MSD365 Student Computer Setup Guide

Setup Time: 60 minutes

Setup Overview: These setup instructions walk through the steps required to configure a Windows PC or a virtual machine (VM) that will be used by students when working on the lab exercises for **MSD365: Modern SharePoint and Office 365 Development**.

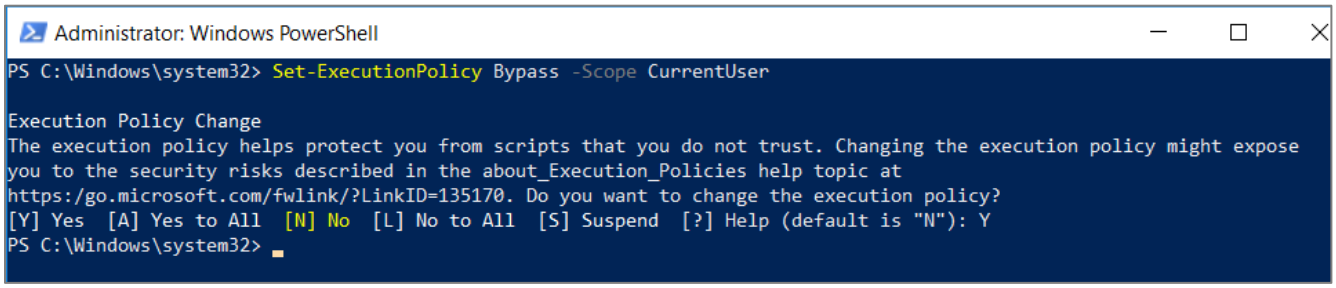
Task 1: Install and Configure Windows 10 or Windows 8.1

In this step you will install the Windows operating system.

1. Install the x64 bit edition of Windows.
   a) You can install either Windows 10 or Windows 8.1 to complete lab exercises.
   b) Apply all Windows updates.
2. Install the Chrome browser.
   a) You should be able to access the Internet with Chrome and at least one other browser (e.g. Edge, Internet Explorer).
3. Enable the execution of PowerShell scripts on your local PC.
   a) Open a PowerShell command shell running as Admin and type in and execute the following PowerShell command.

```
Set-ExecutionPolicy Bypass -Scope CurrentUser
```

   b) When prompted to confirm to the operation, type **Y** and press **ENTER** to confirm that you want to enable script execution.



Task 2: Install the Azure AD PowerShell Modules

In this task you will install the PowerShell libraries required to work with Microsoft Azure resources. Note that if you are running Windows 8.1 instead of Windows 10, you must first install the Windows Management Framework 5.1. If you are running Windows 10, you do not need to perform this step.

1. If you are running Windows 8.1, download and install the Windows Management Framework 5.1using the following link.

```
https://www.microsoft.com/en-us/download/details.aspx?id=54616
```

2. Install the Azure PowerShell modules by executing the following PowerShell commands one at a time in the PowerShell console.
   a) In the PowerShell console, execute the following command

```
Install-PackageProvider -Name NuGet -MinimumVersion 2.8.5.201 -Force
```

   b) Next, execute the following command to trust the PowerShell gallery.

```
Set-PSRepository -Name PSGallery -InstallationPolicy Trusted
```

   c) Next, execute the following command to install the Azure Resource Manager (RM) PowerShell cmdlets library.

```
Install-Module AzureRM -AllowClobber -Force
```

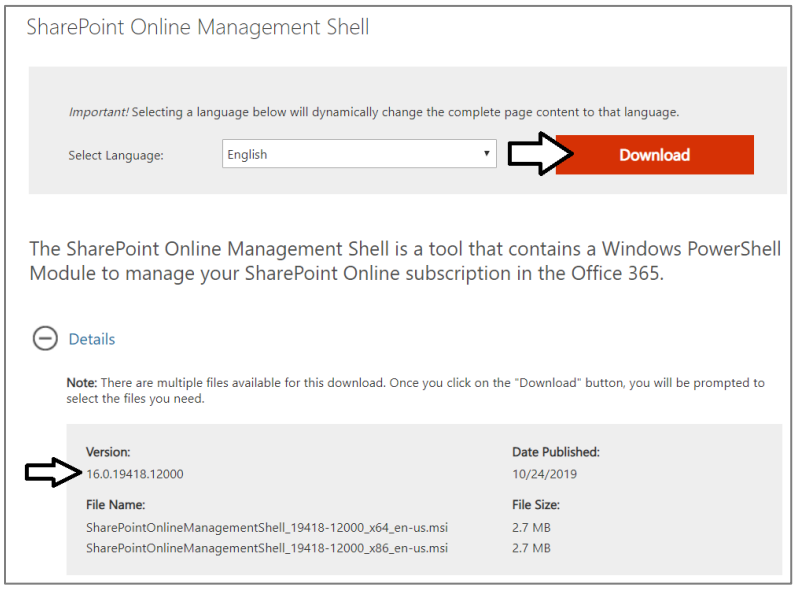
   d) Finally, execute the following command to install the Azure Active Directory PowerShell cmdlets library.

```
Install-Module AzureAD -AllowClobber -Force
```

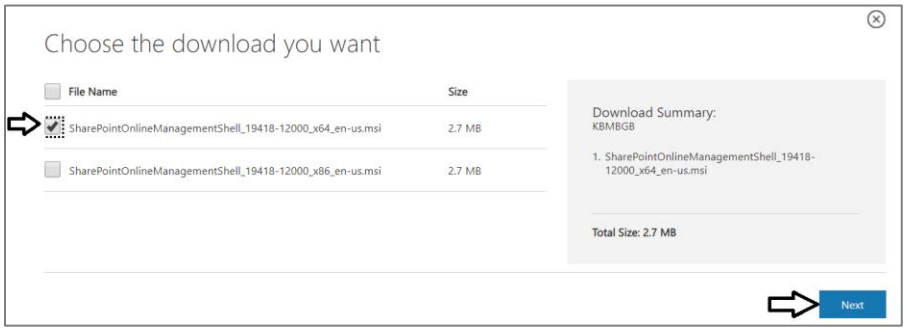
Task 3: Install The SharePoint Online Management Shell

In this task you will install the PowerShell library which is used to managed sites in SharePoint Online.

