

CBD365 Student Computer and VM Setup Guide

Setup Time: 2-3 hours

Setup Overview: These setup instructions walk through the steps required to configure a PC or a virtual machine (VM) that will be used by students when working on the lab exercises for CBD365: Developing Cloud-based Applications with Azure and Office 365.

Task 1: Install and Configure Windows 10

In this step you will install the Windows 10 operating system.

1. Install the x64 bit edition of Windows 10 and apply all Windows updates.
2. Install the Chrome browser.
3. Enable the execution of PowerShell scripts.
 - a) Open a PowerShell command shell running as Admin.
 - b) Type in and execute the following PowerShell command.

```
Set-ExecutionPolicy Bypass
```

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

Task 2: Install Azure PowerShell Modules

In this task you will install the PowerShell libraries required to work with Microsoft Azure resources.

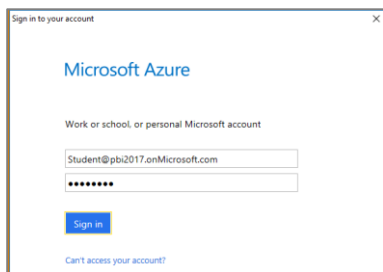
1. Install the Azure PowerShell modules by executing the following PowerShell commands.

```
Install-PackageProvider -Name NuGet -MinimumVersion 2.8.5.201 -Force
Set-PSRepository -Name PSGallery -InstallationPolicy Trusted
Install-Module Azure -AllowClobber
Install-Module AzureRM -AllowClobber
```

2. If you already have an Azure subscription, you can test out the installation with the following steps. If you don't already have an Azure subscription, you can move ahead to the next step.
 - a) Type the following PowerShell command and then press ENTER to execute it.

```
Login-AzureRmAccount
```

- b) When prompted, log in using the credentials for the account associated with your Azure subscription.



- c) Once you have authenticated using the credentials of your user account, the call to **Login-AzureRmAccount** should complete and display information about your subscription.

```
C:\Users\Student> Login-AzureRmAccount
SubscriptionName       : ELEG-11191
SubscriptionId         : 8138P053-1648-4134-P03E-480080668A1C
TenantId              : 98712345-6789-4567-8901-234567890123
Account                : 2E90E9C8B13011-0001C10201F@com
Environment            : AzureCloud
b2 C:/264ub/2cl1b12> Login-AzureRmAccount
```

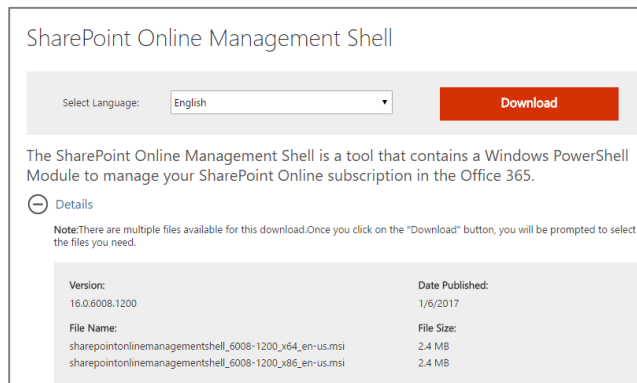
- d) If the call to **Login-AzureRmAccount** completes without error, the Azure PowerShell commands have been successfully installed.

Task 3: Install The SharePoint Online Management Shell

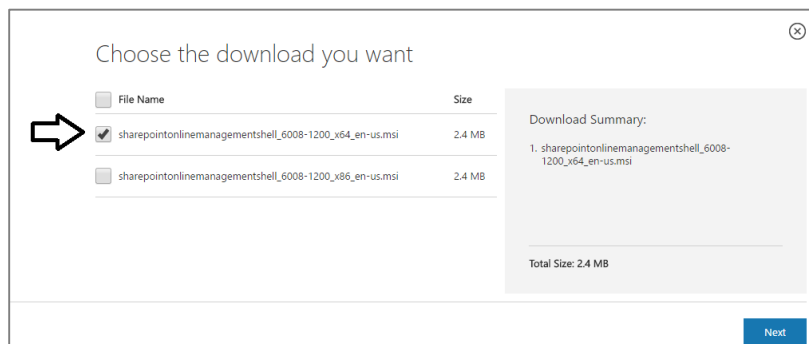
In this task you will install the PowerShell library which is used to managed sites in SharePoint Online.

1. Install The SharePoint Online Management Shell

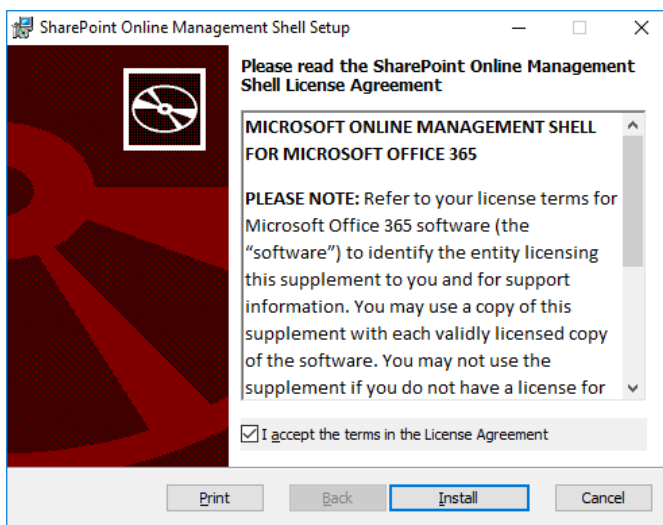
- In the browser, navigate to <https://www.microsoft.com/en-us/download/details.aspx?id=35588>
- Click the **Download** button to download the installation program.



