

# SETTING UP LENDING AND EDGE IN VISUAL STUDIO

## OVERVIEW

As a developer, you will need to set up Lending and EDGE in Visual Studio Professional in accordance with UWM standards and guidelines.

**NOTE:** While Visual Studio 2022 is available for download, users can run into a lot of errors so for now it is best to work out of Visual Studio 2019.

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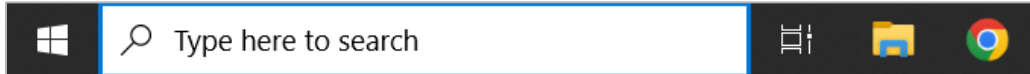
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## INSTALLATIONS

There are four applications you will need to install. These installations are important to ensure solutions run correctly and to prevent errors later down the road.

### INSTALL MICROSERVICE CERTS

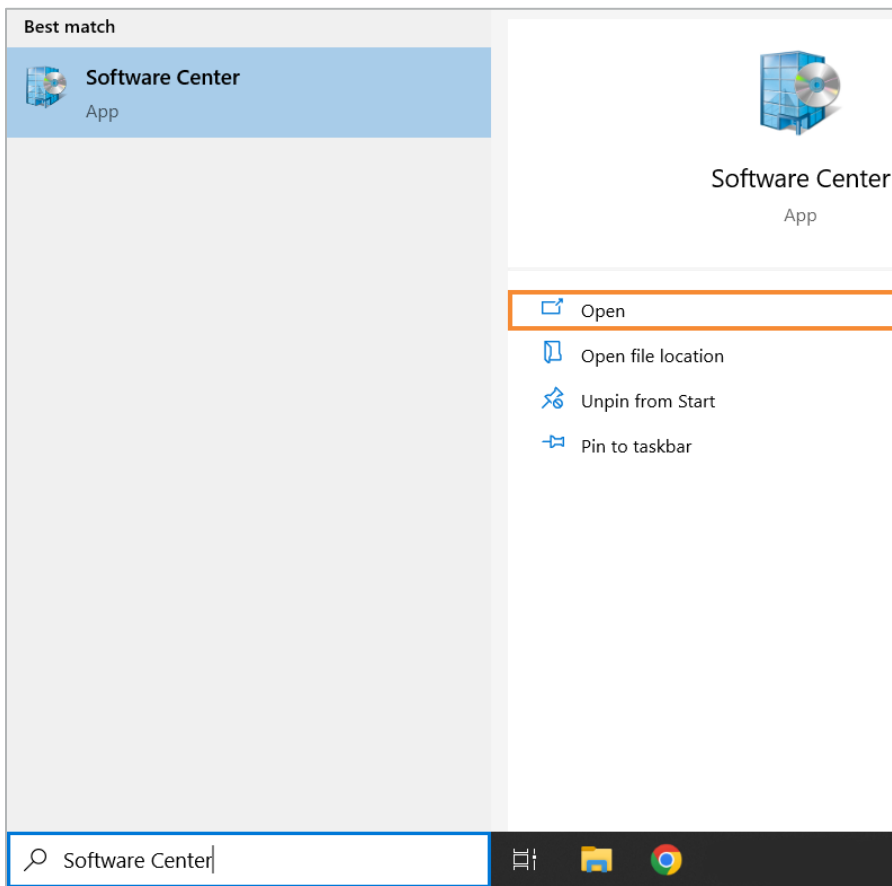
1. In the task bar, click your cursor in the **search bar**



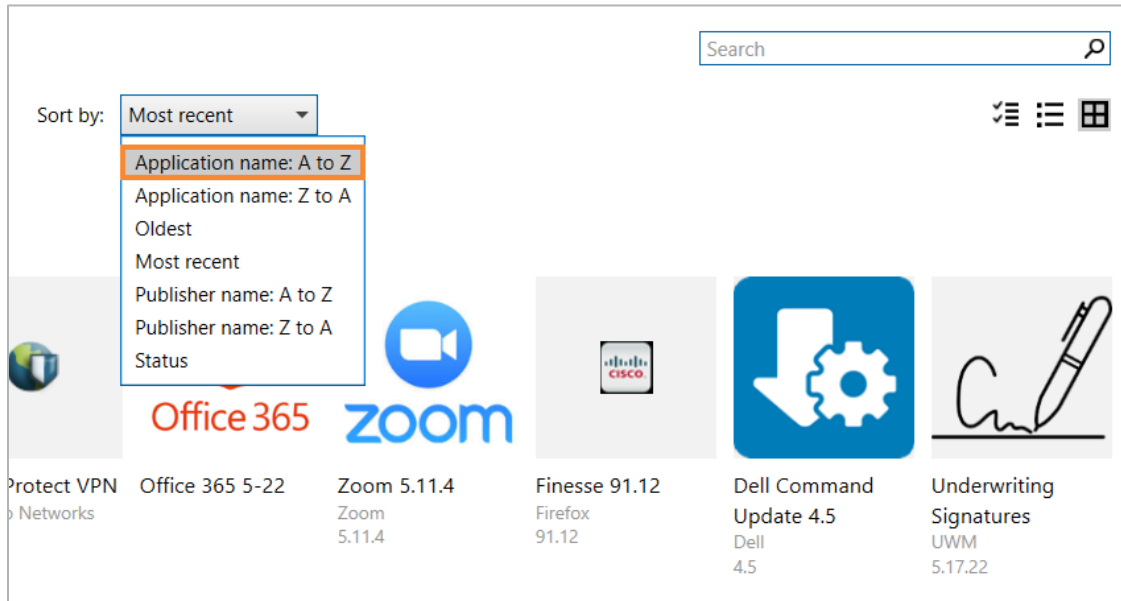
2. Type in the search bar: **Software Center**