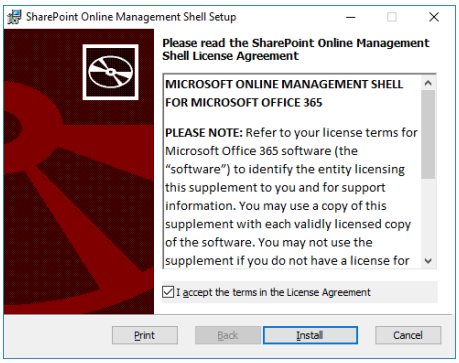
3. Install The SharePoint Online Management Shell
   a) In the browser, navigate to https://www.microsoft.com/en-us/download/details.aspx?id=35588
   b) Click the **Download** button to download the installation program.



   c) Make sure to select the download for the 64-bit version which has an **x64** in its name.



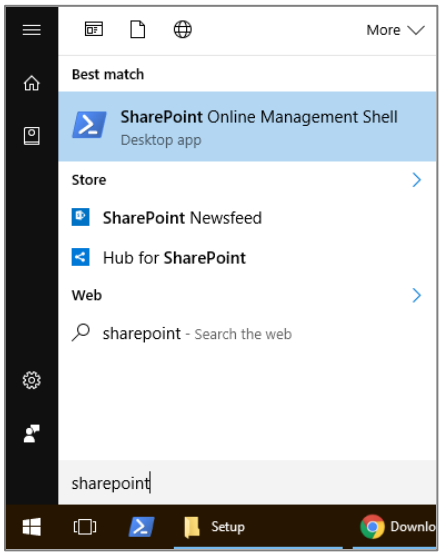
   d) Begin the installation program and accept all the default settings.



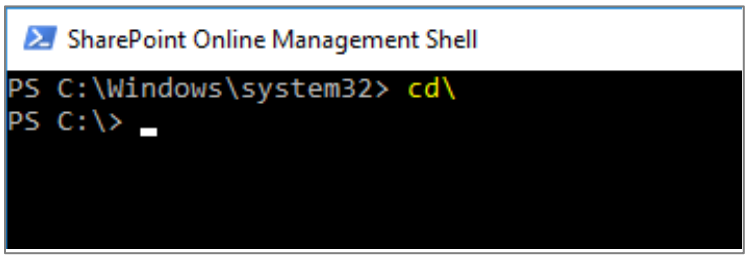
   e) Follow the instructions to complete the installation.

4. If you already have an Office 365 environment with SharePoint Online, you can test out the installation with the following steps. If you don't already have an Office 365 environment with SharePoint Online, you can move ahead to the next step.

   a) Press the **Windows** key to display the Windows Start menu and type in **SharePoint**. You should see the **SharePoint Online Management Shell** appear in the Start menu. Click on **SharePoint Online Management Shell** to launch a PowerShell console window.



   b) Type **cd** into the console window and press **ENTER** to move the current directory to the root of the C:\ drive.

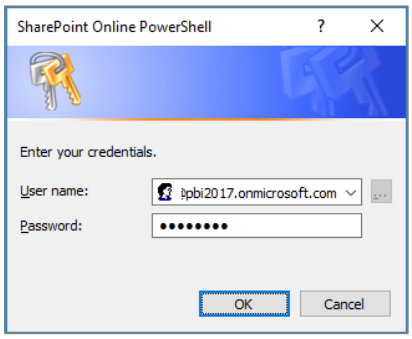


   c) Type **cls** into the console window and press ENTER to clear the screen.

   d) Type in the following PowerShell command and press ENTER. Make sure to replace cbd365 with the name of your Office 365 tenant and the name student with your account name,

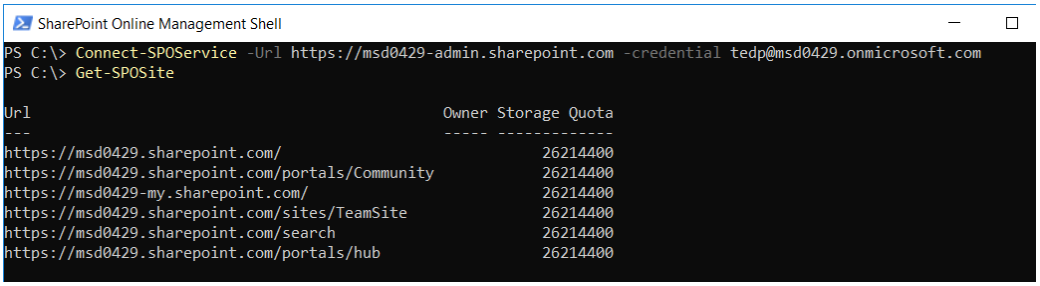
```
Connect-SPOService -Url https://cbd365-admin.sharepoint.com -credential student@cbd365.onmicrosoft.com
```

   e) When this command begins to execute, it will prompt you to login. When prompted, log in using our Office 354 account credentials.



   f) Once you have authenticated, the call to **Connect-SPOService** should return.

g) Type in **Get-SPOSite** and press ENTER



When the call to **Get-SPOSite** executes, it should display a list of the SharePoint Online sites in the current Office 365 tenancy. If you see the list of SharePoint Online sites, you know that the SharePoint Online Management Shell has been correctly installed.

Task 4: Install GIT

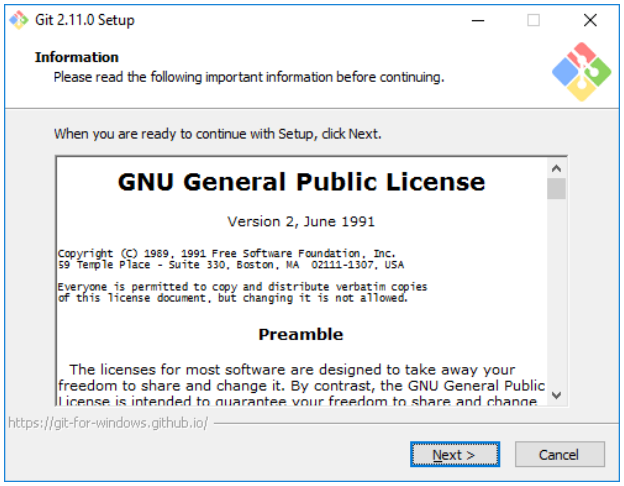
In this exercise, you will install the **git** utility.