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

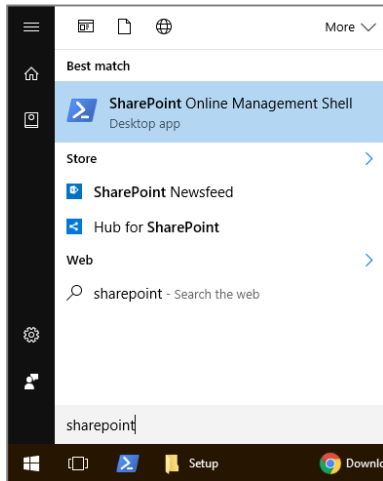


- Begin the installation program and accept all the default settings.

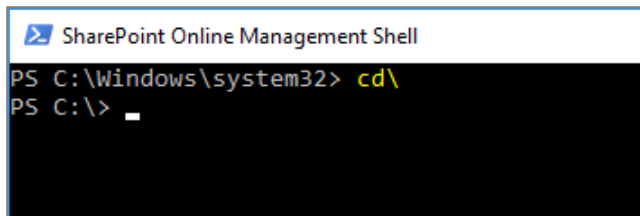


- Follow the instructions to complete the installation.
- If you already have an Office 365 environment with SharePoint Online, you can test out the installation with the following steps. If you don't already have an Office 365 environment with SharePoint Online, you can move ahead to the next step.

- 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.



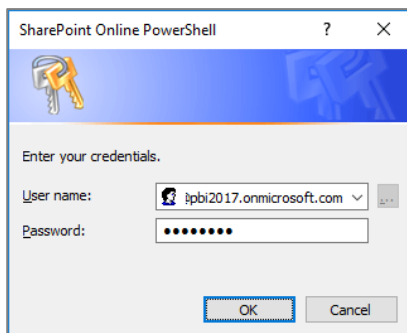
- b) Type **cd** into the console window and press **ENTER** to move the current directory to the root of the C:\ drive.



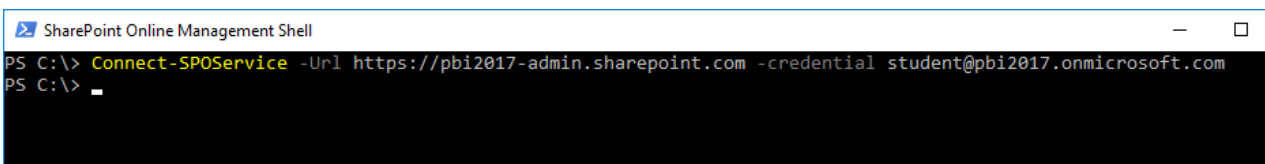
- c) Type **cls** into the console window and press ENTER to clear the screen.
- d) Type in the following PowerShell command and press ENTER. Make sure to replace cbd365 with the name of your Office 365 tenant and the name student with your account name,

```
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

```
SharePoint Online Management Shell
PS C:\> Connect-SPOService -Url https://pbi2017-admin.sharepoint.com -credential student@pbi2017.onmicrosoft.com
PS C:\> Get-SPOSite