3. Click **Open**

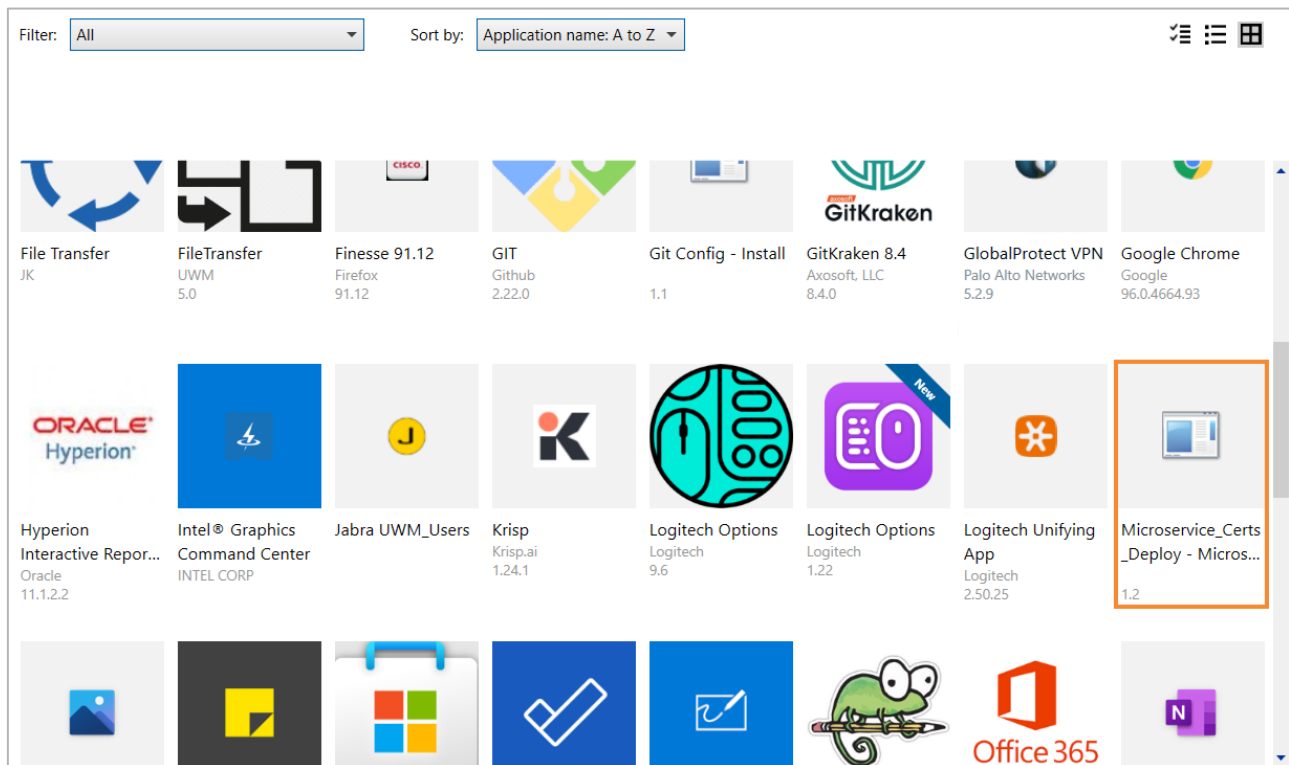


4. Sort by **Application name: A to Z**



5. Scroll down and click **Microservice\_Certs\_Deploy**

**NOTE:** If you are missing Microservice\_Certs\_Deploy [click here](#)

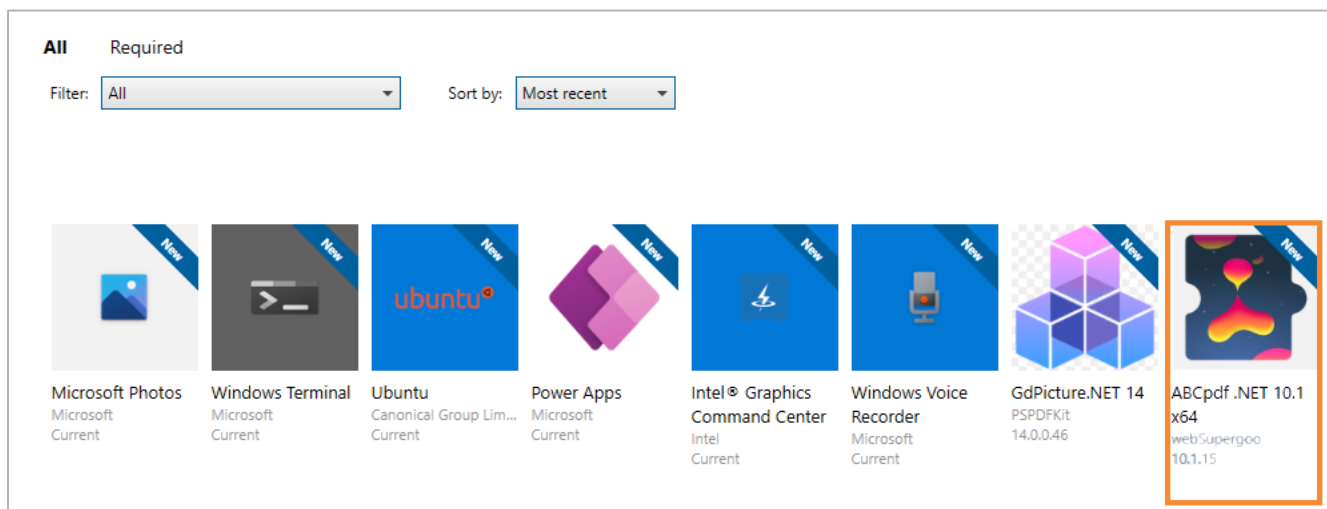


## 6. Click **Install**

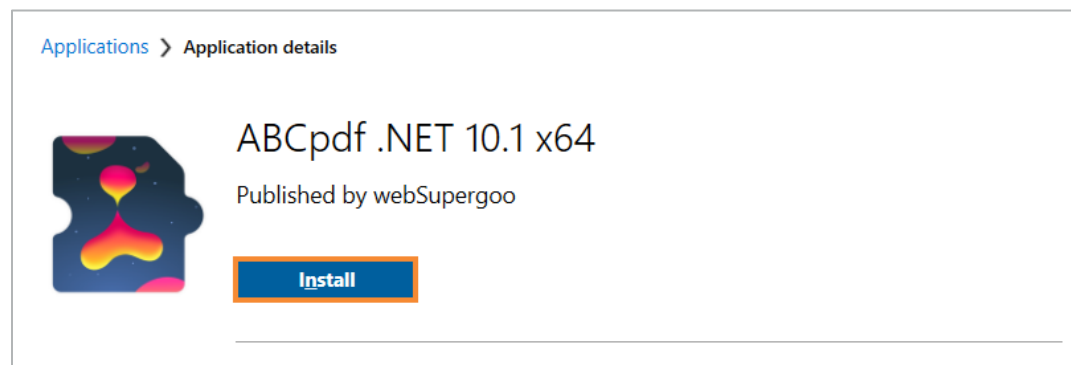


## INSTALL ABCPDF SOFTWARE

1. While still in the Software Center, scroll down and click on **ABCpdf.NET 10.1 x64**

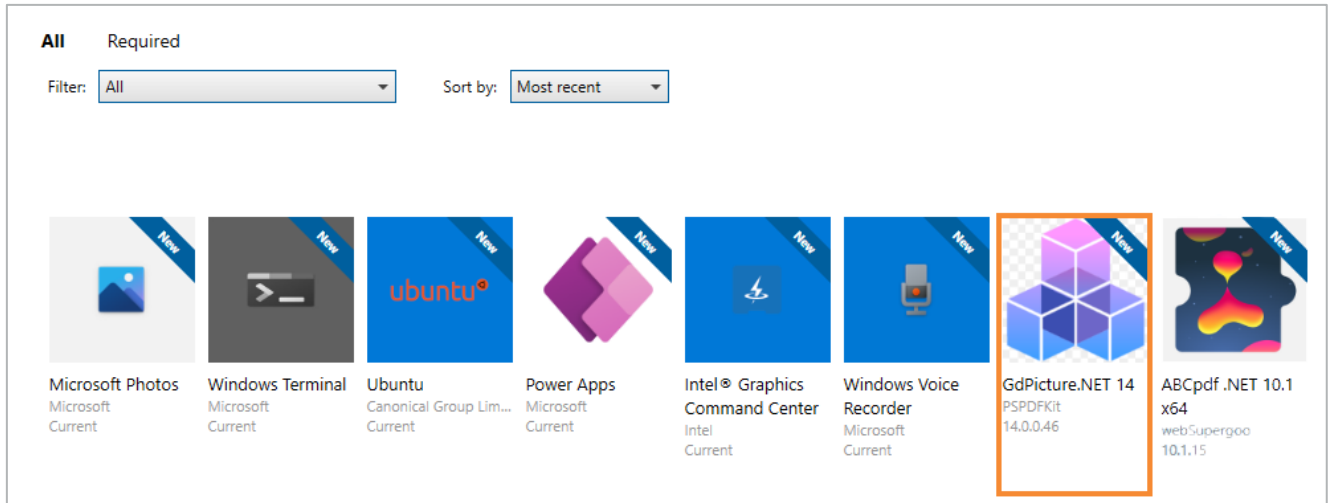


## 2. Click **Install**

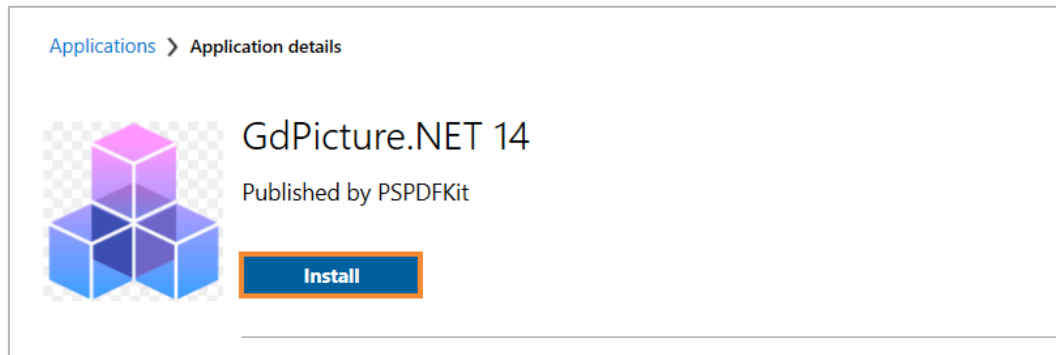


## INSTALL GDPICTURE SOFTWARE

1. While still in the Software Center, scroll down and click on **GdPicture.NET 14**