1. Launch a browser and navigate to the following link.

   https://git-scm.com/download

2. Download the installation files for git for Windows.

3. Run the installation program. When prompted, agree to the terms and accept all the default settings.



4. Wait until the installation is complete.

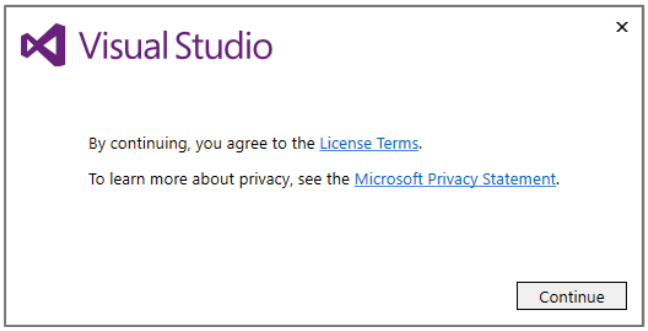
Task 5: Install Visual Studio 2017

In this exercise, you will install Visual Studio 2017 Professional. Note if you don't have access to Visual Studio 2017 Professional, you can complete all of the labs instead using the free version of Visual Studio 2017 community edition.

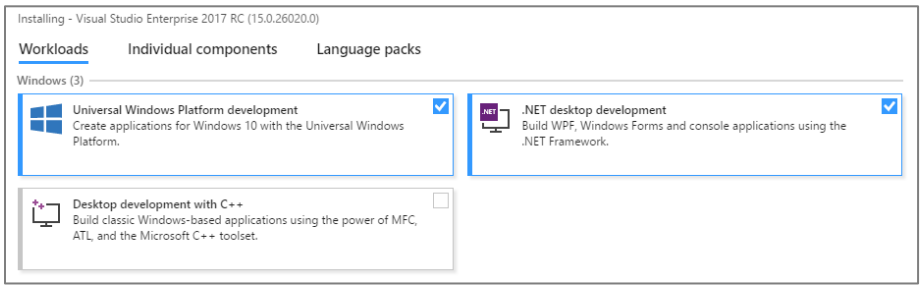
1. Obtain the installation software for Visual Studio 2017 Professional.
   a) If you don't have a copy, you can download the Visual Studio 2017 community edition using the following link.

   ```
   https://visualstudio.microsoft.com/thank-you-downloading-visual-studio/?sku=Community&rel=15
   ```

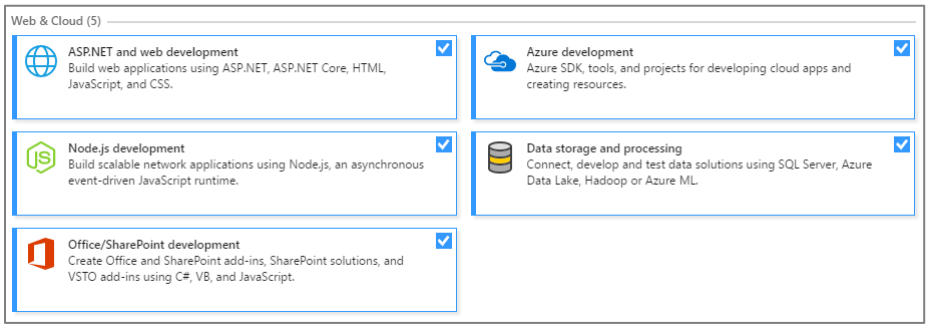
2. Click **Continue** to run the installation program for Visual Studio 2017.



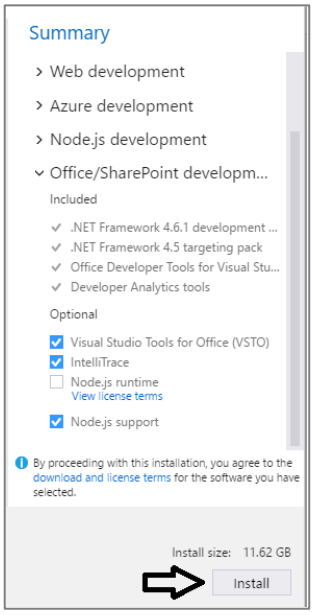
3. Under **Workloads** tab in the **Windows** section, select the following workloads
   a) Universal Windows Platform development (this is optional)
   b) .NET desktop development (this is required)



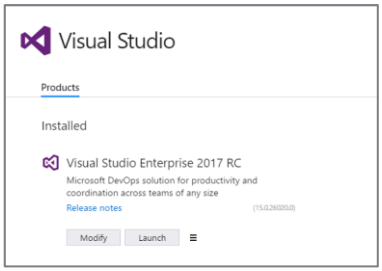
4. Under **Workloads** tab in the **Web and Cloud** section, select the following workloads
   a) Web development (this is required)
   b) Azure development (this is required)
   c) Node.js development (this is optional)
   d) Data storage and processing (this is optional)
   e) Office/SharePoint development (this is required)



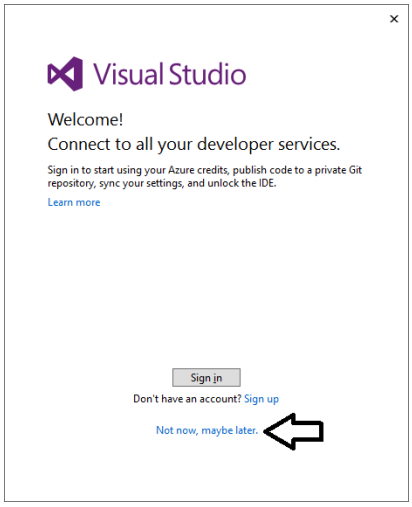
5. Move ahead in the installation program to the **Summary** section. Locate and click the Install button in the bottom right corner to begin the installation.



