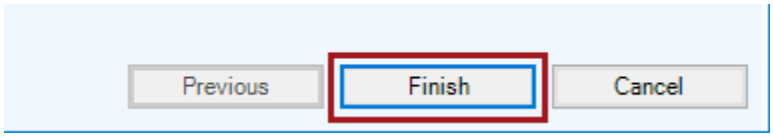
12. At the **Summary** step, review the setup information, and then click **Next**.



13. At the **Progress and Finish** step, when the configuration has completed, verify that all configuration tasks succeeded.

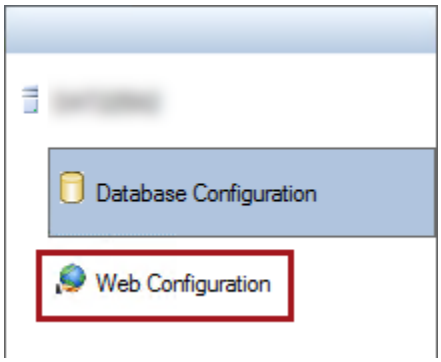
Task	Status
Preparing to create database.	Success
Running database script.	Success
Verify database creation.	Success

14. Click **Finish**.

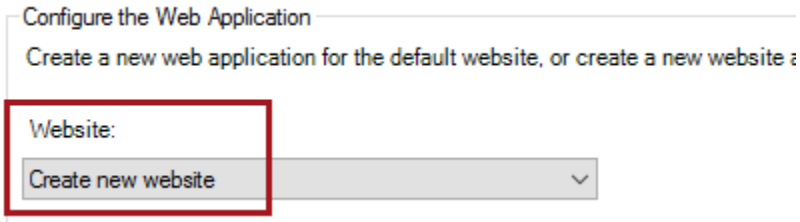


An MDS repository database has now been created. You will now continue with the setup by creating an MDS web application.

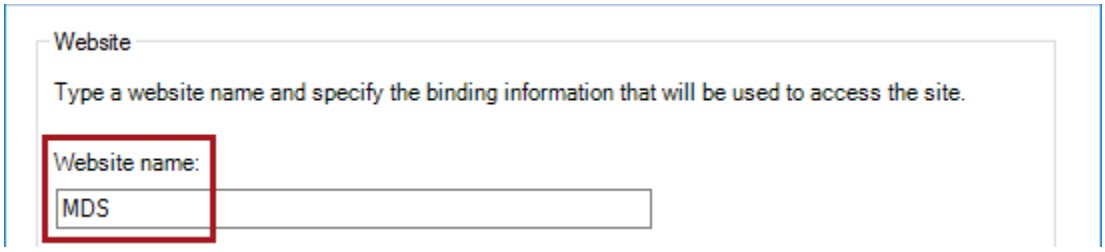
15. In the **Master Data Services Configuration Manager** window, in the left pane, select **Web Configuration**.



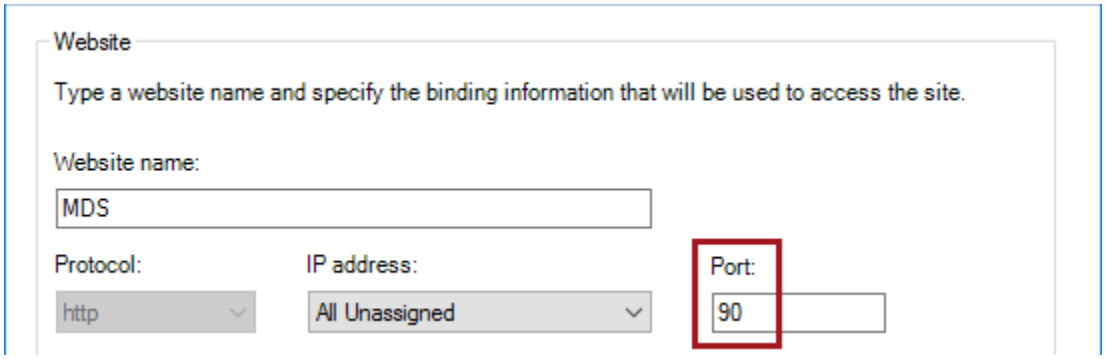
16. In the **Web Configuration** pane, in the **Website** dropdown list, select **Create New Website**.



17. In the **Create Website** window, in the **Website** section, in the **Website Name** box, notice that **MDS** is entered.



18. In the **Port** box, replace the value with **90**.

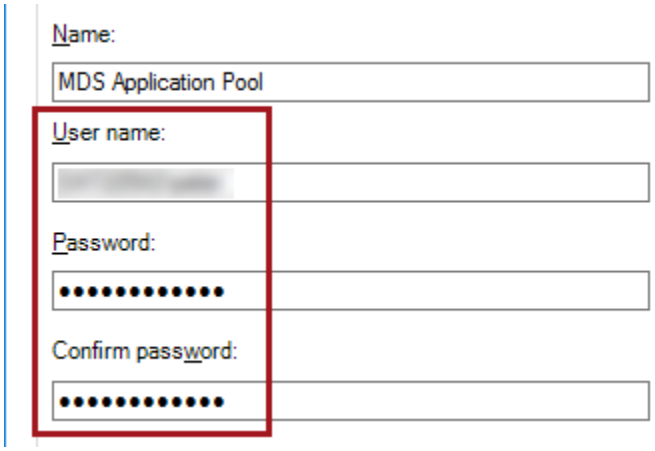


19. In the **Application Pool** section, in the **User Name** box, enter **VM-Admin**.

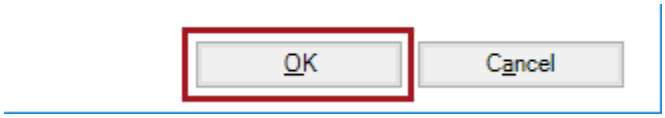
20. Notice that the account updates to include the machine name.

    It is a good practice to use a dedicated domain account and apply the principle of least privilege by granting the account just the permissions it requires. In this lab, for simplicity, you will use your administrator account.

21. In the **Password** and **Confirm Password** boxes, enter your password.



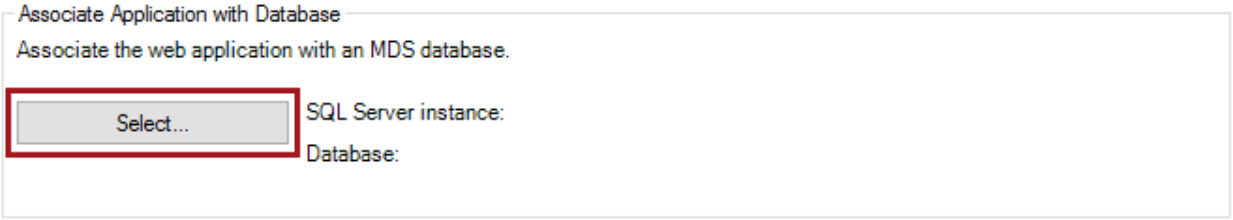
22. Click **OK**.