Url                                     Owner Storage Quota
-----
https://pbi2017.sharepoint.com/portals/Community 26214400
https://pbi2017.sharepoint.com/sites/CompliancePolicyCenter 26214400
https://pbi2017-my.sharepoint.com/ 26214400
https://pbi2017.sharepoint.com/portals/hub 26214400
https://pbi2017.sharepoint.com/sites/contentTypeHub 26214400
https://pbi2017.sharepoint.com/search 26214400
https://pbi2017.sharepoint.com/ 26214400
```

- h) 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.

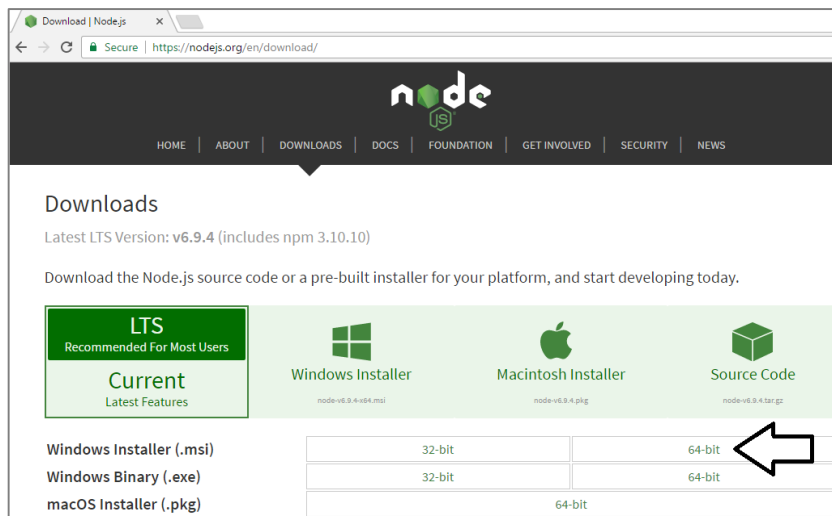
Task 4: Install the 64-bit Version of Node.js

In this task, you will install Node.js.

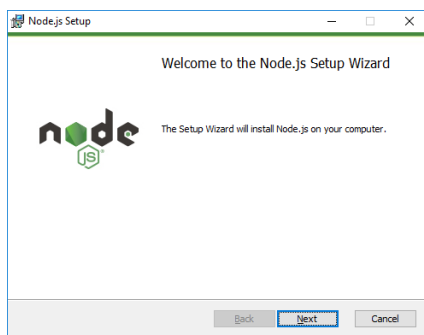
1. Launch a browser and navigate to the following link.

<https://nodejs.org/en/download/>

2. Download the installation files for Node.js for Windows.

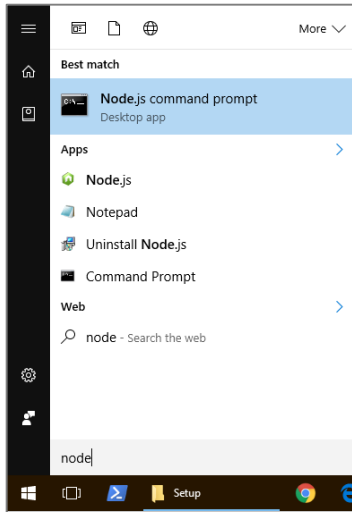


3. Run the Node.js installation program.



4. Agree to terms and accept all default settings.

- When the installation is complete, you should be able to locate the **Node.js command prompt** from the Windows Start menu.



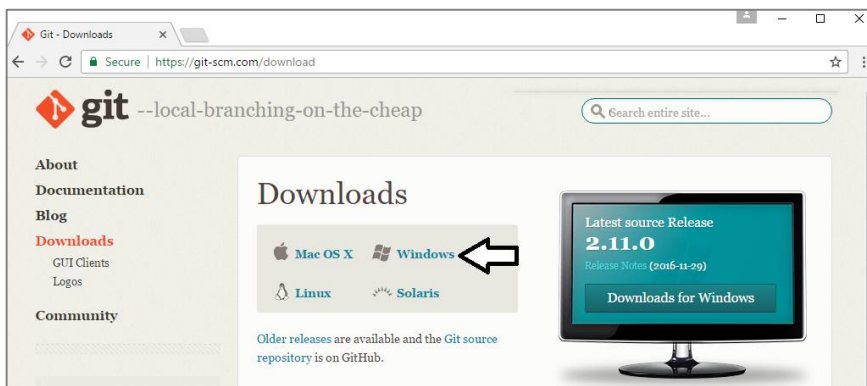
Task 5: Install GIT