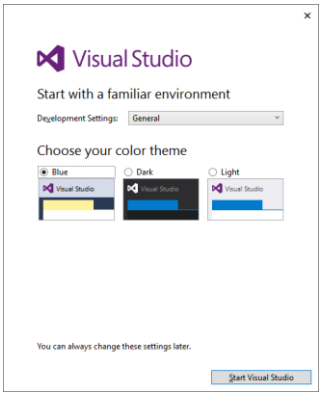
6. Instalation will take about 20-30 minutes. When the installation is complete, you will see the a page telling you that Visual Studio 2017 has been installed.



7. Launch Visual Studio 2017.
   a) When you see the **Welcome** screen, it will prompt you to sign into Visual Studio Online. However, there is no need for you to log onto Visual Studio Online. Instead, click the **Not now, maybe later** link at the bottom of the **Welcome** screen



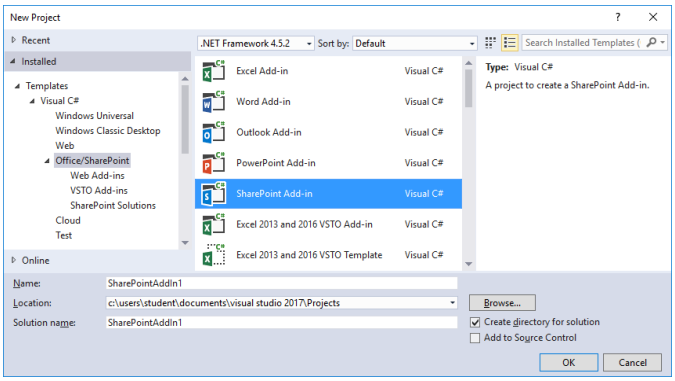
b) On the next screen, select a Development Setting for the color theme and then click **Start Visual Studio**.



c) Once Visual Studio has started, select the **File > New Project** command.

d) On the left hand side of the **New Project** dialog, select **Installed > Templates > Visual C# > Office/SharePoint**.

e) Make sure you see the **SharePoint Add-in** project template. If you see the **SharePoint Add-in** project template, it means you have installed Visual Studio 2017 with the Office/SharePoint tools.



You are now done with your installation of Visual Studio 2017.

Task 6: Install Fiddler

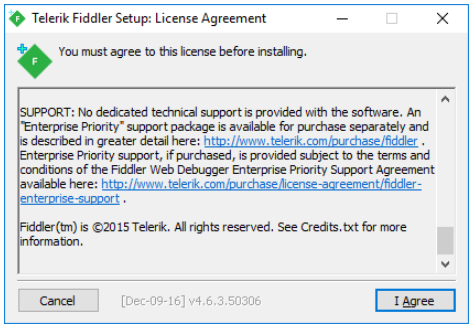
In this exercise, you will install the Fiddler developer utility.

1. Launch a browser and navigate to the following link.

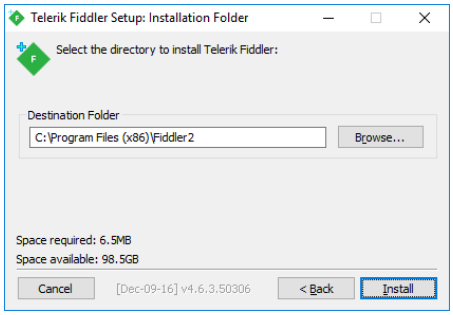
   https://www.telerik.com/download/fiddler

2. Download the installation files for Fiddler.

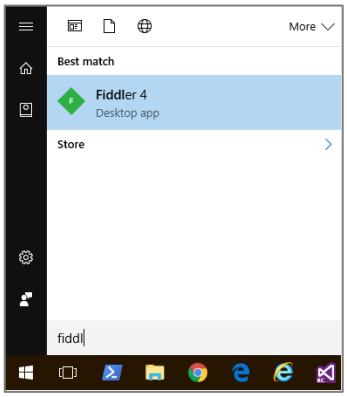
3. When the Fiddler installation program starts, it prompts you to accept the licensing agreement. Click **I Agree**.



4. Next, click the **Install** button to run the Fiddler installation program.

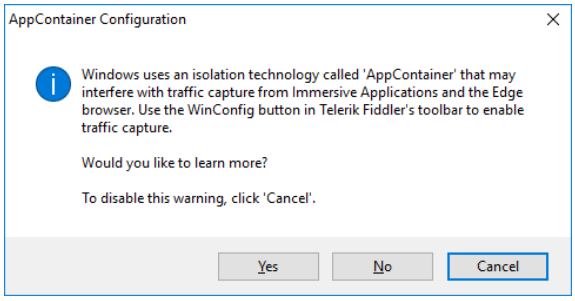


5. When the Fiddler installation program completes, launch Fiddler from the Windows Start menu.

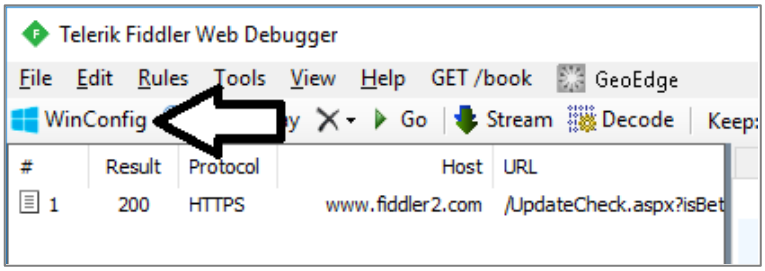


Steps 6, 7 and 8 only apply if you are using Windows 10. If you are using Windows 8.1, you can skip ahead.