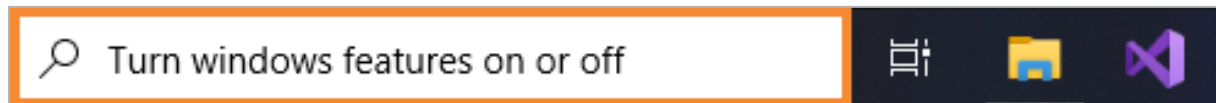


2. Click **Install**

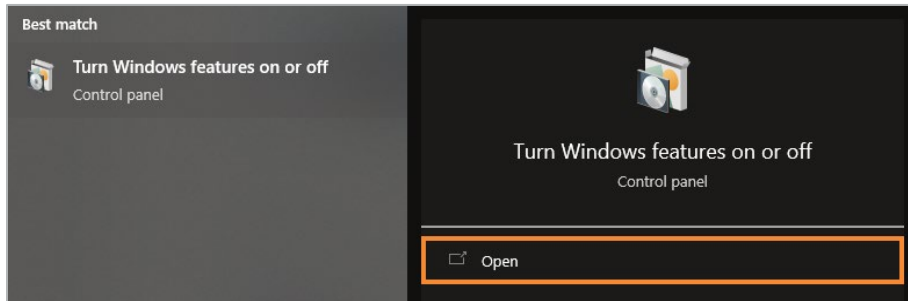


## INSTALL MICROSOFT MESSAGE QUEUE (MSMQ)

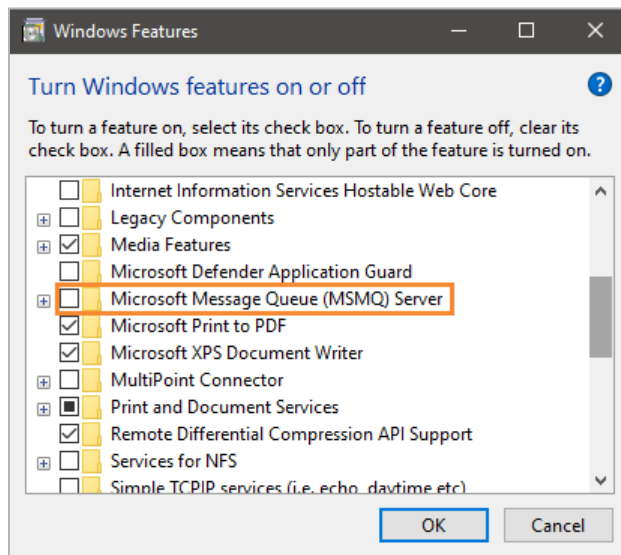
1. In the taskbar, search **Turn Windows features on or off**



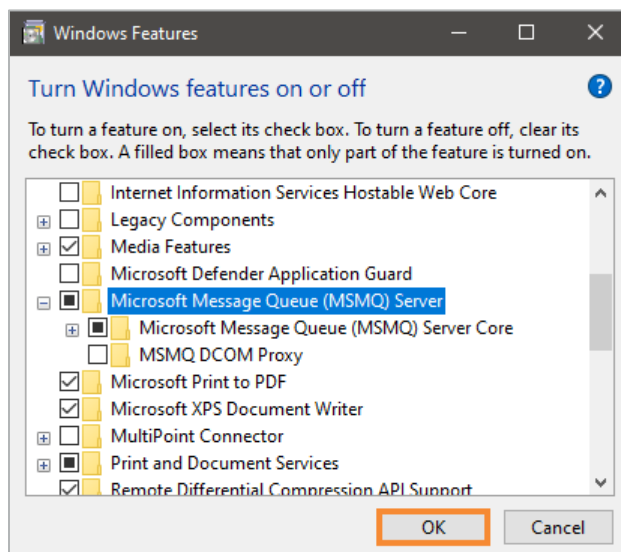
2. Click **Open**



3. Scroll down and select **Microsoft Message Queue (MSMQ) Server**



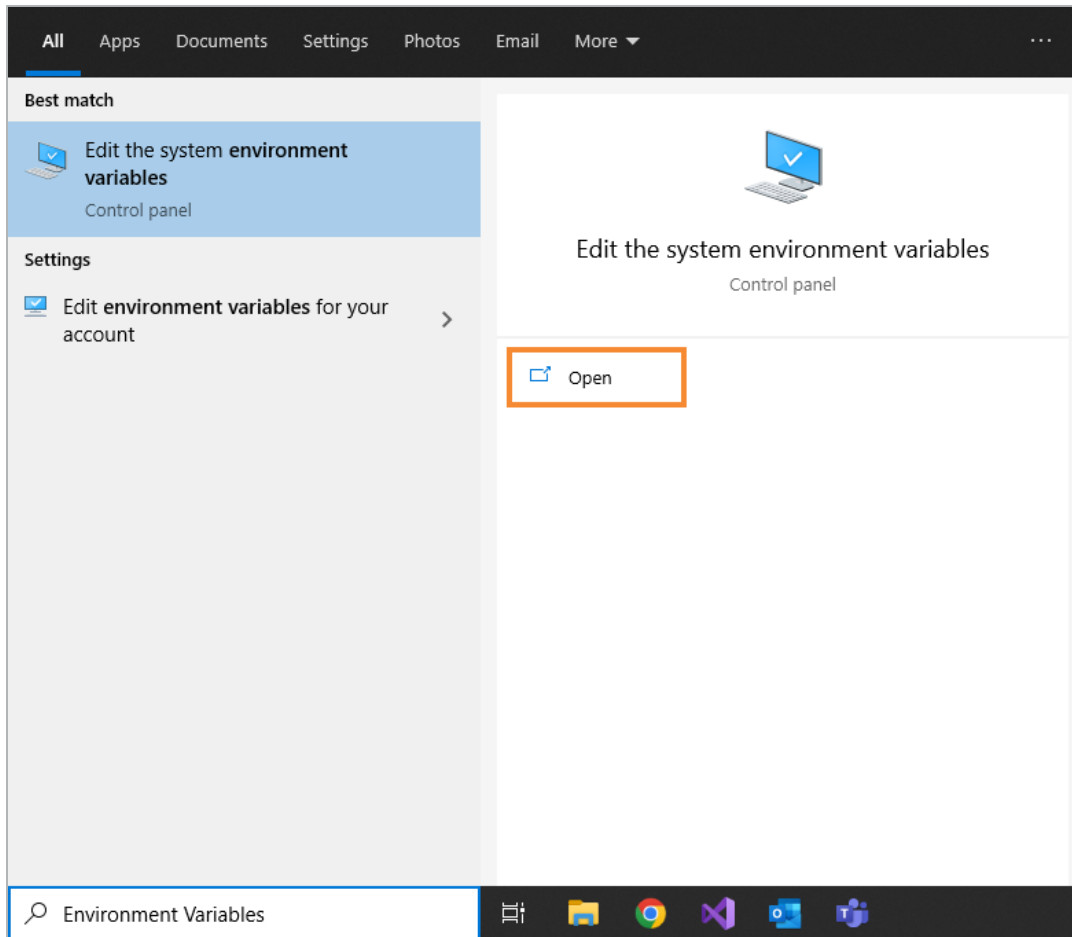
4. Click **OK**



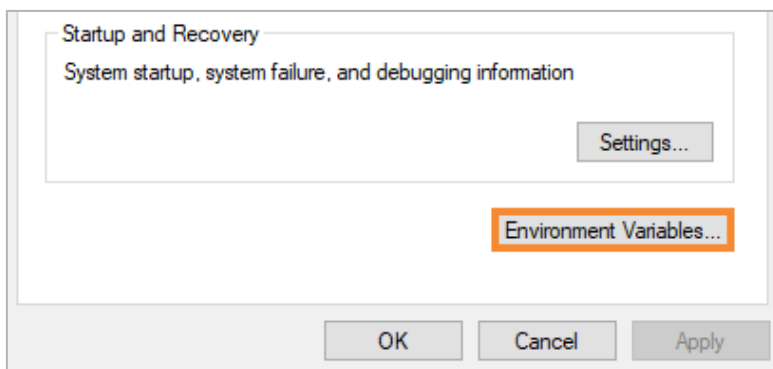
## SET ENVIRONMENT VARIABLE

Setting environment variables provide a way to set application execution parameters. This step is to ensure the run level is set to local.