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

- Launch a browser and navigate to the following link.

<https://git-scm.com/download>

- Download the installation files for git for Windows.



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



- Wait until the installation is complete.

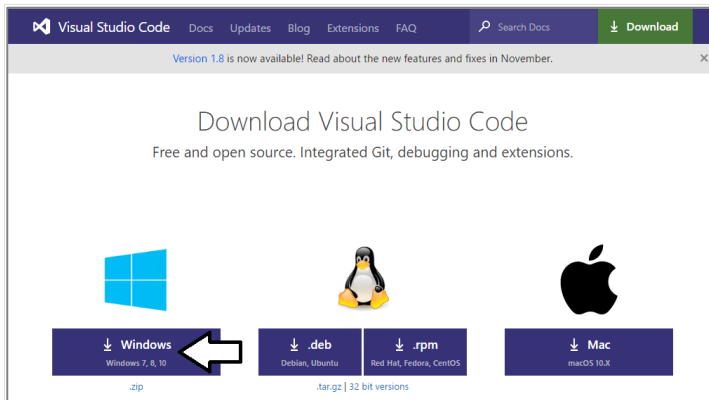
Task 6: Install Visual Studio Code

In this exercise, you will install Visual Studio Code.

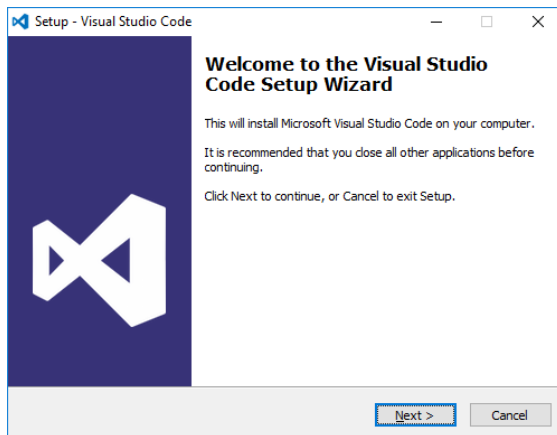
1. Launch a browser and navigate to the following link.

<https://code.visualstudio.com/download>

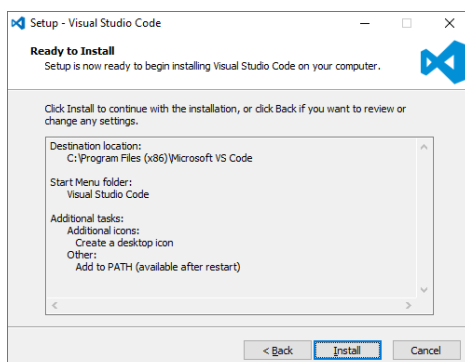
2. Download the installation files for Visual Studio Code for Windows.



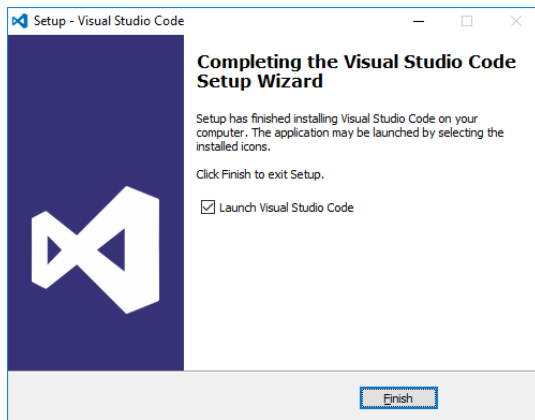
3. Run the installation program for Visual Studio Code.



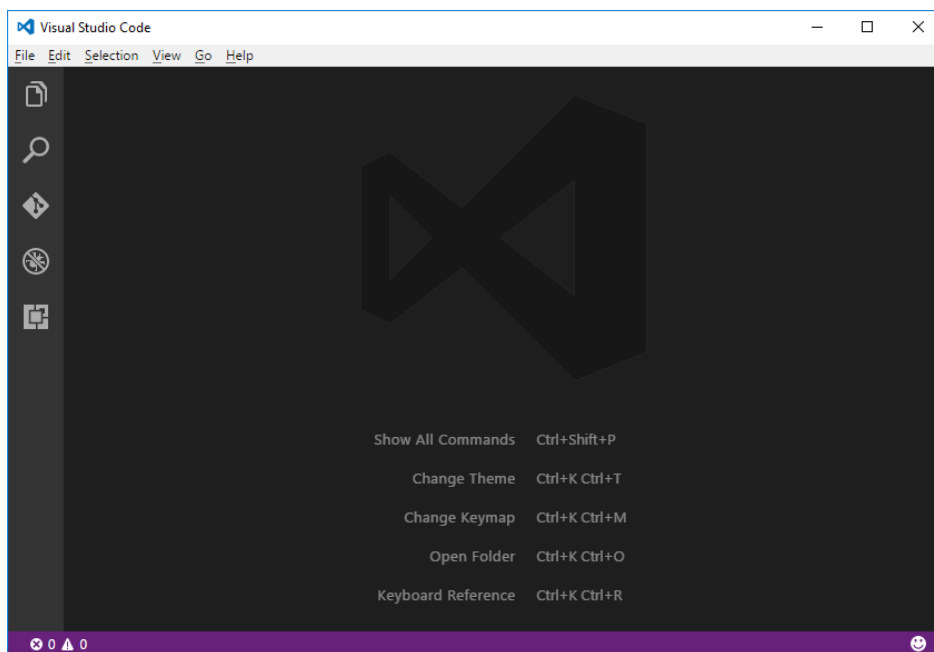
4. When you get to the **Ready to Install** dialog, click **Next** to continue.



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



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



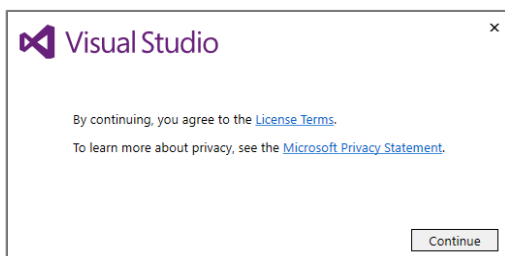
Task 7: Install Visual Studio 2017 RC