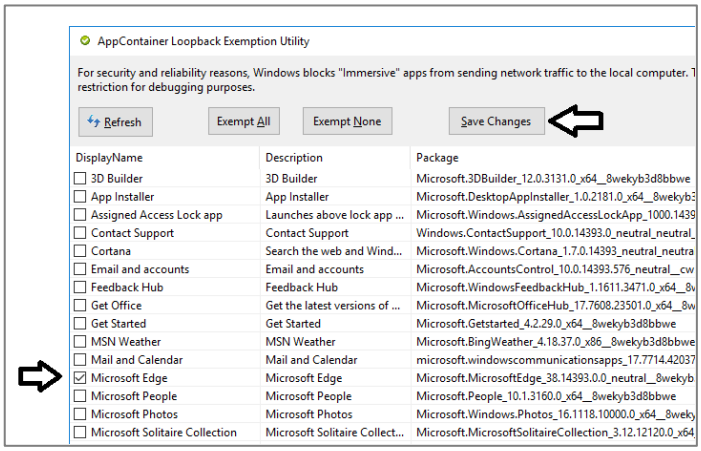
6. When Fiddler starts for the first time, it prompts you with the **AppContainer Configuration** dialog. Click the **Cancel** button to dismiss the dialog and prevent this dialog from reappearing later.



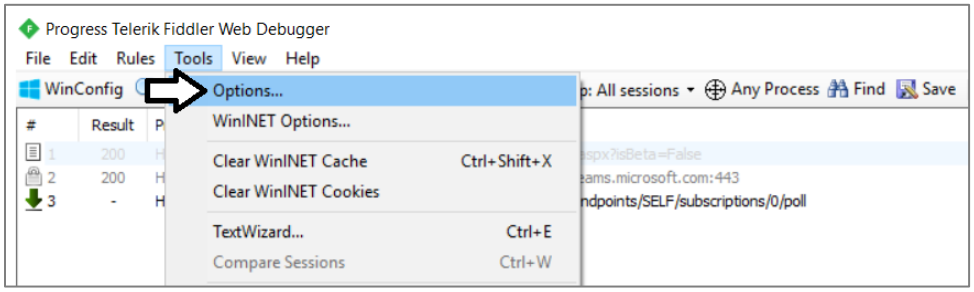
7. Once Fiddler has started, click the **WinConfig** button in the toolbar in the top left-hand corner of the Fiddler window to display the **AppContainer Loopback Exemption Utility** dialog.



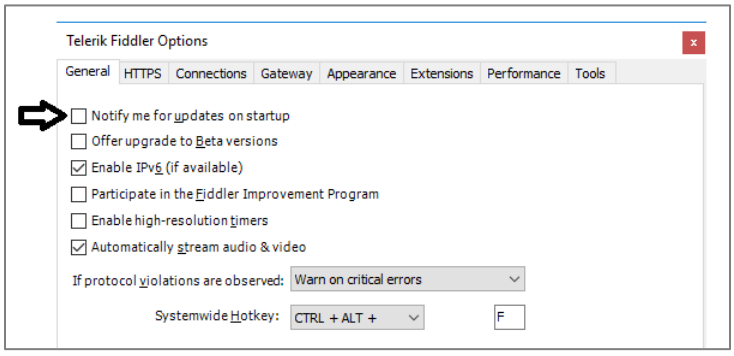
8. In the **AppContainer Loopback Exemption Utility** dialog, select Microsoft Edge on the left and then click **Save Changes**.



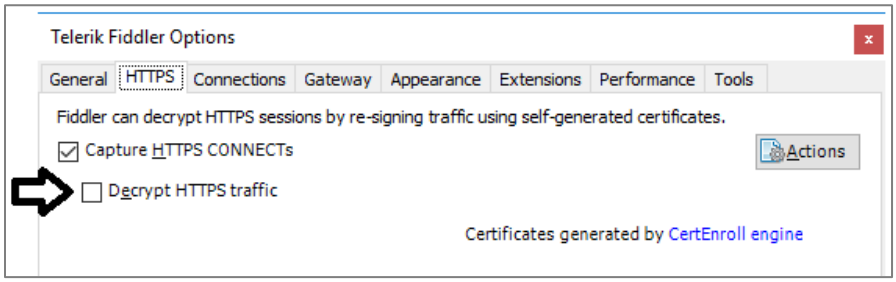
9. Configure Fiddler support inspecting HTTPS request that are using SSL.
   a) Select the **Tools > Options…** command



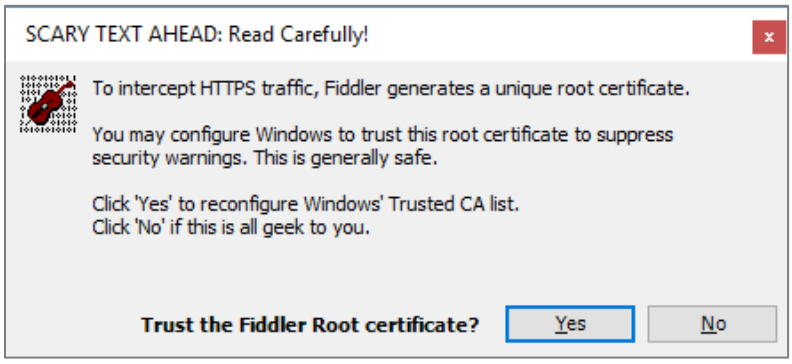
   b) On the **General** tab of the **Options** dialog, uncheck the **Notify me for updates on startup** checkbox.



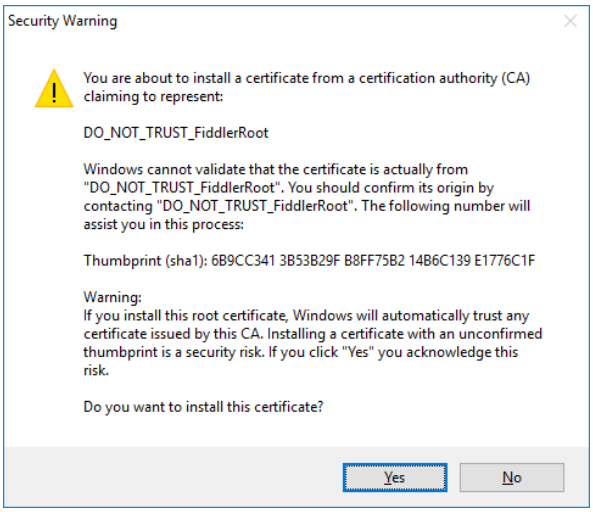
c) On the **HTTPS** tab of the **Telerik Fiddler Options** dialog, check the **Decript HTTPS traffic** checkbox.