### 1. Open **Environment Variable**



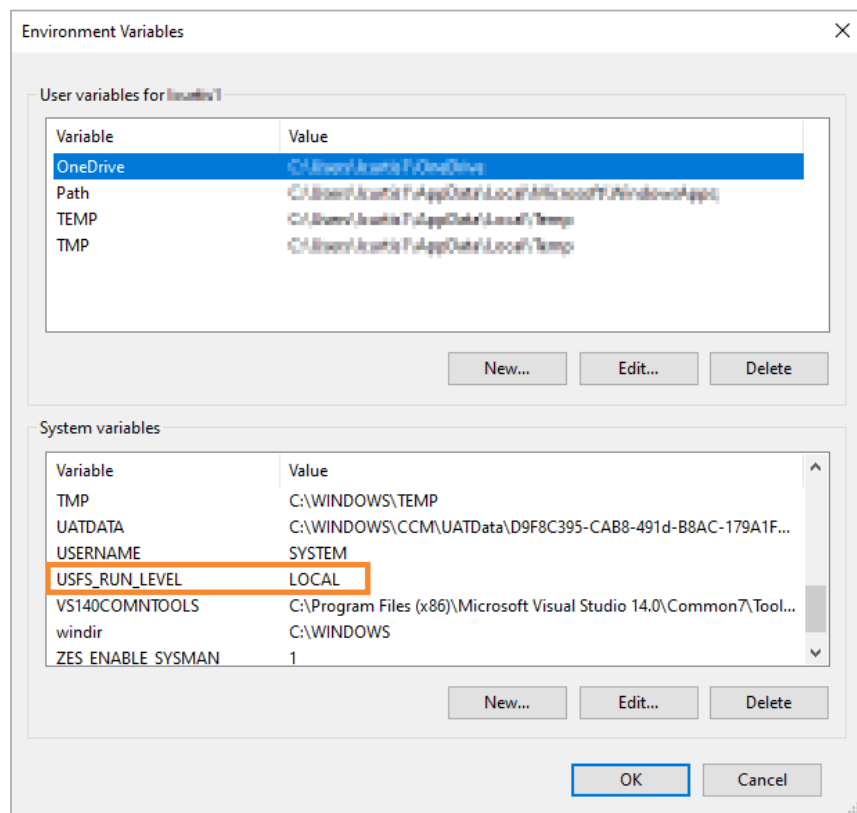
### 2. Click **Environment Variables**



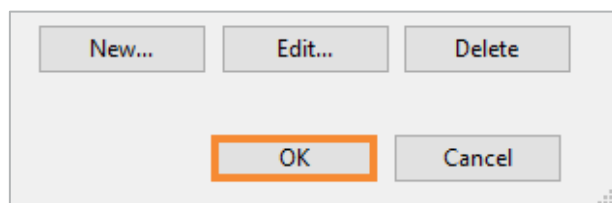


3. Under system variables, scroll down to check that **USFS\_RUN\_LEVEL** is set to the value **LOCAL**

**NOTE:** If you do not see USFS\_RUN\_LEVEL **click here**



4. Click **OK**

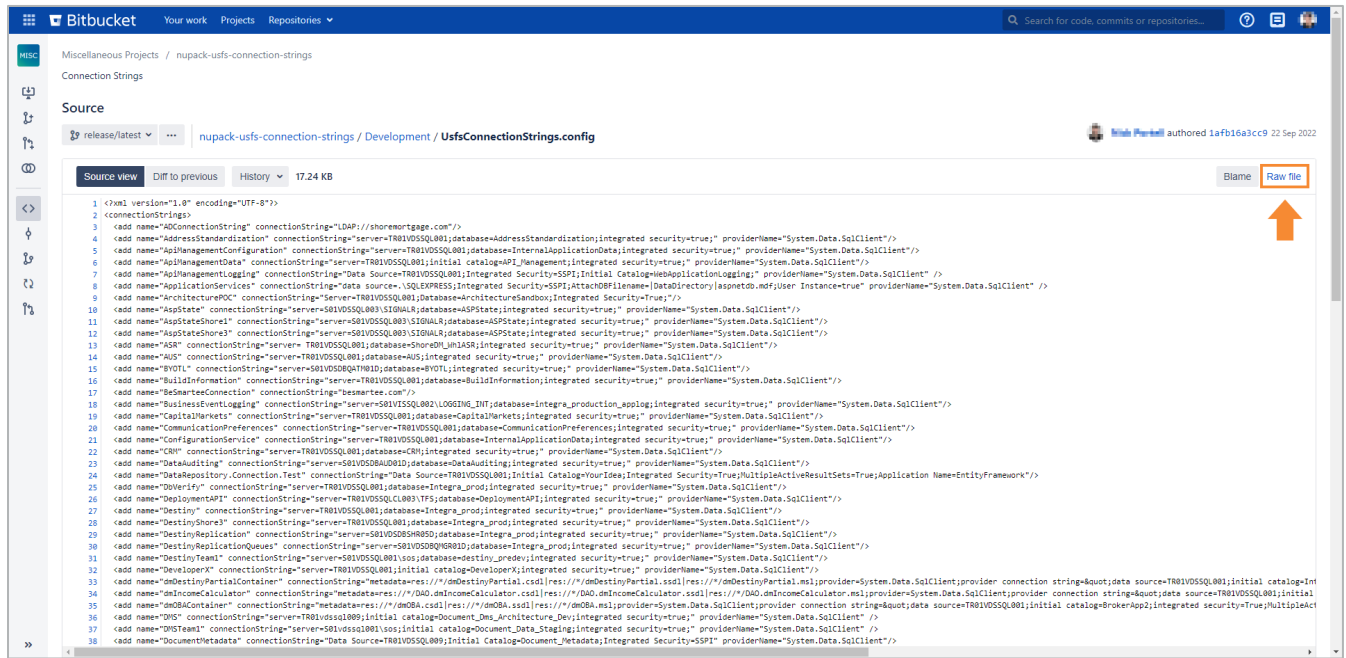


## UPDATE CONFIG FILES

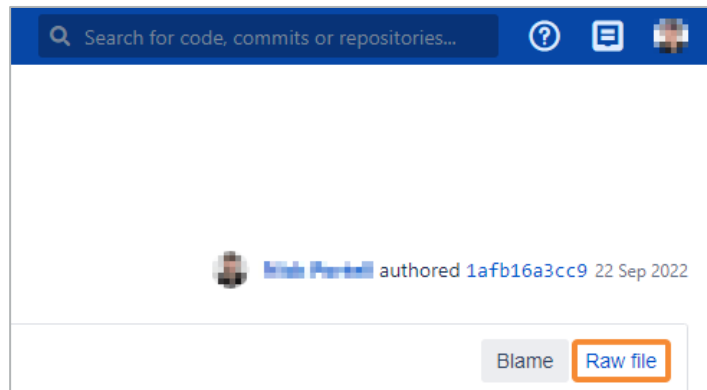
Updating the config files establishes connections to the UWM development database.