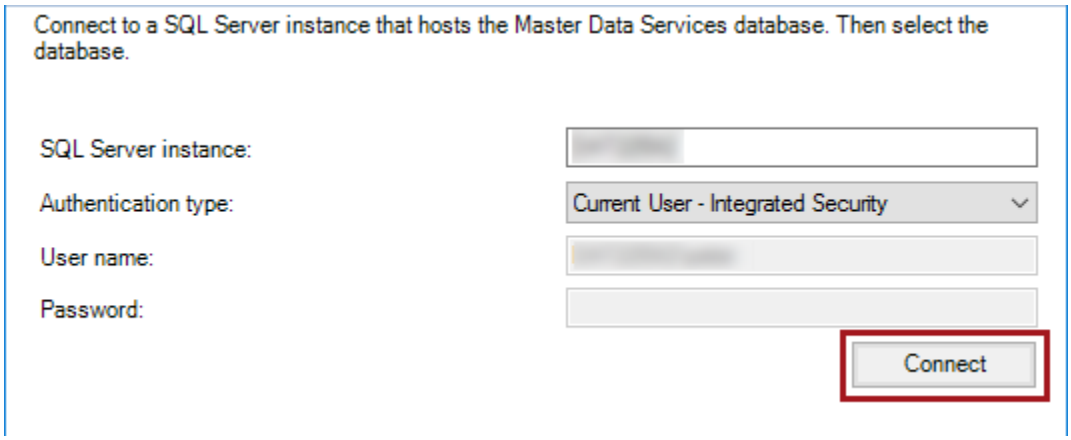
23. When prompted with a warning about the use of HTTP, click **OK**.

    In a production environment, it is recommended that HTTPS and Secure Sockets Layer (SSL) be used for all communication with the web application.

24. To associate the MDS repository database with the web application, in the **Associate Application with Database** section, click **Select**.

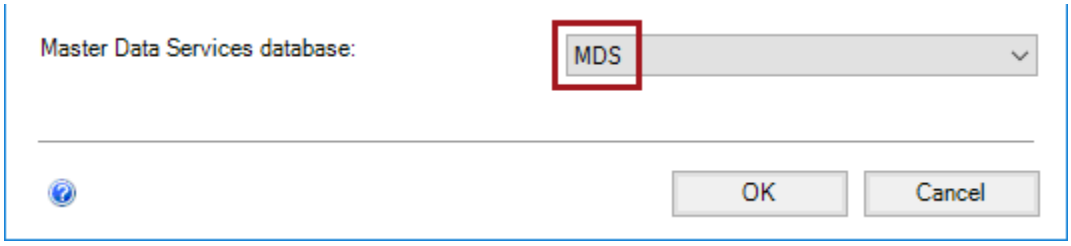


25. In the **Connect to Database** window, notice that the default settings will connect to the default SQL Server instance with your account.

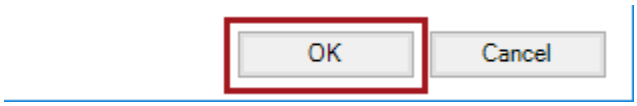


26. Click **Connect**.

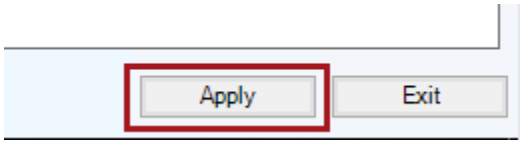
27. In the **Master Data Services Database** dropdown list, ensure that the **MDS** database is selected.



28. Click **OK**.



29. At the bottom-right-corner, click **Apply**.

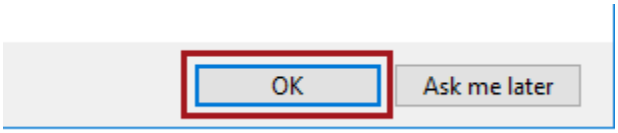


30. When notified that the web application settings were successfully applied, click **OK**.

    The Master Data Manager web application will open in the default web browser.

31. Notice that an **Internet Explorer 11** window has opened.

32. In the **Internet Explorer 11** window, to accept the recommended settings, click **OK**.

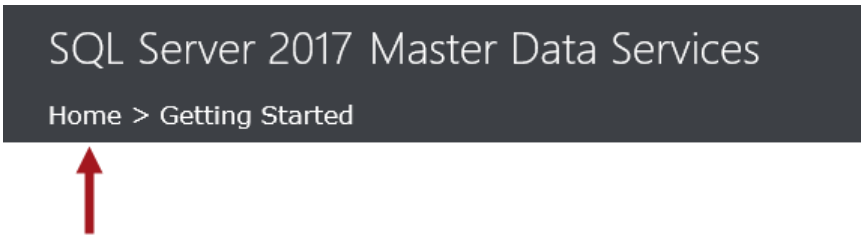


33. Close the **Welcome to the Web** browser tab.

34. If necessary, maximize the Internet Explorer window.

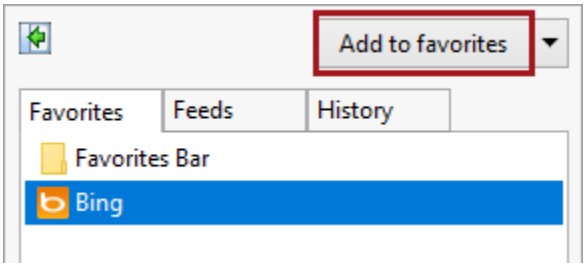
35. Notice that the loaded page displays the **SQL Server 2017 Master Data Services Getting Started** page.

36. At the top-left corner, click the **Home** link.

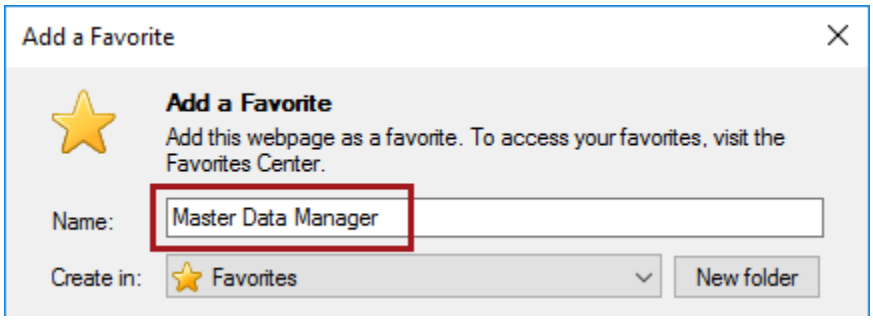


37. To create a browser favorite, at the top-right corner click the star icon.

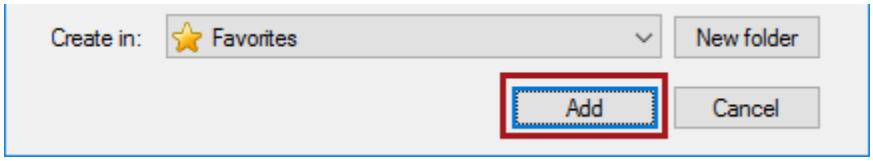
38. In the left pane, click **Add to Favorites**.



39. In the **Add a Favorite** window, in the **Name** box, replace the text with **Master Data Manager**.



40. Click **Add**.



41. Leave the Internet Explorer window open.

    You will return later in this lab after you have installed Office, to install the MDS Add-in for Excel.