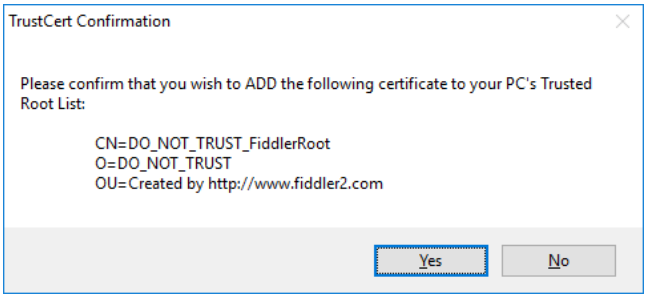
d) Click **Yes** when prompted whether to **Trust the Fiddler Root Certificate?**



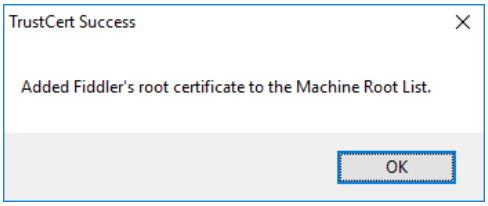
e) Click **Yes**, when you see the following dialog which asks **Do you want to install this certificate**.



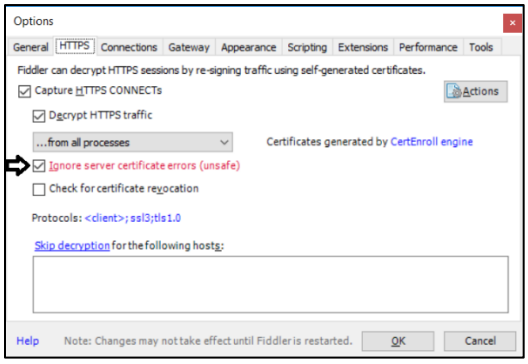
f) Click **Yes** one more time when you see the **TrustCert Confirmation** dialog.



g) You should now see a dialog that confirms that Fiddler's root certificate has been added to the machine root list.



h) Select **Ignore server certificate errors (unsafe)** and then click **OK** to dismiss the **Options** dialog.

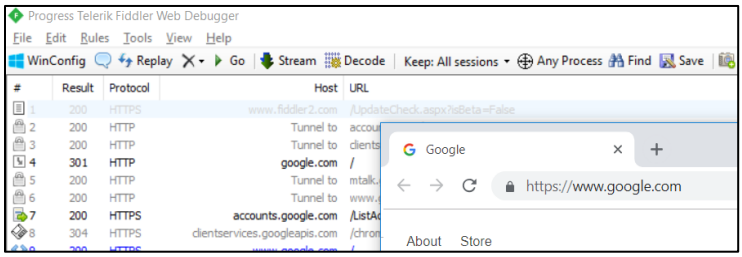


10. Test out Fiddler.

a) Close and restart Fidler.

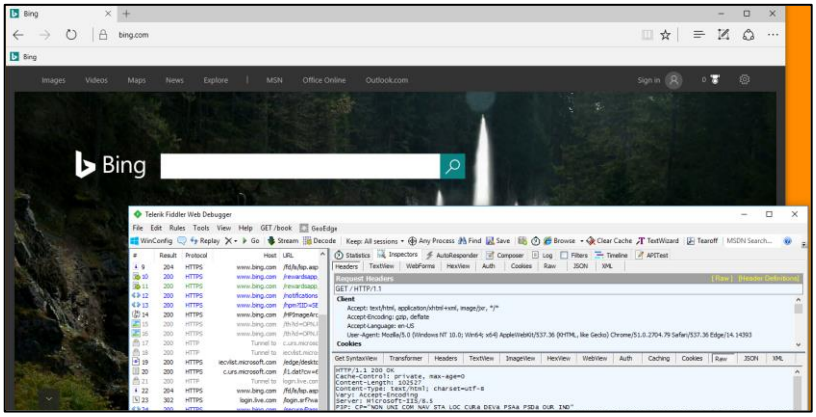
b) Launch the Chrome browser and navigate to a URL with SSL such as https://google.com.

c) Make sure you can use Fiddler to monitor HTTPS request.



d) If you are using Windows 10, launch the Microsoft Edge browser and navigate to a URL with SSL such as https://bing.com.

e) Make sure you can use Fiddler to monitor HTTPS request.