## COPY CONNECTION STRINGS

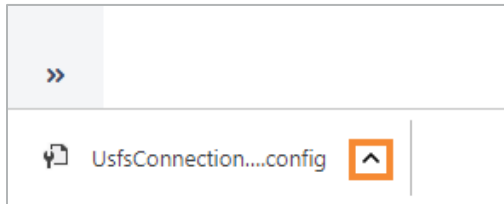
1. Go to [Bitbucket](#)<sup>1</sup> to obtain the connection strings



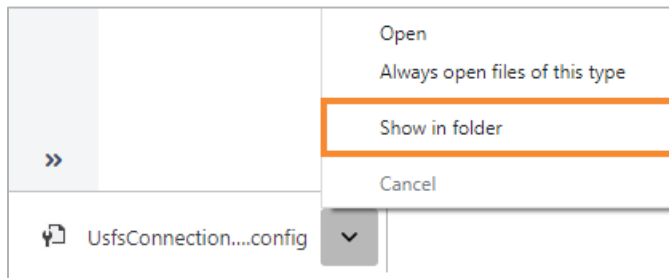
2. Click **Raw file**



- At the bottom of your browser, click **the caret** on the downloaded file

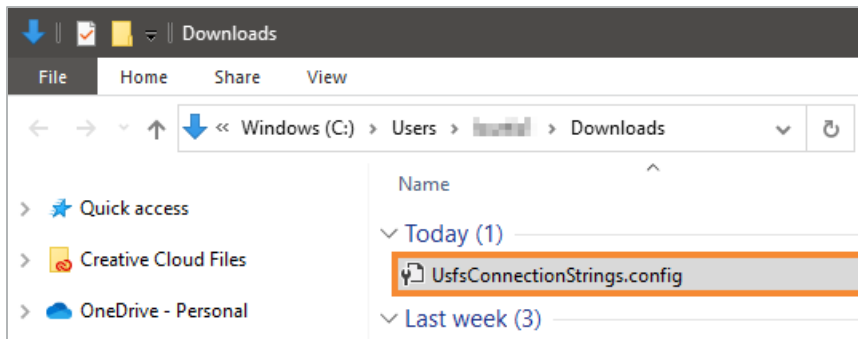


- Click **Show in folder**



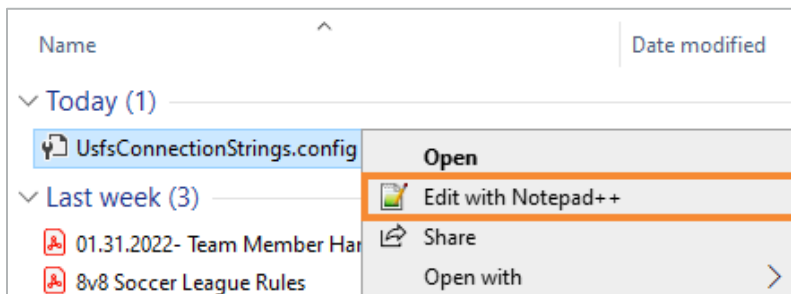
## EDIT USFSCONNECTIONSTRINGS.CONFIG FILE

- After clicking show in folder, right click **UsfsConnectionStrings.config**

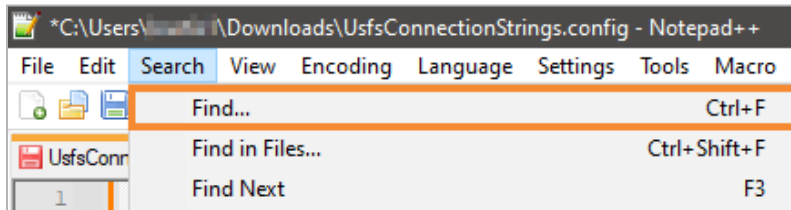


- Edit with **Notepad++**

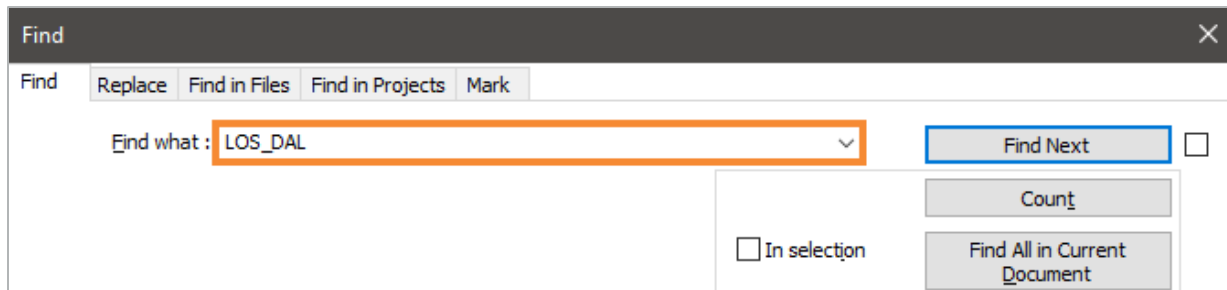
**Note:** If you do not have Notepad++, you can install it via the Software Center



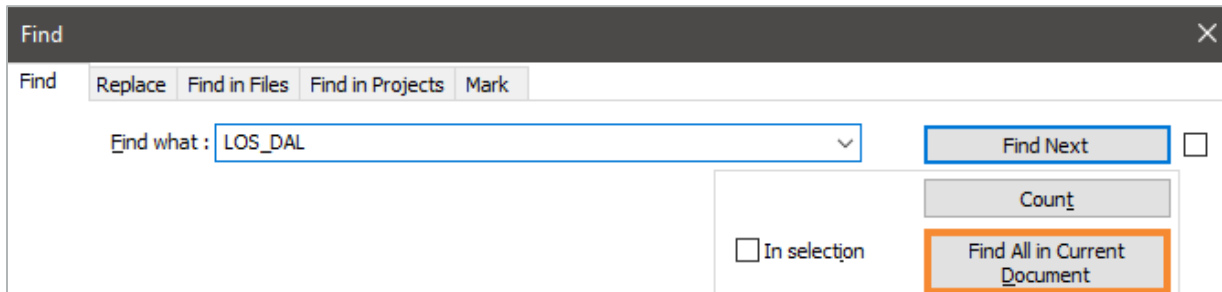
3. In Notepad++ click **Search > Find**



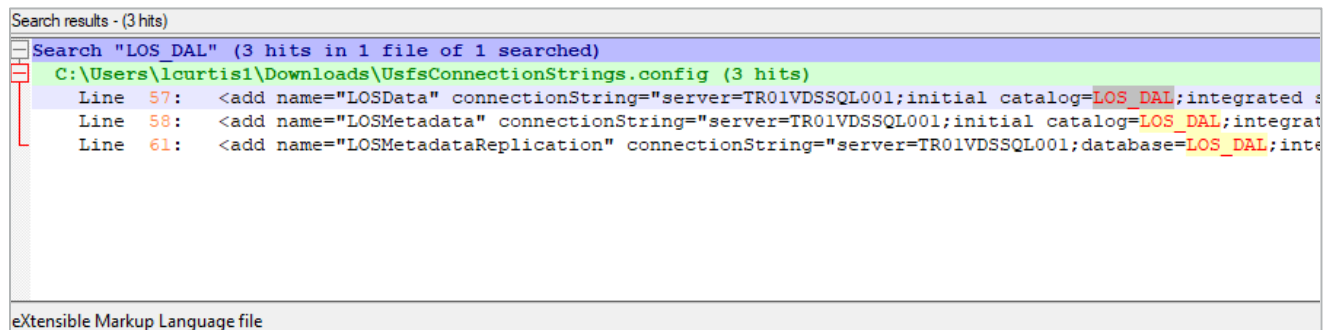
4. In the Find what box, type **LOS\_DAL**



5. Click **Find All in Current Document**



6. Use the search results bar at the bottom to easily find each instance containing LOS\_DAL



7. After each LOS\_DAL, add **\_Team#\_Dev**

**NOTE:** For this screenshot we will use Team10 as an example. When you are doing this, ensure to add your own team number. Ask your team lead if unsure or [click here](#)<sup>2</sup>

```
56 <add name="LocalSqlServer" connectionString="data source=.\SQLEXPRESS;Integrated Security=SSPI;AttachDBF
57 <add name="LOSData" connectionString="server=TR01VDSSQL001;initial catalog=LOS_DAL_Team10_Dev;integrated
58 <add name="LOSMetadata" connectionString="server=TR01VDSSQL001;initial catalog=LOS_DAL_Team10_Dev;integr
59 <add name="LOSFramework" connectionString="server=TR01VDSSQL001;initial catalog=LOS_Data;integrated secu
60 <add name="LOSDataReplication" connectionString="server=TR01VDSSQL001;database=LOS_Data;integrated secur
61 <add name="LOSMetadataReplication" connectionString="server=TR01VDSSQL001;database=LOS_DAL_Team10_Dev;in
62 <add name="LQReview" connectionString="server=TR01VDSSQL001;database=LQReview;integrated security=true;"
```