42. Return to the **Master Data Services Configuration Manager** window.

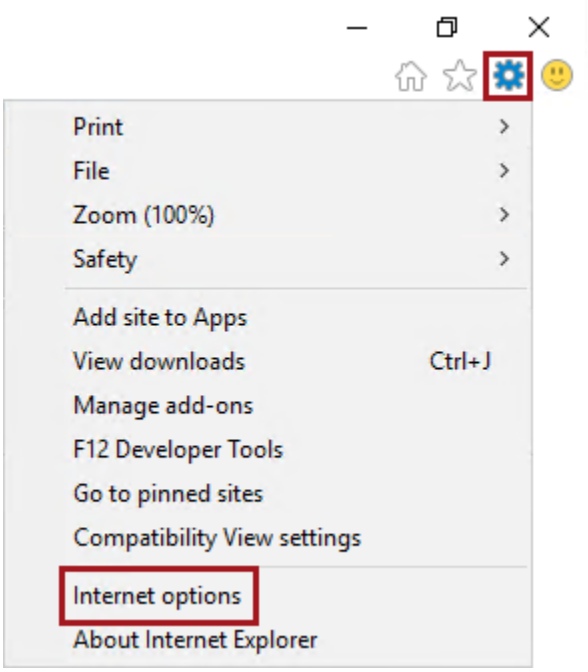
43. To close the application, at the top-right corner, click **X**.

Installing the Lab Resources

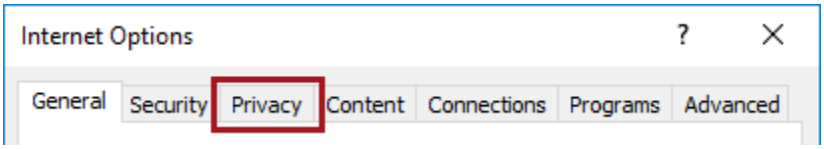
In this task, you will download and extract the lab resources that support the labs.

1. In Internet Explorer, to the left of the **Home – Master Data Services** tab, click to create a new browser tab.

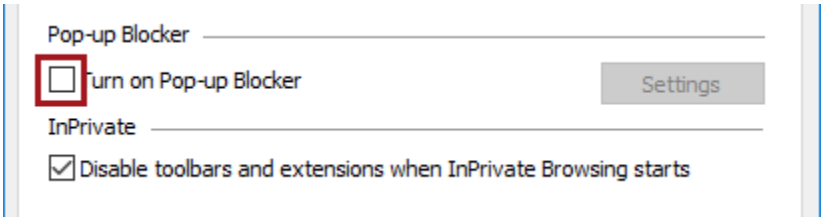
2. At the top-right corner, click the settings icon, and then select **Internet Options**.



3. In the **Internet Options** window, select the **Privacy** tab.



4. Uncheck the **Turn On Pop-up Blocker** checkbox.



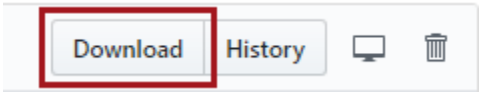
5. Click **OK**.

6. In the **URL** box, enter https://aka.ms/edx-dat226-git.

   Tip: You can copy-and-paste the URL into the Remote Desktop window.

7. On the web page, click the **DAT226x-LabResources.zip** link.

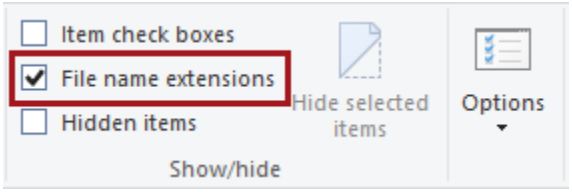
8. To download the lab resources, click **Download**.



9. Download the file to **F:**.

10. When downloaded, open File Explorer.

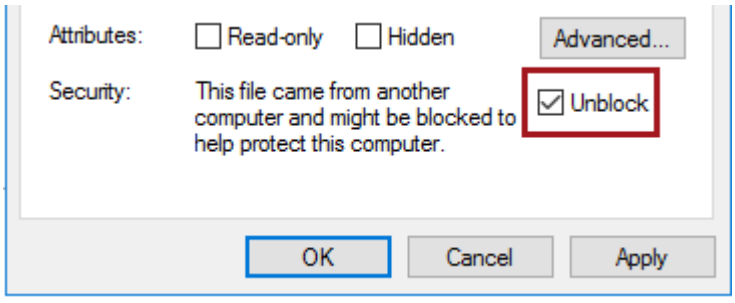
11. In the File Explorer window, on the **View** ribbon, check **File Name Extensions**.



12. Navigate to **F:**.

13. Right-click the **DAT226x-LabResources.zip** file, and then select **Properties**.

14. In the window, check **Unblock**.

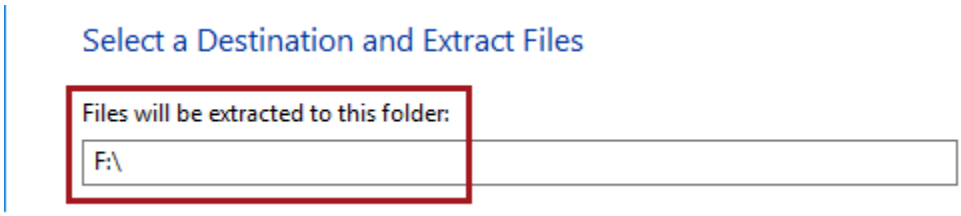


15. Click **OK**.

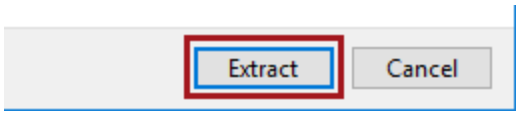
16. To extract the file content, right-click the **DAT226x-LabResources.zip** file, and then select **Extract All**.

17. In the window, replace the folder path with **F:**.

    *Be sure to extract the files to **F:**, otherwise later steps in this lab will fail.*



18. Click **Extract**.



19. Verify that you have the **F:\Labs** folder.

20. Optionally, delete the **DAT226x-LabResources.zip** file.

Installing the Sample Database

In this task, you will run a script to install a sample database.

1. In File Explorer, navigate to the **F:\Labs\Lab1-1\Assets** folder.

2. Right-click the **Setup-Database.cmd** file, and then select **Open**.

    *The setup will restore the **AdventureWorksDW2016** database. The database has been modified from the original sample for the purposes of this course.*

    The setup may take 1-2 minutes to complete.

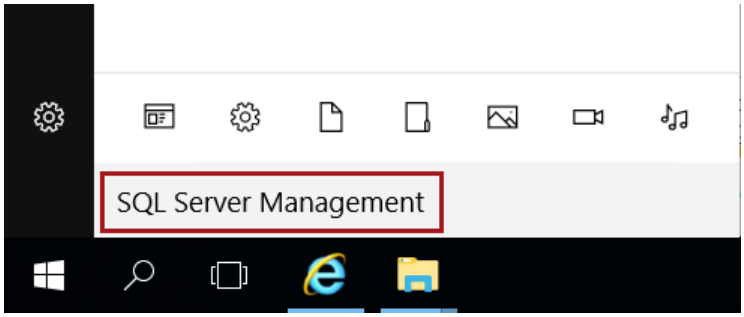
3. When the script execution completes, press any key to close the command window.

4. Close File Explorer.

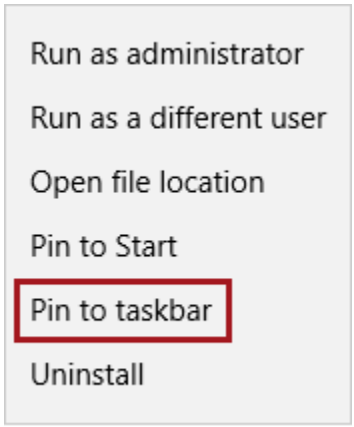
Configuring SQL Server Management Studio

In this task, you will configure SQL Server Management Studio (SSMS). This tool will be used to execute scripts.