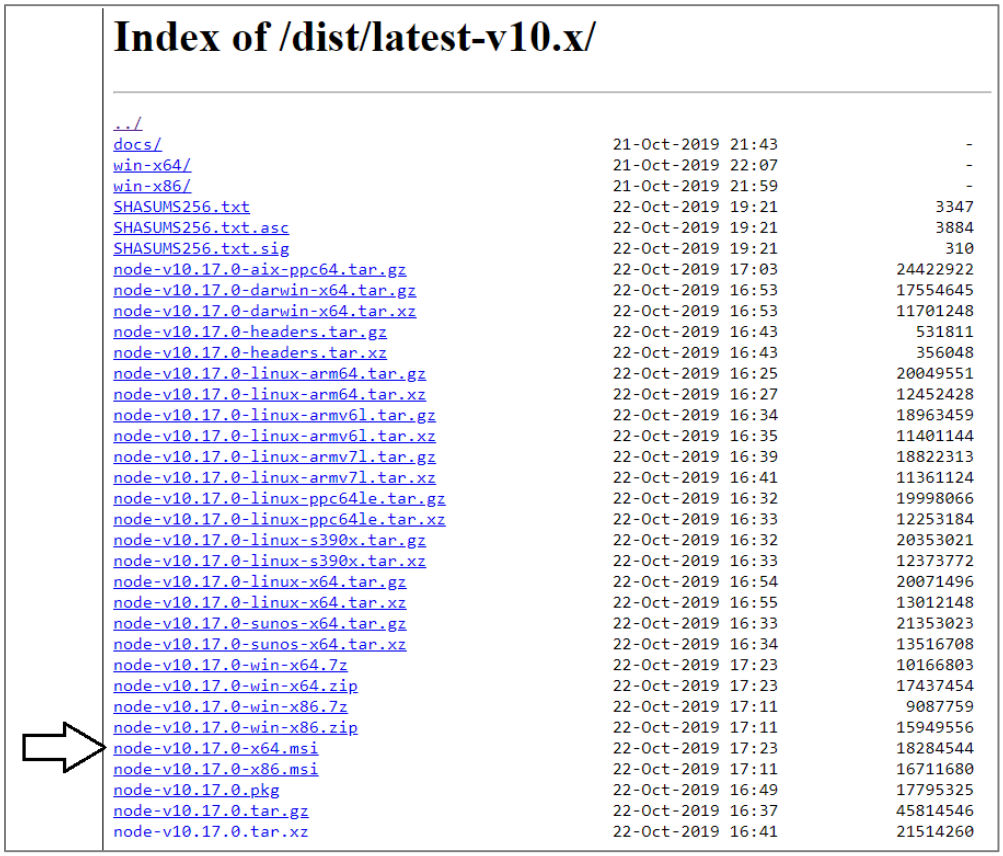
Task 7: Install Node.js Version 10.x

In this task, you will install Node.js. Note there are more recent version of Node.js beyond version 10, but they are not compatible with the SharePoint Framework. Node.js version 10 is the most recent supported by the SharePoint Framework.

1. Download the MSI file to install the latest release of Node.js version 10.
   a) Navigate to the web page at the following URL.

      https://nodejs.org/dist/latest-v10.x/

   b) You should see a folder of files installation files similar to the folder shown in the following screenshot.



Index of /dist/latest-v10.x/

../		
docs/	21-Oct-2019 21:43	-
win-x64/	21-Oct-2019 22:07	-
win-x86/	21-Oct-2019 21:59	-
SHASUMS256.txt	22-Oct-2019 19:21	3347
SHASUMS256.txt.asc	22-Oct-2019 19:21	3884
SHASUMS256.txt.sig	22-Oct-2019 19:21	310
node-v10.17.0-aix-ppc64.tar.gz	22-Oct-2019 17:03	24422922
node-v10.17.0-darwin-x64.tar.gz	22-Oct-2019 16:53	17554645
node-v10.17.0-darwin-x64.tar.xz	22-Oct-2019 16:53	11701248
node-v10.17.0-headers.tar.gz	22-Oct-2019 16:43	531811
node-v10.17.0-headers.tar.xz	22-Oct-2019 16:43	356048
node-v10.17.0-linux-arm64.tar.gz	22-Oct-2019 16:25	20049551
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node-v10.17.0-win-x86.7z	22-Oct-2019 17:11	9087759
node-v10.17.0-win-x86.zip	22-Oct-2019 17:11	15949556
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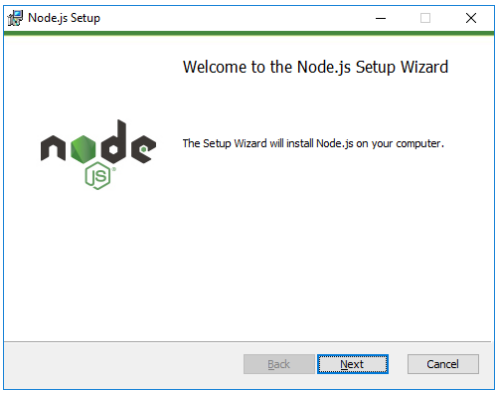
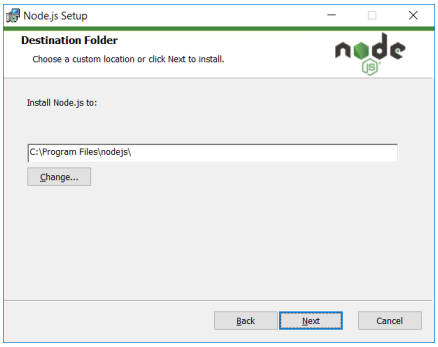
node-v10.17.0-x86.msi	22-Oct-2019 17:11	16711680
node-v10.17.0.pkg	22-Oct-2019 16:49	17795325
node-v10.17.0.tar.gz	22-Oct-2019 16:37	45814546
node-v10.17.0.tar.xz	22-Oct-2019 16:41	21514260

   c) Download the MSI file with the name matching the pattern **node-v10.x.y-x64.msi**.
   d) Once you have downloaded the MSI installation file, run it to begin the Node.js installation program.
   e) When you see the Node.js Setup Wizard's Welcome screen, click **Next**.

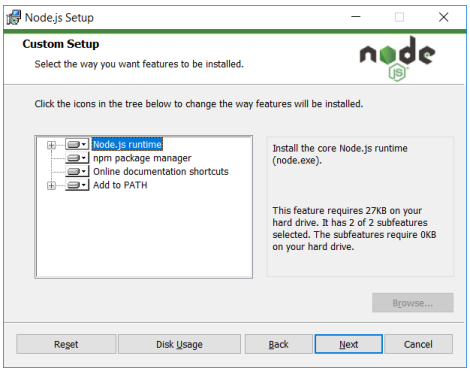


f) Agree to terms and click **Next**.

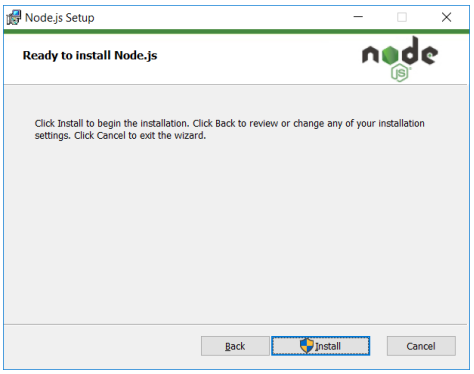
g) Accept (or modify) the installation folder and click Next.



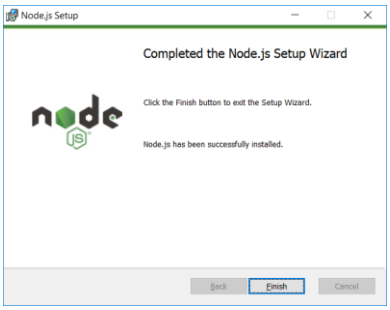
h) On the **Custom Setup** page, accept the default setting and click **Next**.