In this exercise, you will install Visual Studio 2017. At the time of this writing, the RTM version of Visual Studio 2017 has not been released. Therefore, this setup guide will instruct you to install the release candidate (RC) version of Visual Studio 2017. If you are completing this setup after the RTM version of Visual Studio 2017 has been released, use the RTM version instead of the RC version.

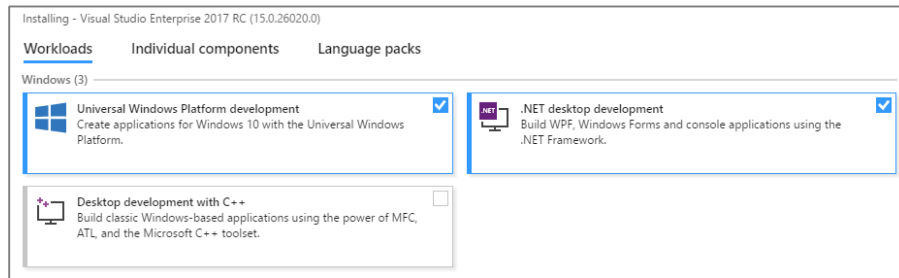
- Launch a browser and navigate to the following link. This will download the installation files for Visual Studio 2017.

https://aka.ms/vs/15/release/vs_Enterprise.exe

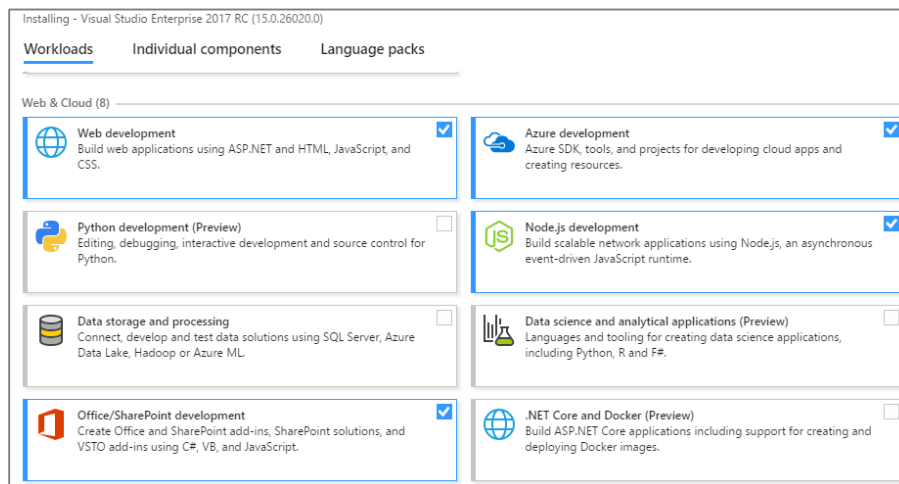
- Run the installation program for Visual Studio 2017.



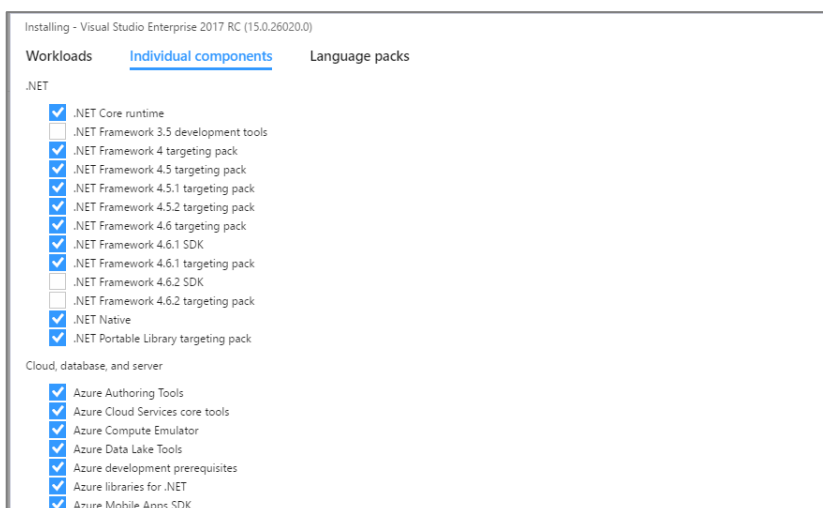
3. Under **Workloads** tab in the **Windows** section, select the following workloads
- Universal Windows Platform development
 - .NET desktop development



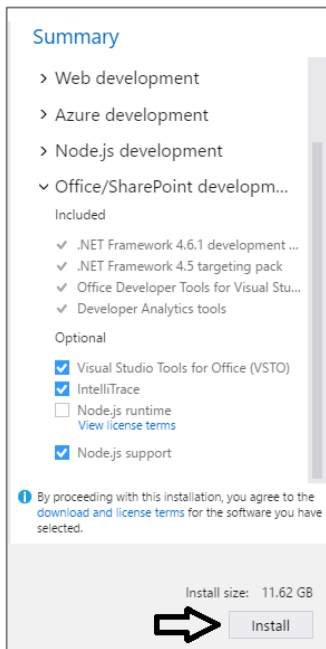
4. Under **Workloads** tab in the **Web and Cloud** section, select the following workloads
- Web development
 - Azure development
 - Node.js development
 - Office/SharePoint development



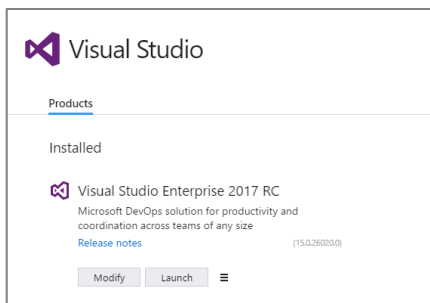