1. To add a shortcut to the taskbar, at the bottom-left corner, click the **Windows** icon, and then commence typing **SQL Server Management**.



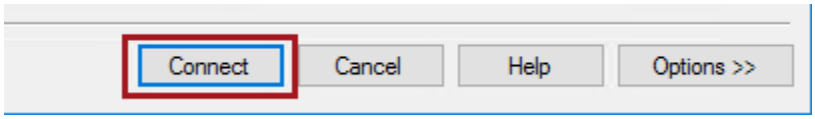
2. In the **Apps** section, when the search result appears, right-click **Microsoft SQL Server Management Studio 17**, and then select **Pin to Taskbar**.



3. Return to the desktop, and then click the **SQL Server Management Studio** shortcut.

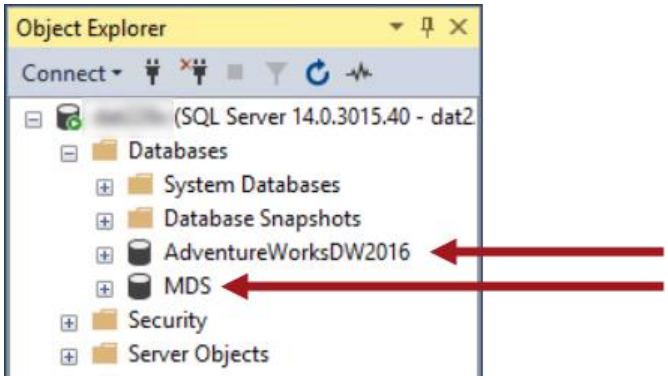
It may take 1-2 minutes for SSMS to setup.

4. In the **Connect to Server** window, click **Connect**.



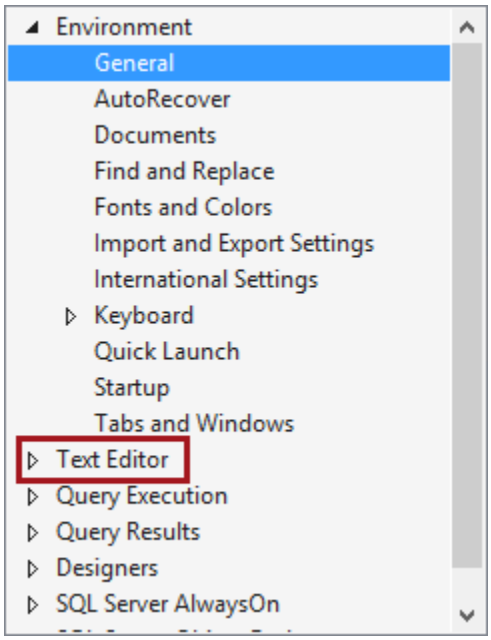
5. To verify that the **AdventureWorksDW2016** database was restored, in **Object Explorer** (located at the left), expand the **Databases** folder.

6. Verify that the **AdventureWorksDW2016** and **MDS** databases are listed.

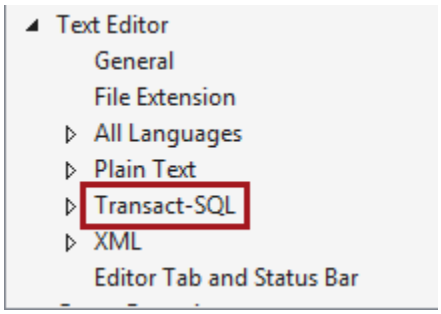


7. On the **Tools** menu, select **Options**.

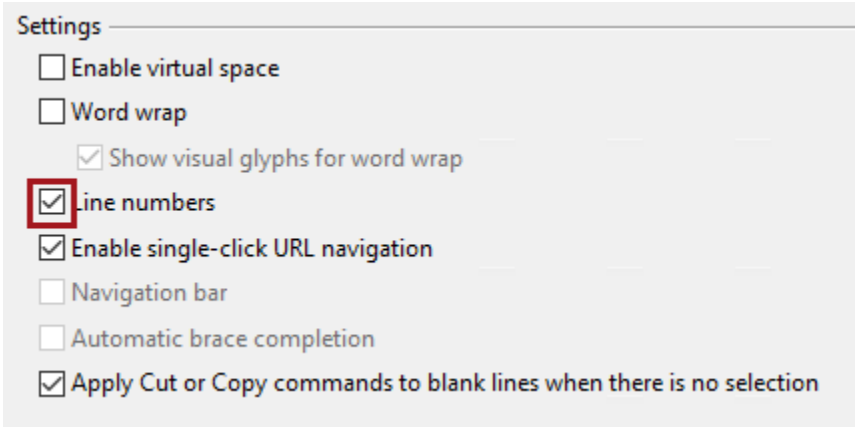
8. In the **Options** window, in the left pane, expand **Text Editor**.



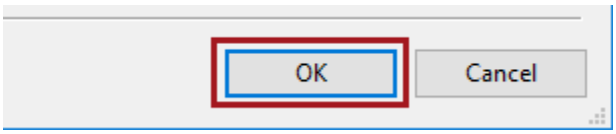
9. Select **Transact-SQL**.



10. Check the **Line Numbers** checkbox.



11. Click **OK**.



12. To close SQL Server Management Studio, on the **File** menu, select **Exit**.

    You may receive a popup notification from SSMS stating that a later version is available for download. There is no need to install a later version to complete the labs.

Installing SQL Server Data Tools

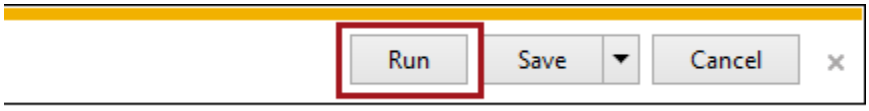
In this task, you will install SQL Server Data Tools (SSDT). This tool is required to review and execute an Integration Services package.

1. In Internet Explorer, create a new browser tab, and then navigate to https://aka.ms/edx-dat226-ssdt.

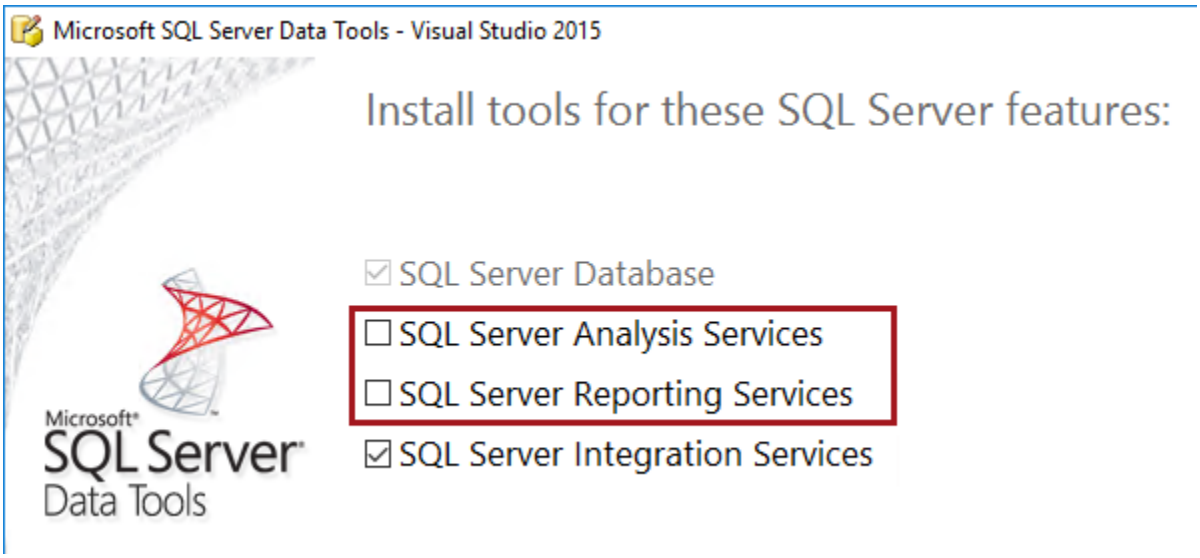
   Tip: You can copy-and-paste the URL into the Remote Desktop window.