8. Use the Find tool again to search for **LOS\_DATA**

Find

Find Replace Find in Files Find in Projects Mark

Find what: LOS\_DATA

Find Next

Count

☐ In selection

Find All in Current Document

9. After each LOS\_DATA, add **\_Team#\_Dev**

**NOTE:** For this screenshot we will use Team10 as an example. When you are doing this, ensure to add your own team number. Ask your team lead if unsure or [click here](#)<sup>2</sup>

```
57 <add name="LOSData" connectionString="server=TR01VDSSQL001;initial catalog=LOS_DAL_Team10_Dev;integrated secu
58 <add name="LOSMetadata" connectionString="server=TR01VDSSQL001;initial catalog=LOS_DAL_Team10_Dev;integrated
59 <add name="LOSFramework" connectionString="server=TR01VDSSQL001;initial catalog=LOS_Data_Team10_Dev;integrate
60 <add name="LOSDataReplication" connectionString="server=TR01VDSSQL001;database=LOS_Data_Team10_Dev;integrated
61 <add name="LOSMetadataReplication" connectionString="server=TR01VDSSQL001;database=LOS_DAL_Team10_Dev;integrate
```

10. Navigate to **Line 21**

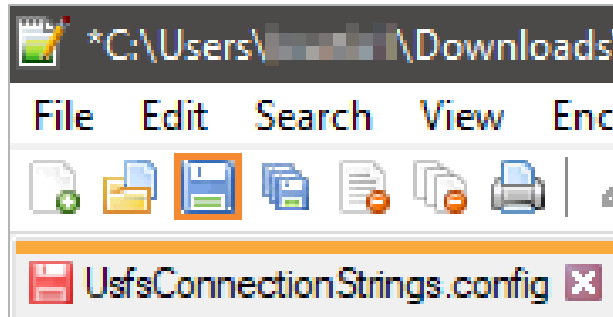
**NOTE:** It may be a slightly different line for you, look for InternalApplicationData in the code

```
19 <add name="C
20 <add name="C
21 <add name="C
22 <add name="C
23 <add name="D
```

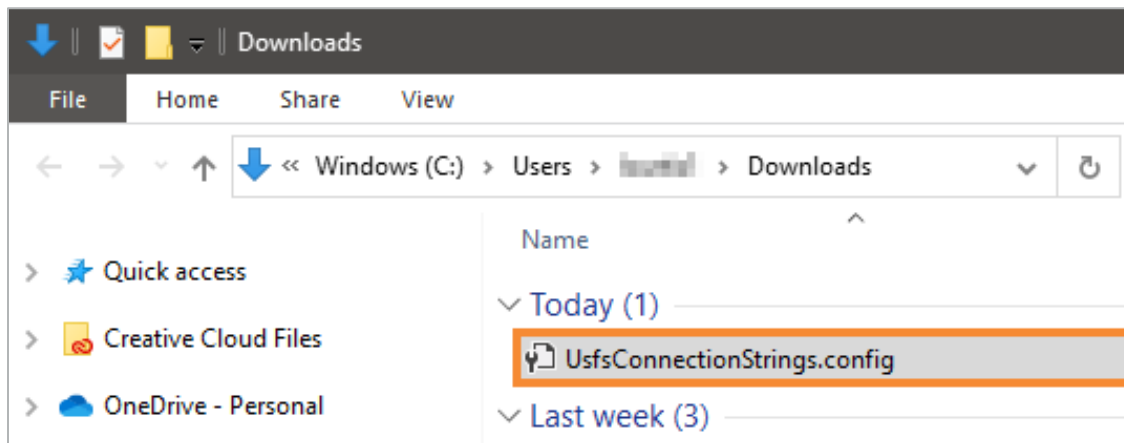
11. On line 21, after InternalApplicationData, add **\_Team#\_Dev**

```
18 <add name="BusinessEventLogging" connectionString="server=SVISSQL002\2000100_INI;database=integra_production_applog;integrated security=true;" providerName="System.Data.SqlClient"/>
19 <add name="CapitalMarkets" connectionString="server=TR01VDSSQL001;database=CapitalMarkets;integrated security=true;" providerName="System.Data.SqlClient"/>
20 <add name="CommunicationPreferences" connectionString="server=TR01VDSSQL001;database=CommunicationPreferences;integrated security=true;" providerName="System.Data.SqlClient"/>
21 <add name="ConfigurationService" connectionString="server=TR01VDSSQL001;database=InternalApplicationData_Team10_Dev;integrated security=true;" providerName="System.Data.SqlClient"/>
22 <add name="CRM" connectionString="server=TR01VDSSQL001;database=CRM;integrated security=true;" providerName="System.Data.SqlClient"/>
23 <add name="DataAuditing" connectionString="server=S01VDSDBAUD01D;database=DataAuditing;integrated security=true;" providerName="System.Data.SqlClient"/>
24 <add name="DataRepository_Connection_Test" connectionString="Data_Source=TR01VDSSQL001;Initial_Catalog=YourIdea;Integrated_Security=true;" providerName="System.Data.SqlClient"/>
```

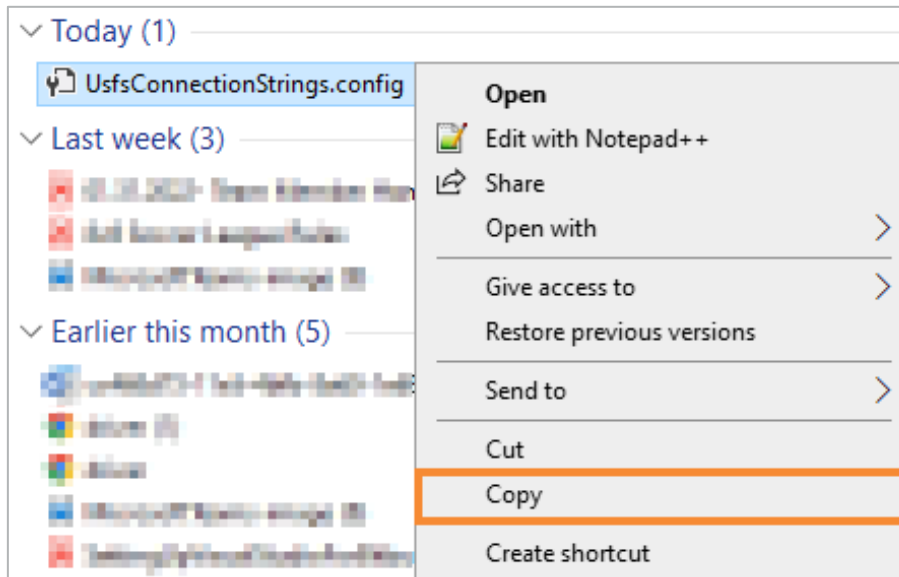
12. Click **Save icon** (or press CTRL+S)