5. In the **Individual components** tab, take a moment to inspect the components that will be installed. Note there is no need to modify anything in the **Individual components** tab.



6. 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.

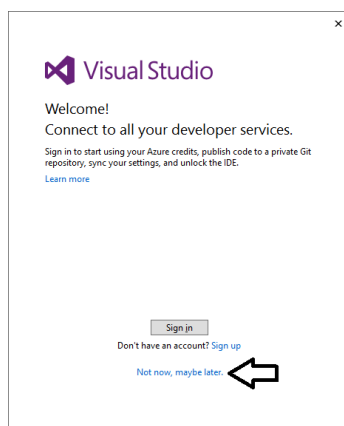


7. Installation will take about 20-30 minutes. When the installation is complete, you will see the a page telling you that Visual Studio 2017 has been installed.

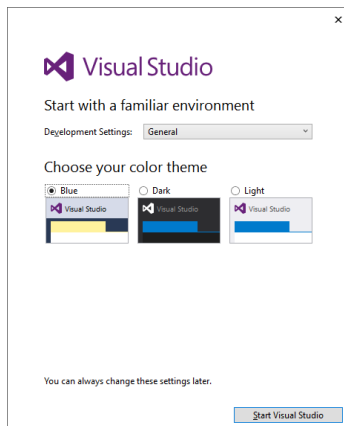


8. Launch Visual Studio 2017.

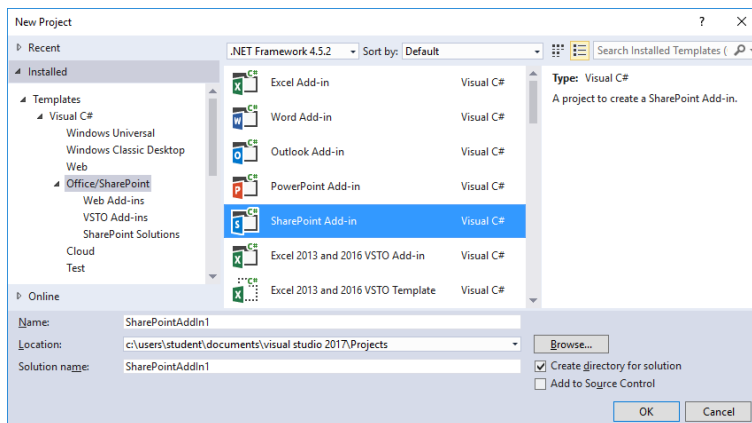
- a) When you see the **Welcome** screen, it will prompt you to sign into Visual Studio Online. However, there is no need for you to log onto Visual Studio Online. Instead, click the **Not now, maybe later** link at the bottom of the **Welcome** screen



- 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.



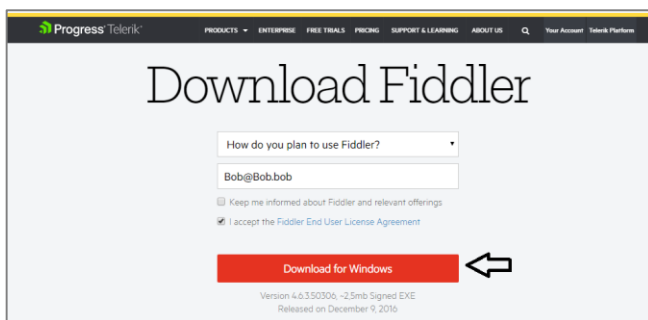
Task 8: Install Fiddler

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

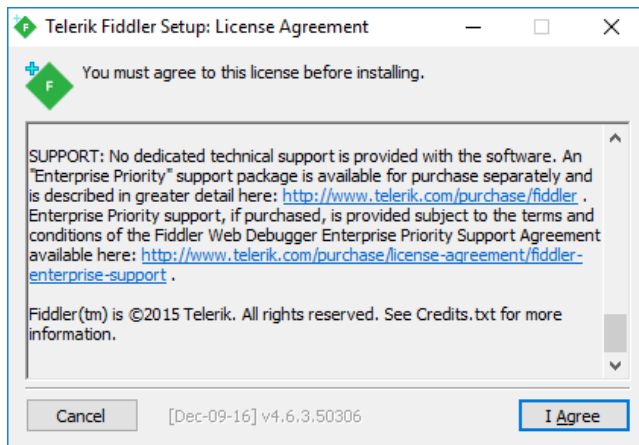
1. Launch a browser and navigate to the following link.

<https://www.telarik.com/download/fiddler>

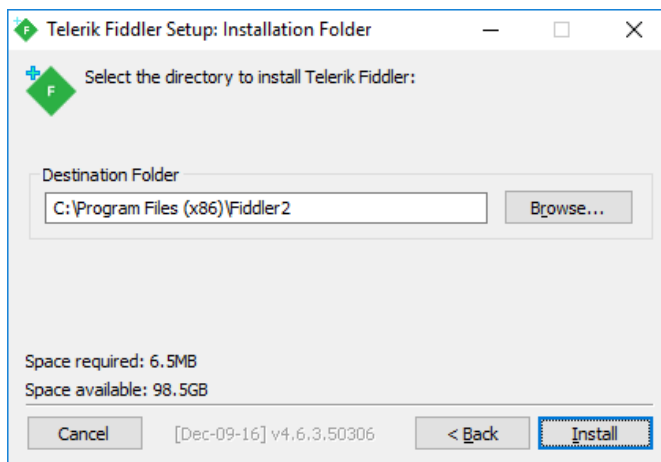
2. Download the installation files for Fiddler.