2. Click the **Download SQL Server Data Tools** link.

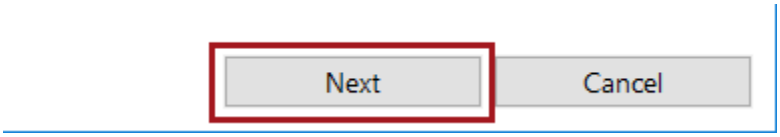
3. When prompted by Internet Explorer to run the **SSDTSetup.exe** file, click **Run**.



4. In the installation window, uncheck the **SQL Server Analysis Services** and **SQL Server Reporting Services** checkboxes.

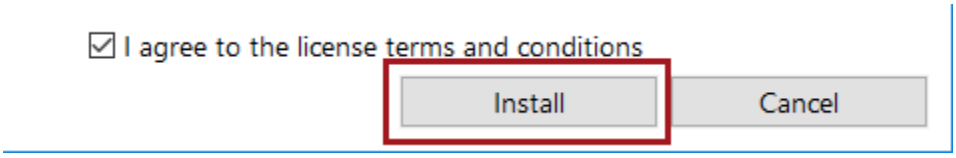


5. Click **Next**.



6. If you accept the license terms and conditions, check the checkbox.

7. Click **Install**.



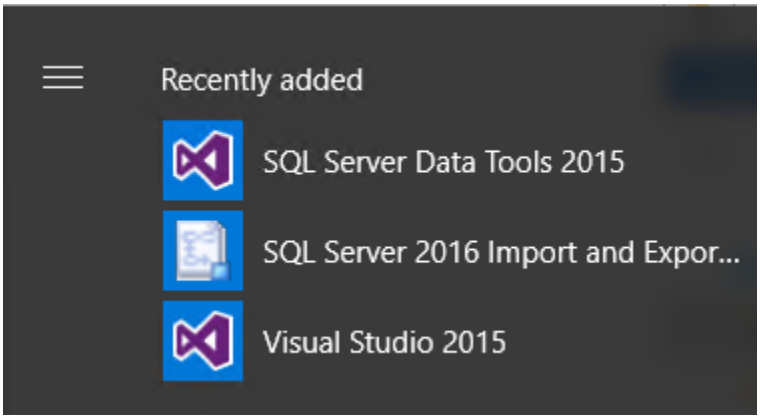
The installation usually takes 10-15 minutes to complete.

8. When the installation has completed, click **Close**.

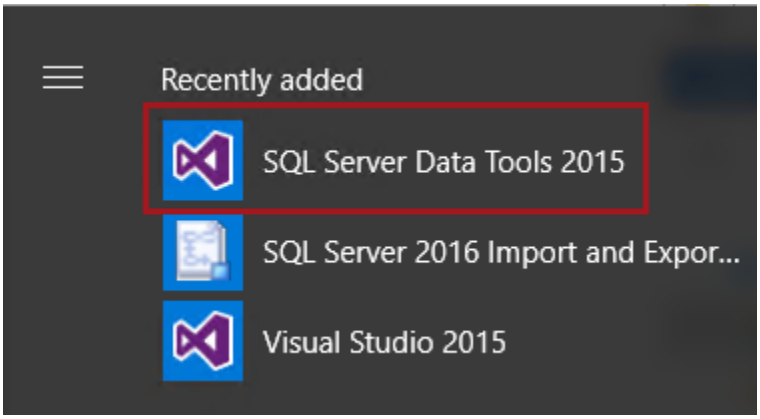
Configuring SQL Server Data Tools

In this task, you will configure SSDT.

1. To launch SSDT, at the bottom-left corner, click the **Windows** icon, and notice the items in the **Recently Added** section.

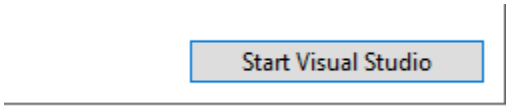


2. Select **SQL Server Data Tools 2015**.



3. In the Visual Studio getting started window, in the **Development Settings** dropdown list, select **Business Intelligence Settings**.

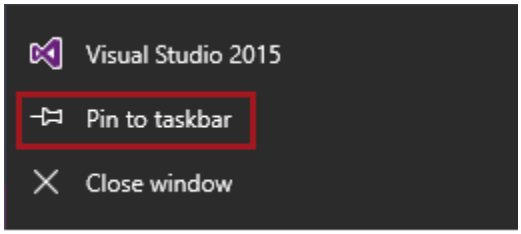
4. Click **Start Visual Studio**.



The SSDT setup usually takes 1-2 minutes to complete.

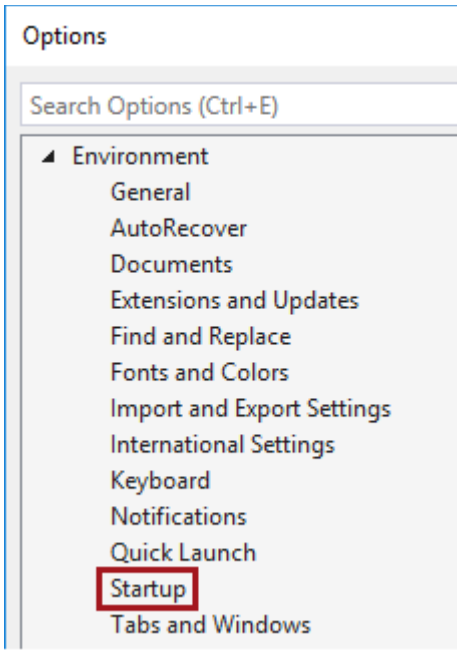
5. If you receive an error describing that Visual Studio was unable to load one or more of the requested types, click **OK**. (This will not impact on completing the labs.)

6. To create a shortcut, on the taskbar, right-click the **Visual Studio 2015** icon, and then select **Pin to Taskbar**.



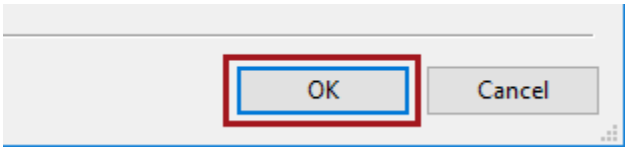
7. When SSDT opens, to configure the SSDT environment, on the **Tools** menu, select **Options**.

8. In the **Options** window, in the left pane, select the **Startup** page.



9. In the **At Startup** dropdown list, select **Show Empty Environment**.

10. Click **OK**.



11. To close SSDT, on the **File** menu, select **Exit**.

*You will work with SSDT to create an Integration Services project in **Lab 3-1**.*

Installing Microsoft Office

In this task, you will install Microsoft Office. Office is required to work with the MDS Add-in for Excel.