13. Navigate back to the **File Explorer** to locate the config file you just saved

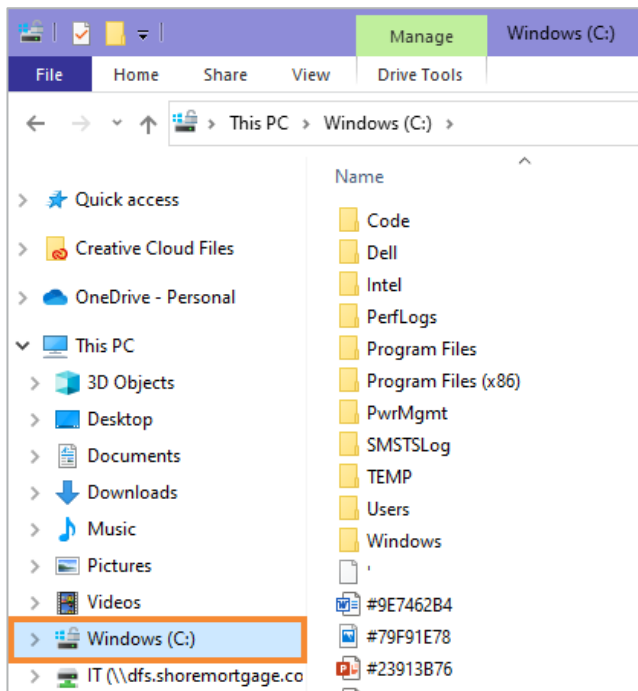


#### 14. Right click to copy the **config** file

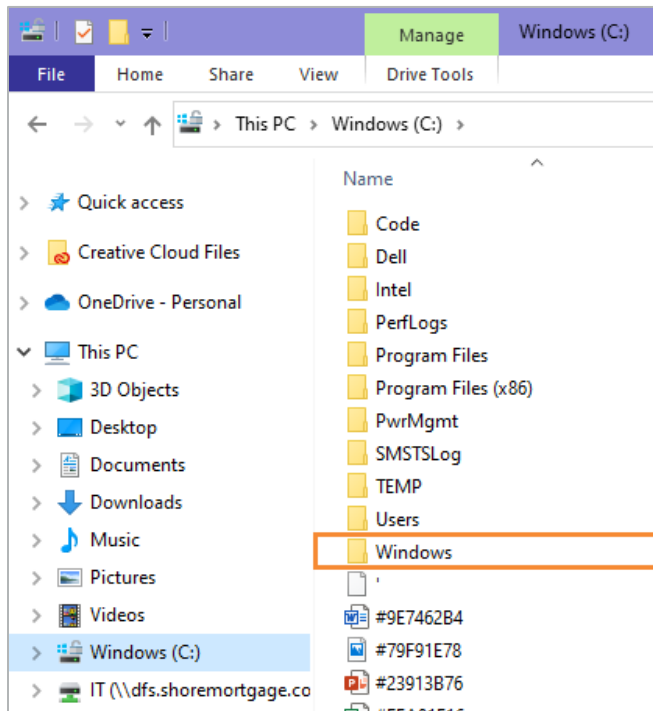


## PASTE CONNECTION STRINGS INTO CONFIG FOLDERS

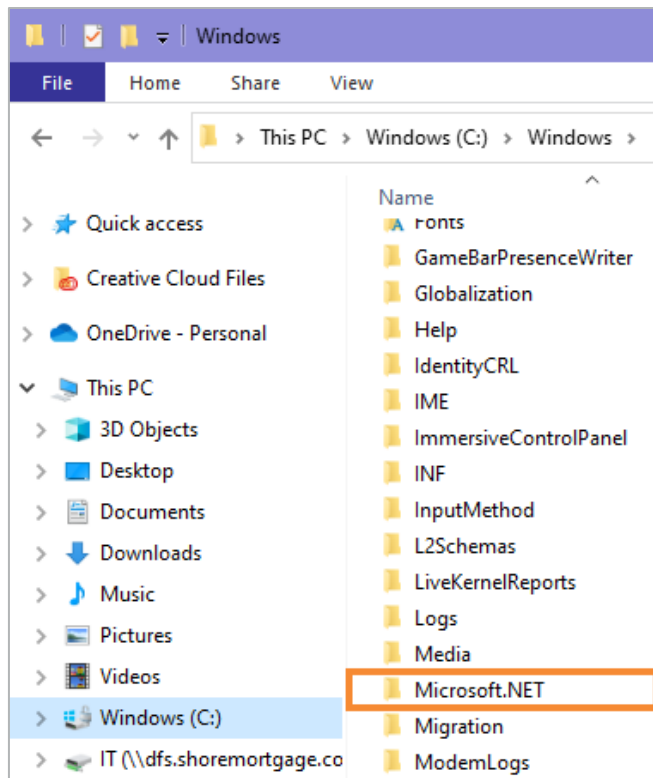
### 1. Open the **(C:) Drive**



2. Scroll down and open **Windows** folder

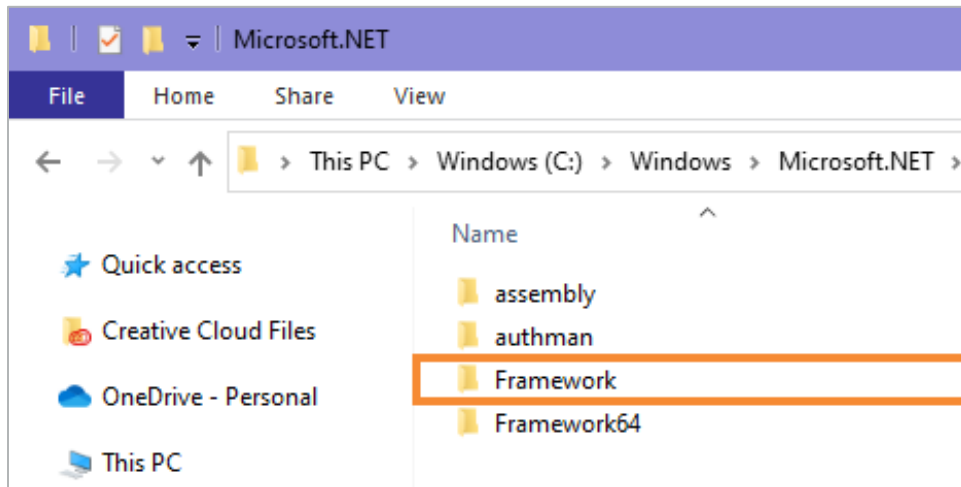


3. Scroll down and open **Microsoft.NET** folder

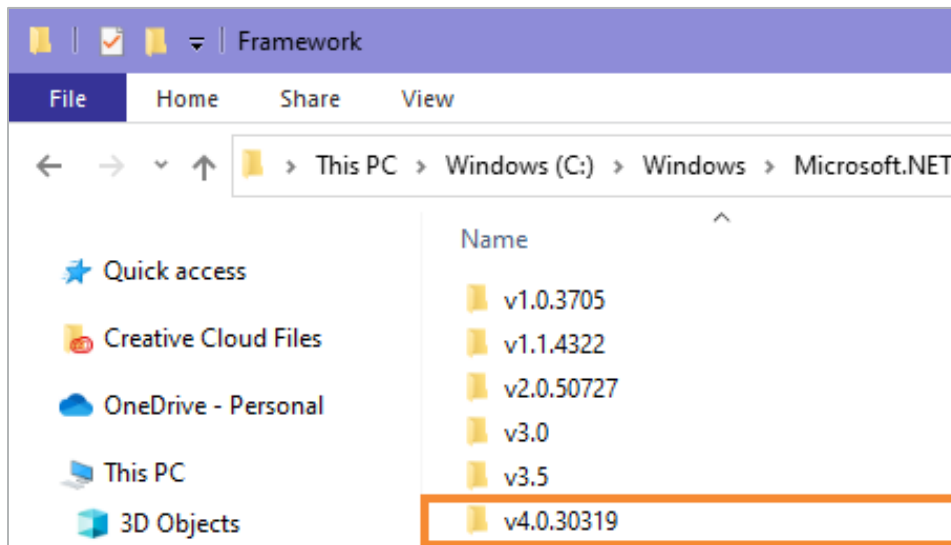




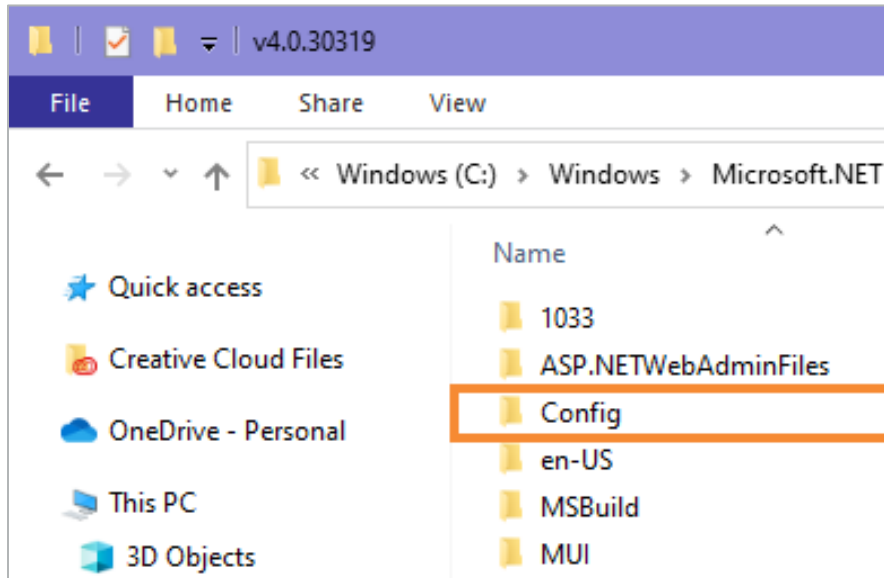