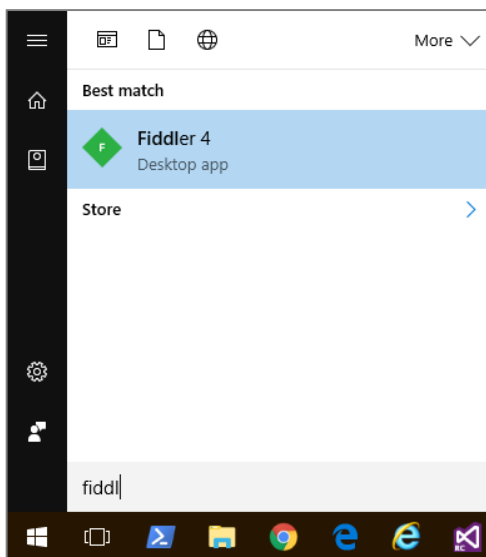
3. When the Fiddler installation program starts, it prompts you to accept the licensing agreement. Click **I Agree**.



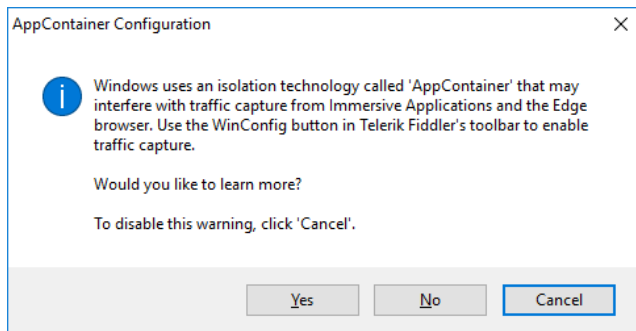
- Next, click the **Install** button to run the Fiddler installation program.



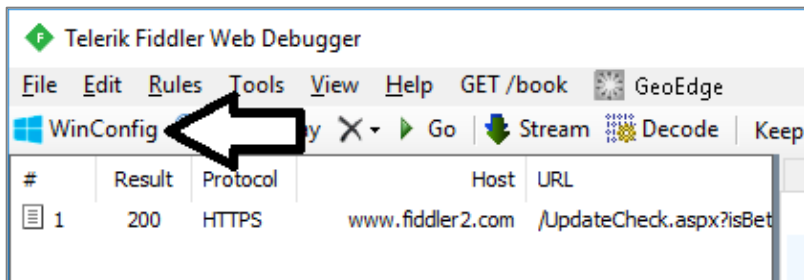
- When the Fiddler installation program completes, launch Fiddler from the Windows Start menu.



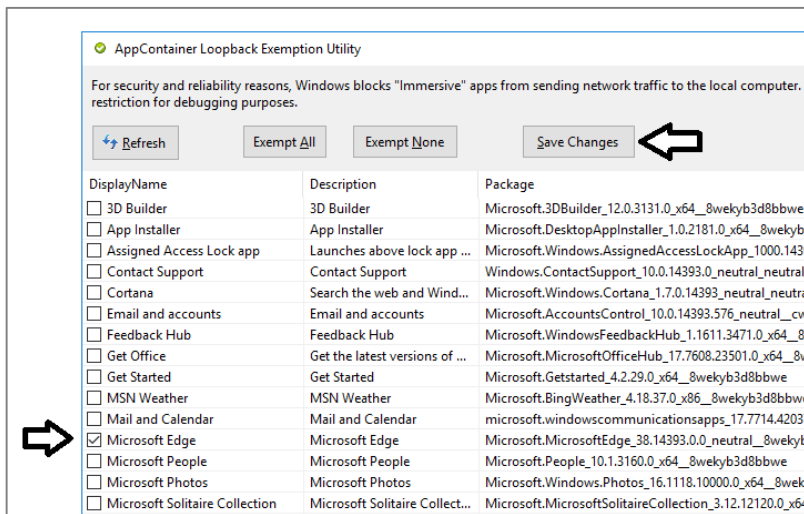
- When Fiddler starts for the first time, it prompts you with the **AppContainer Configuration** dialog. Click the **Cancel** button to dismiss the dialog and prevent this dialog from reappearing later.



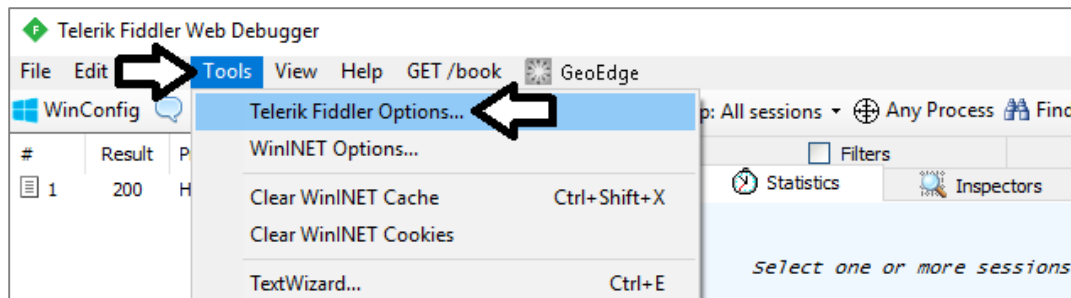
7. Once Fiddler has started, click the **WinConfig** button in the toolbar in the top left-hand corner of the Fiddler window to display the **AppContainer Loopback Exemption Utility** dialog.



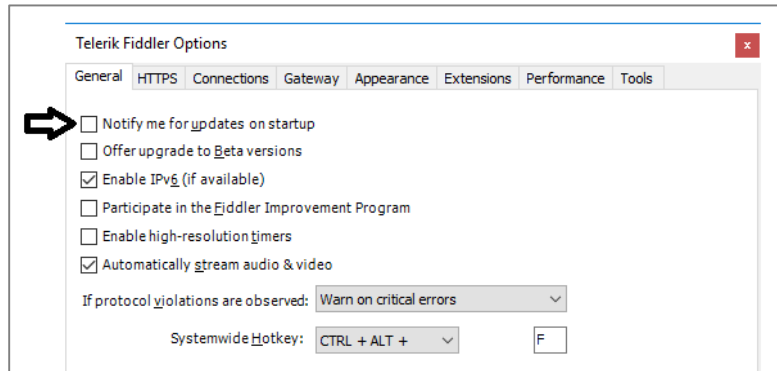
8. In the **AppContainer Loopback Exemption Utility** dialog, select Microsoft Edge on the left and then click **Save Changes**.



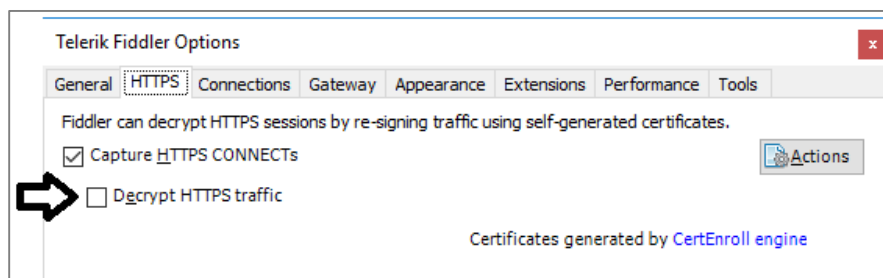