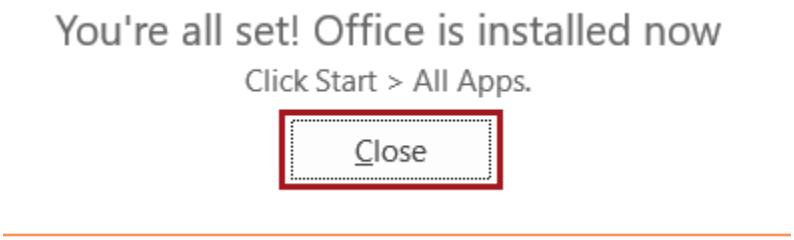
1. In Internet Explorer, in a new browser tab, navigate to https://aka.ms/edx-dat226-office365-install.

   Tip: You can copy-and-paste the URL into the Remote Desktop window.

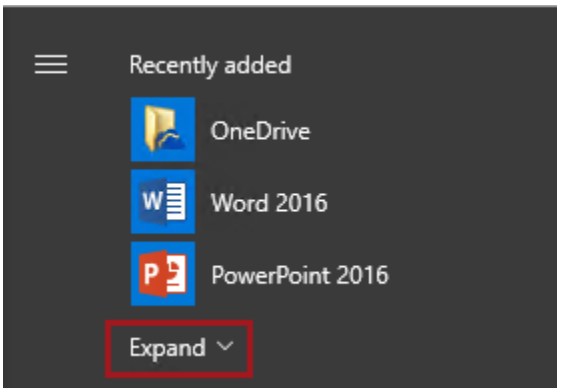
2. When prompted by Internet Explorer to run the setup file, click **Run**.

   The installation usually takes 10-15 minutes to complete.

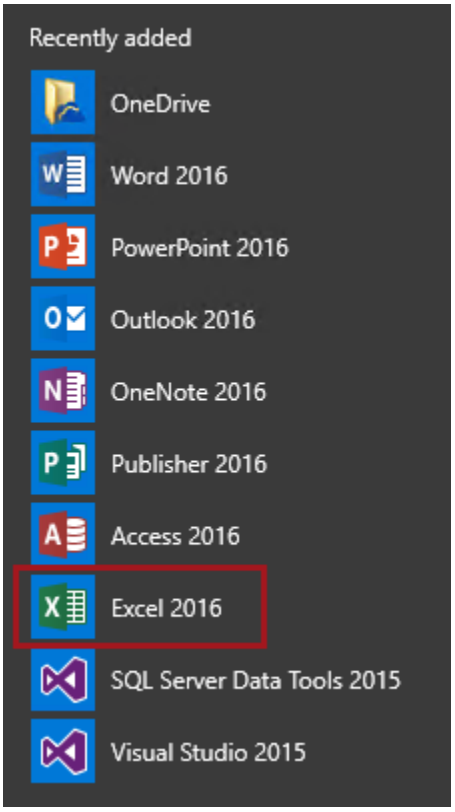
3. When the installation completes, click **Close**.



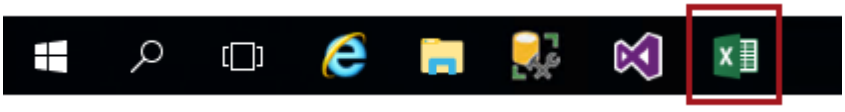
4. To launch Excel, at the bottom-left corner, click the **Windows** icon, and expand the items in the **Recently Added** section.



5. Right-click **Excel 2016**, and then select **More | Pin to Taskbar**.

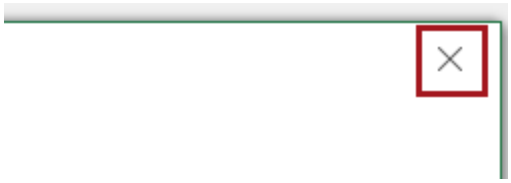


6. To launch Excel, on the task bar, click the **Excel** shortcut.



7. When Excel launches, in the sign in window, at the bottom, click the **I Don't Want to Sign In or Create an Account** link.

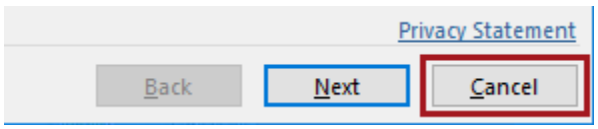
8. In the **Enter Your Product Key** window, at the top-right corner, click **X**.



A trial period is available for up to 30 days, during which you will have ample time to complete the labs for this course. Once the trial period expires, you will have the option to purchase an Office 365 subscription.

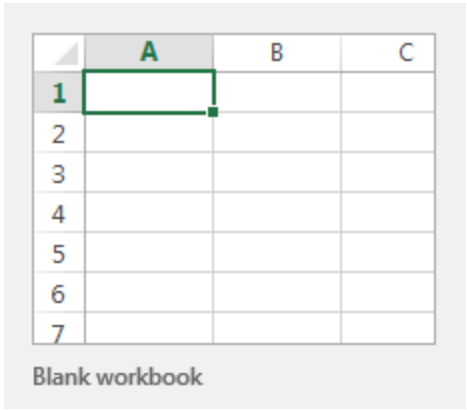
9. In the **Accept the License Terms** window, if you agree to the Microsoft Office License Agreement, click **Accept and Start Excel**.

10. In the **Microsoft Office Activation Wizard** window, click **Cancel**.



*Every time you launch Excel, you will be asked to active Office. During the trial period, you can simply click **Cancel**.*

11. To create a blank workbook, select the **Blank Workbook** template.

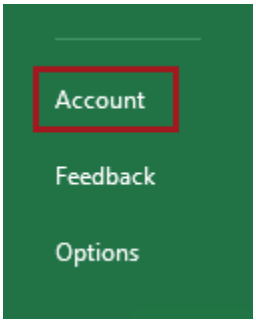


12. Notice the yellow warning banner informing you of the trail period.

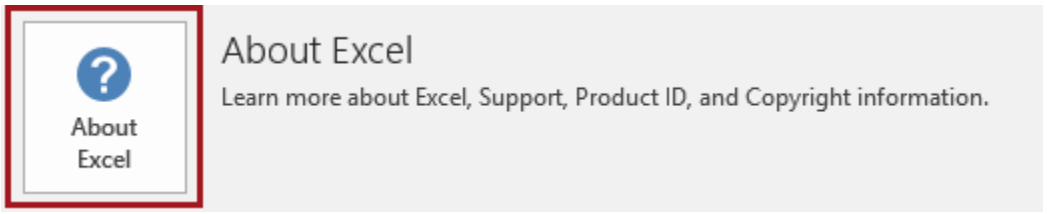
13. To hide the banner, at the far right, click **X**.

14. Click the **File** ribbon tab.

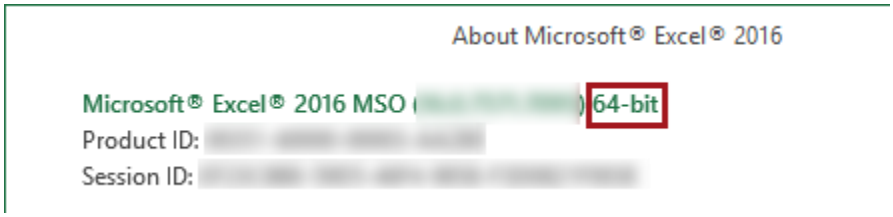
15. In the left pane, select the **Account** page.