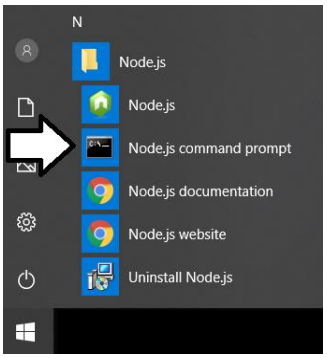
i) On the Ready to install Node.js page, click **Install** to begin the installation.



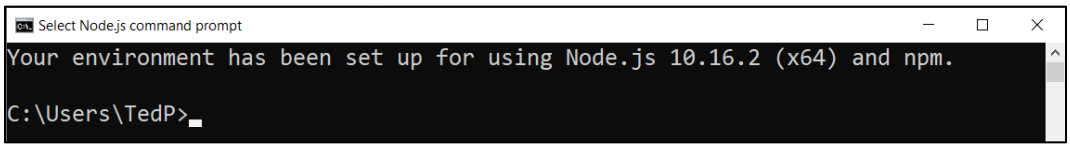
j) Wait until the installation completes and then click **Finish**.



2. Launch the Node.js command prompt.
   a) In the Windows Start menu, locate and select the **Node.js command prompt**.



   b) Verify the the Node.js command prompt launches without error and that the version number begins with an 10.



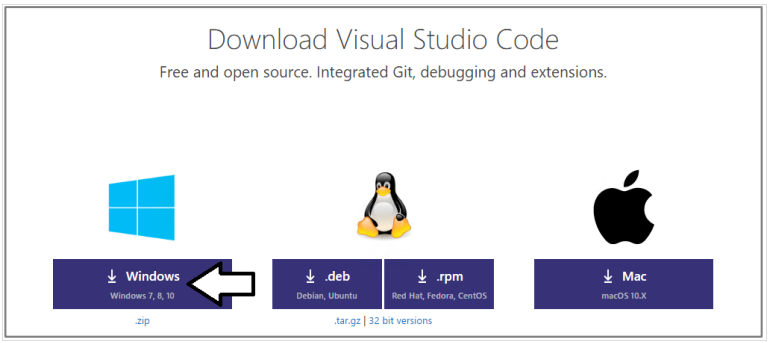
Task 8: Install Visual Studio Code

In this setup task, you will install Visual Studio Code.

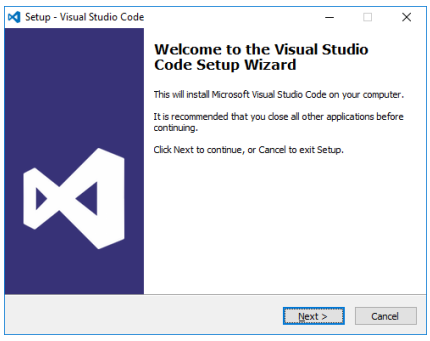
1. Launch a browser and navigate to the following link.

   https://code.visualstudio.com/download

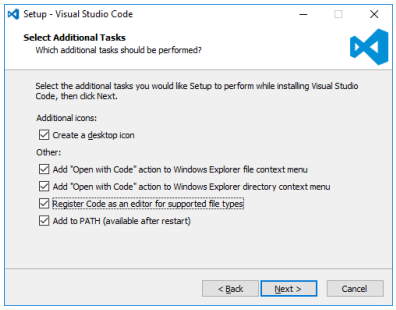
2. Download the installation files for Visual Studio Code for Windows.



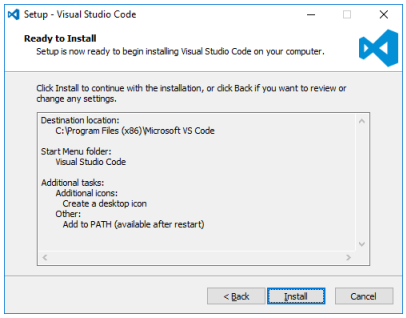
3. Run the installation program for Visual Studio Code.



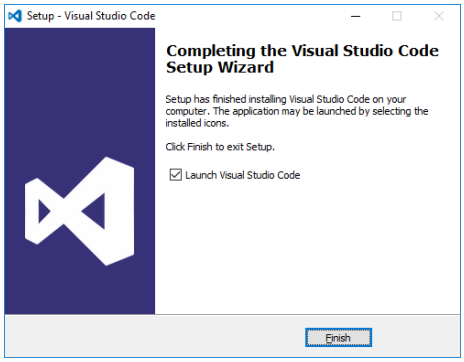
4. When you get to the **Select Additional Tasks** dialog, select all options and click **Next** to continue.



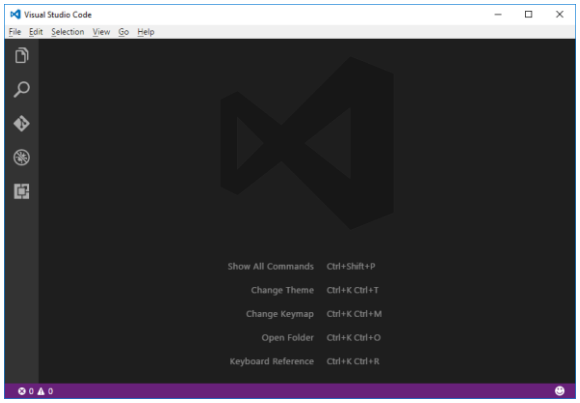
5. When you get to the **Ready to Install** dialog, click **Next** to continue.



6. Move through the dialogs of the installation program until you reach the **Completing the Visual Studio Code Setup Wizard** dialog. Click **Finish**.



7. When the installation program completes, it should launch Visual Studio Code.



Task 9: Install the ngrok Utility

In this exercise, you will install the ngrok developer utility.

1. Launch a browser and navigate to the following link.

   https://ngrok.com/download

2. Click the **Download for Windows** button to download a zip archive which contains **ngrok.exe**.
3. Once you have downloaded the zip archive, extract **ngrok.exe** to a local folder such as **c:\Tools**.

You will use **ngrok** in several of the lab exercises in this training course. Follow the documentation on the **ngrok** website if you want to test the utility now.