9. Configure Fiddler support inspecting HTTPS request that are using SSL.
 - a) Select the **Tools > Telerik Fiddler Options...** command



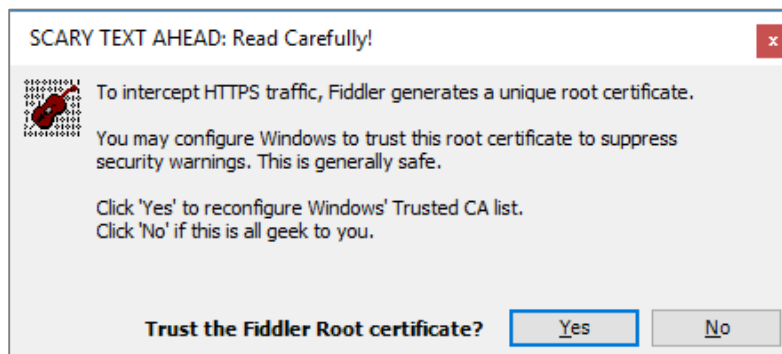
- b) On the **General** tab of the **Telerik Fiddler Options** dialog, uncheck the **Notify me for updates on startup** checkbox.



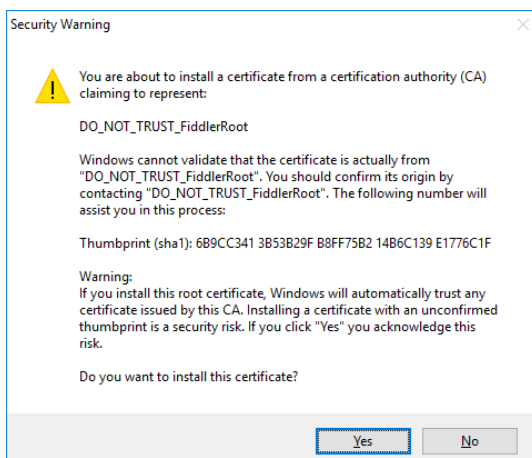
- c) On the **HTTPS** tab of the **Telerik Fiddler Options** dialog, check the **Decrypt HTTPS traffic** checkbox.



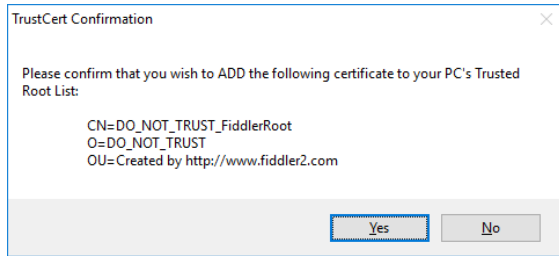
- d) Click **Yes** when prompted whether to **Trust the Fiddler Root Certificate?**



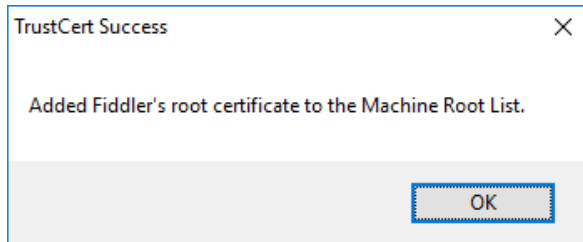
- e) Click **Yes**, when you see the following dialog which asks **Do you want to install this certificate.**



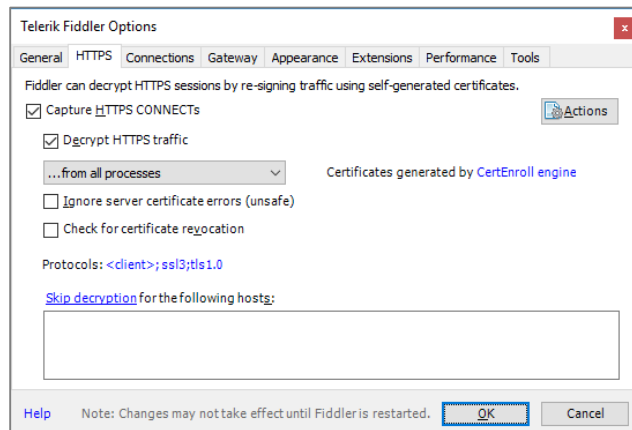
- f) Click **Yes** one more time when you see the **TrustCert Confirmation** dialog.



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



- h) Click **OK** to dismiss the **Telerik Fiddler Options** dialog.



10. Start Fiddler and then launch the Microsoft Edge browser and navigate to a URL with SSL such as <https://bing.com>. Make sure you can use Fiddler to monitor HTTPS request.