16. Click **About Excel**.



17. In the **About Microsoft Excel** window, to the right of the version number, take note of the architecture of your Office installation.



Your version, product and session IDs may differ. When you download the MDS Add-in for Excel, you must choose the add-in with the architecture (32- or 64-bit) that matches.

18. To close the window, click **OK**.

19. To close Excel, at the top-right corner, click **X**.

Installing the Office Runtime 2010

In this task, you will install the Office Runtime 2010 which is a prerequisite for installing the MDS Add-in for Excel.

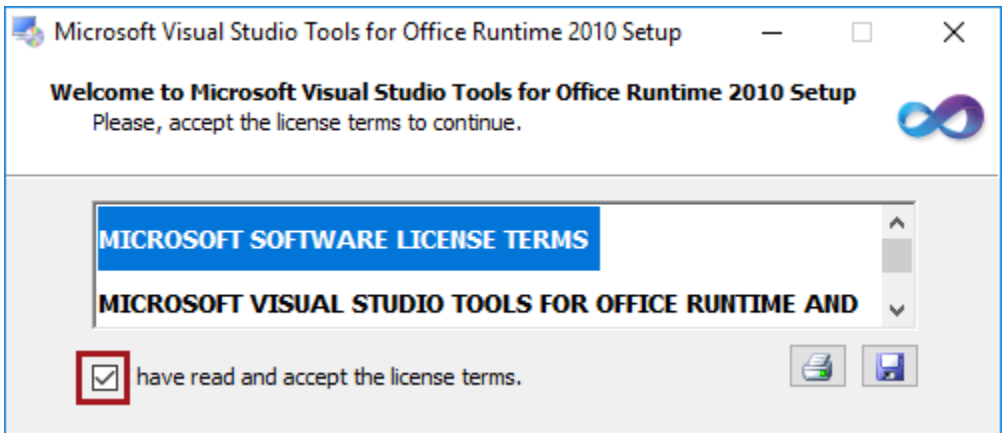
1. In a new Internet Explorer browser tab, navigate to https://aka.ms/edx-dat226-vstor.

2. In the Visual Studio 2010 Tools for Office Runtime download side, click **Download**.

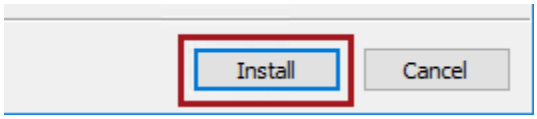
3. When prompted by Internet Explorer, click **Run**.

The Office Runtime software will download and automatically launch.

4. In the **Office Runtime 2010 Setup** window, if you have read and accept the license terms, check the **I Have Read and Accept the License Terms** checkbox.



5. Click **Install**.



6. If notified that some files are in use, click **Ignore**.

   If you click Ignore, you must ensure that a system restart is performed before commencing the next lab.

7. When installation has completed, click **Finish**.

8. If prompted to restart, click **Restart Later**.

Installing the MDS Add-in for Excel

In this task, you will install the MDS Add-in for Excel.

1. In a new Internet Explorer browser tab, navigate to https://aka.ms/edx-dat226-mds-addin-install.

   The SQL Server 2016 MDS add-in is compatible with SQL Server 2017.

2. In the Microsoft SQL Server 2016 SP1 Master Data Services Add-in for Microsoft Excel download side, click **Download**.

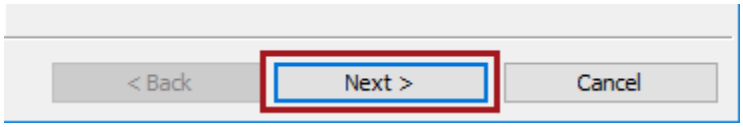
3. Check the file which matches your Office installed architecture (x86 for 32-bit, or x64 for 64-bit).

4. Click **Next**.

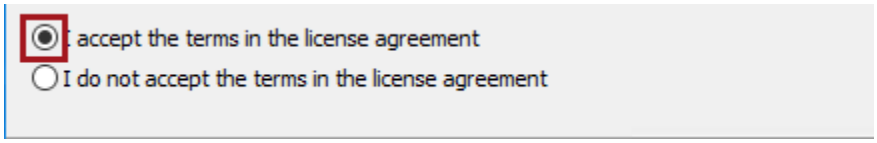
5. When prompted by Internet Explorer, click **Run**.

   The add-in software will download and automatically launch.

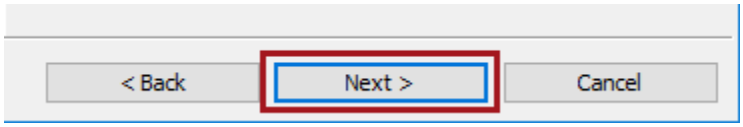
6. In the **Microsoft SQL Server 2016 MDS Add-in for Excel** window, click **Next**.



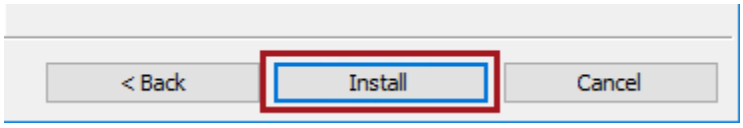
7. If you accept the license terms, select the **I Accept the Terms in this License Agreement** option.



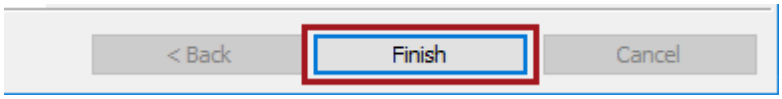
8. Click **Next**.



9. Click **Install**.



10. When installation has completed, click **Finish**.



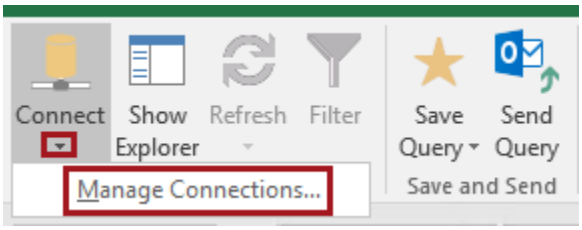
11. To verify that the MDS Add-in for Excel has installed, launch Excel.

12. Cancel the Activation Wizard window.

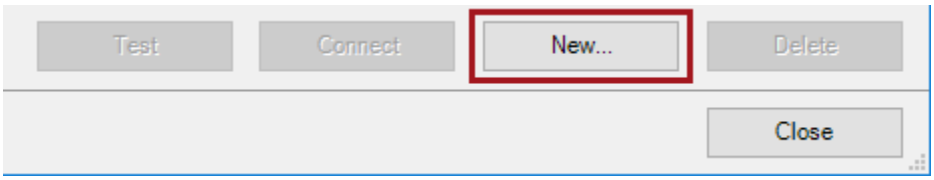
13. Create a blank workbook.

14. Verify that there is a **Master Data** tab.

15. On the **Master Data** ribbon, from inside the **Connect and Load** group, click the down-arrow below the **Connect** command, and then select **Manage Connections**.

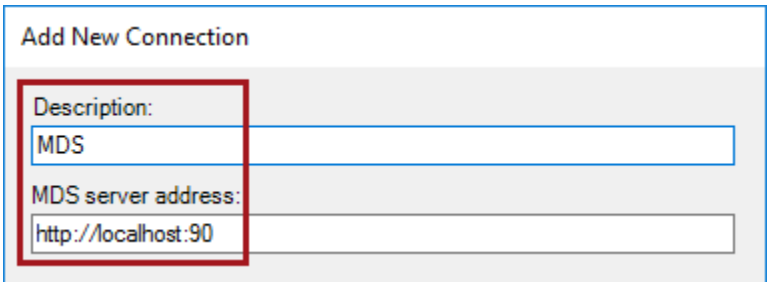


16. In the **Manage Connections** window, click **New**.



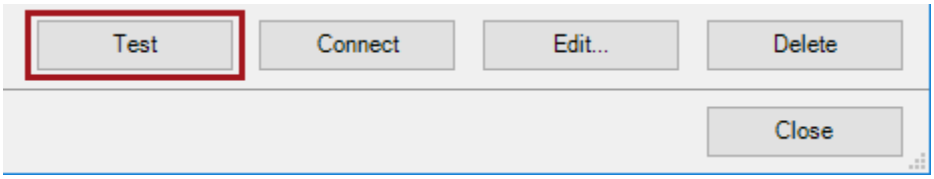
17. In the **Add New Connection** window, in the **Description** box, enter **MDS**.

18. In the **MDS Server Address** box, complete the address as **http://localhost:90**. (Do not enter the period.)

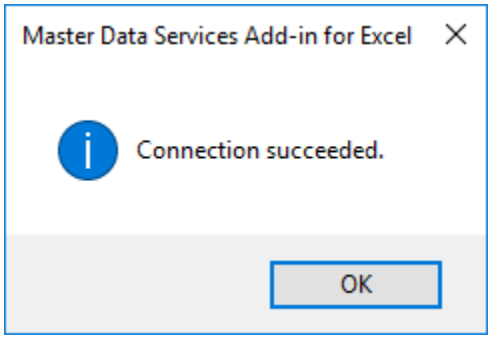


19. Click **OK**.

20. In the **Manage Connections** window, click **Test**.



21. Ensure that the test succeeds.



22. Click **OK**.

23. In the **Manage Connections** window, click **Close**.

24. Close Excel.

25. If prompted to save workbook changes, click **Don't Save**.

Installing Silverlight

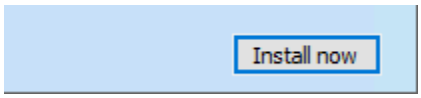
In this task, you will install Silverlight which is required by the Master Data Manager Web application.

1. In a new Internet Explorer browser tab, navigate to https://aka.ms/edx-dat226-sl.

2. When prompted by Internet Explorer, click **Run**.

Silverlight will download and automatically launch.

3. In the **Install Silverlight** window, click **Install Now**.



4. When the installation has completed, click **Close**.

5. Close the Internet Explorer window, including all browser sessions.

You have now completed the Getting Started lab. In the next lab, you will commence the development of a Master Data Services solution.

If you are not immediately continuing with the next lab, you should complete the ***Finishing Up*** *exercise to shut down and stop the VM.*

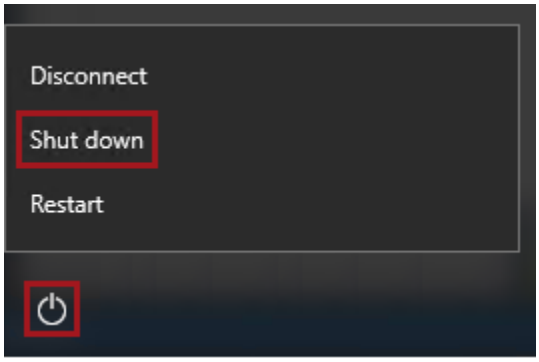
Be sure the restart the machine if it is required.

Finishing Up

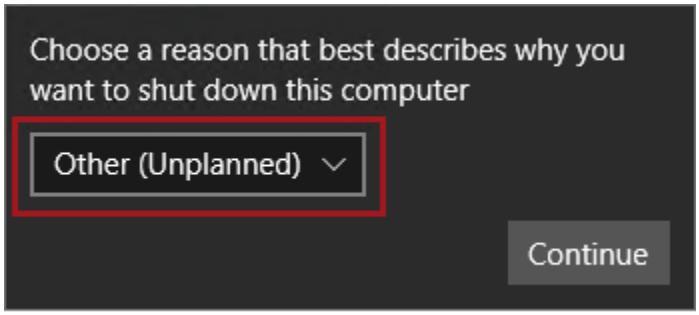
In this exercise, you will shut down and stop the VM.

1. Close all open applications.

2. Press the **Windows** key, and then in the **Start** page, located at the bottom-left, click the **Power** button, and then select **Shut Down**.

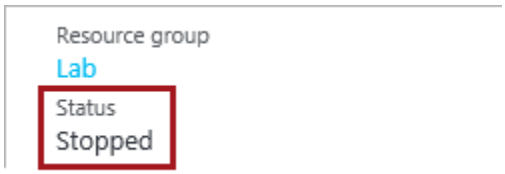


3. When prompted to choose a reason, select **Other (Unplanned)**.



4. Click **Continue**.

5. In the **Azure Portal** Web browser page, wait until the status of the VM updates to **Stopped**.

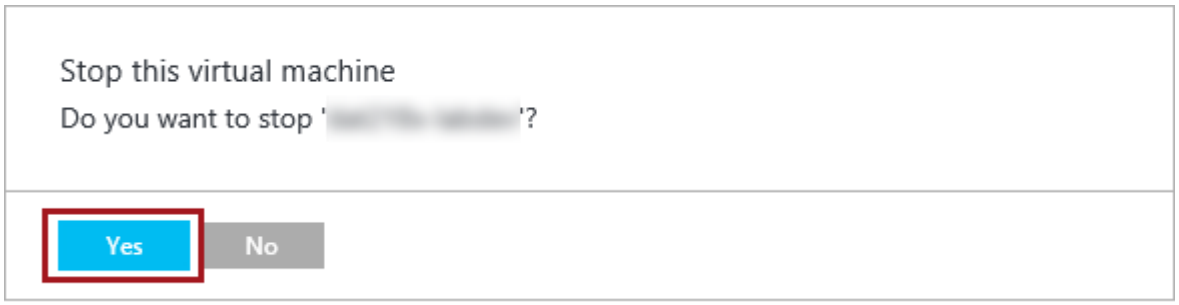


In this state, however, the VM is still billable.

6. Optionally, to deallocate the VM, click **Stop**.

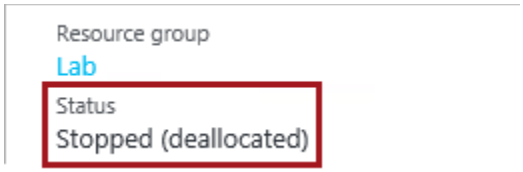
   Deallocation will take some minutes to complete, and also extends the time required to restart the VM. Consider deallocating the VM if you want to reduce costs, or if you choose to complete the next lab after an extended period.

7. When prompted to stop the VM, click **Yes**.



   The deallocation can take several minutes to complete.

8. Verify that the VM status updates to **Stopped (Deallocated)**.



   In this state, the VM is now not billable—except for a relatively smaller storage cost.

   Note that a deallocated VM will likely acquire a different IP address the next time it is started.

9. Sign out of the **Azure Portal**.