4. Open **Framework** folder



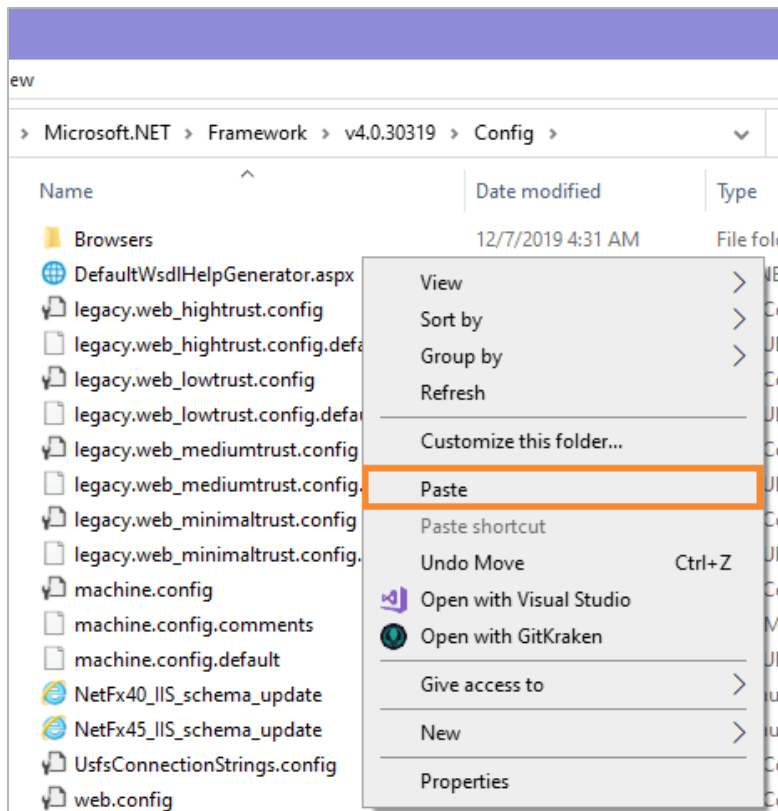
5. Open **v4.0.30319** folder



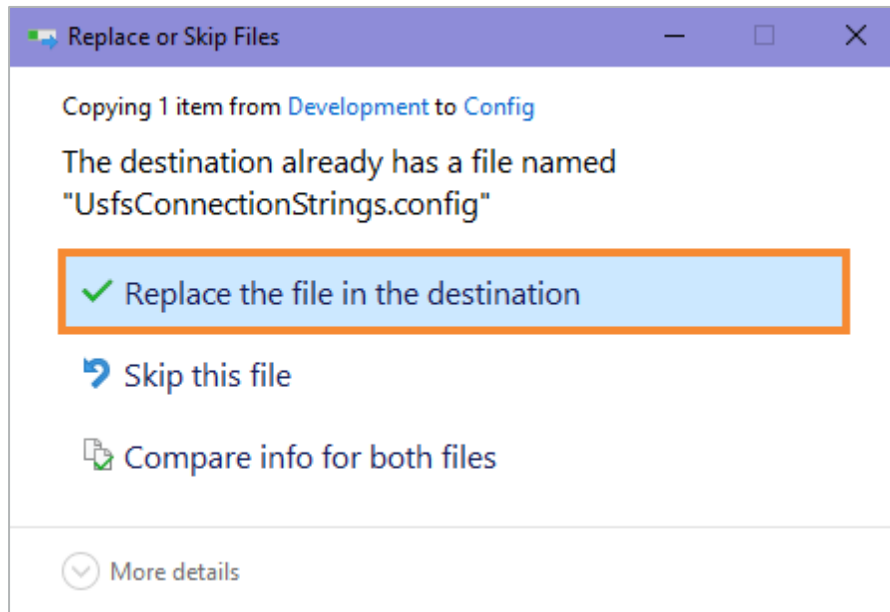
6. Open **Config** folder



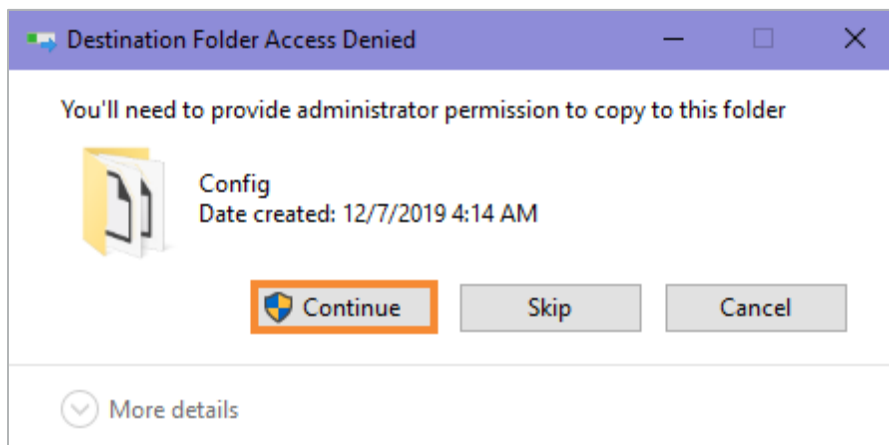
7. Right click and **Paste** (Remember, you are pasting the config file that was copied earlier)



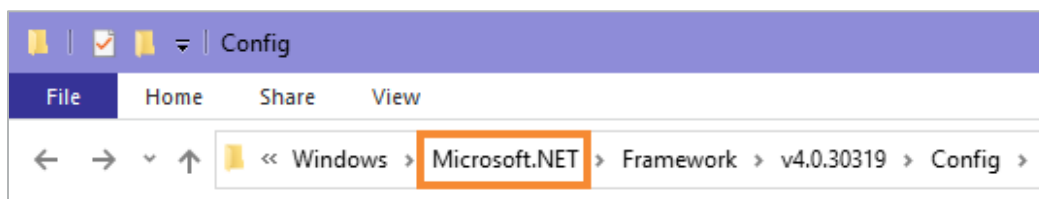
8. Click **Replace the file in the destination**



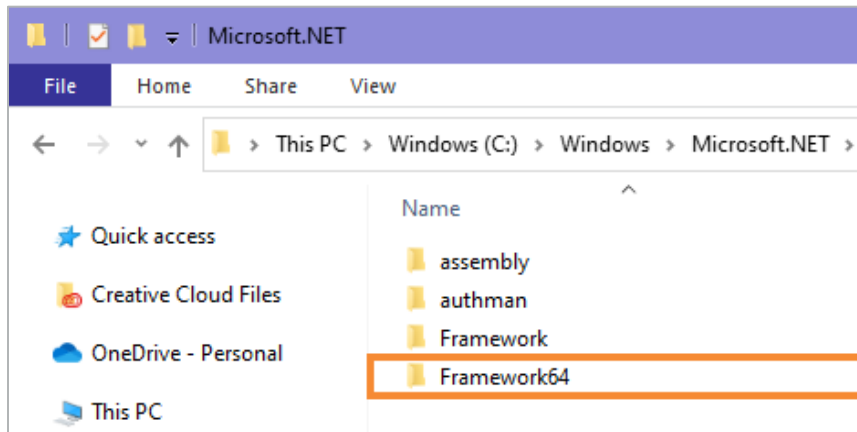
9. Click **Continue**



10. In the File Explorer navigation bar, click back to the **Microsoft.NET** folder



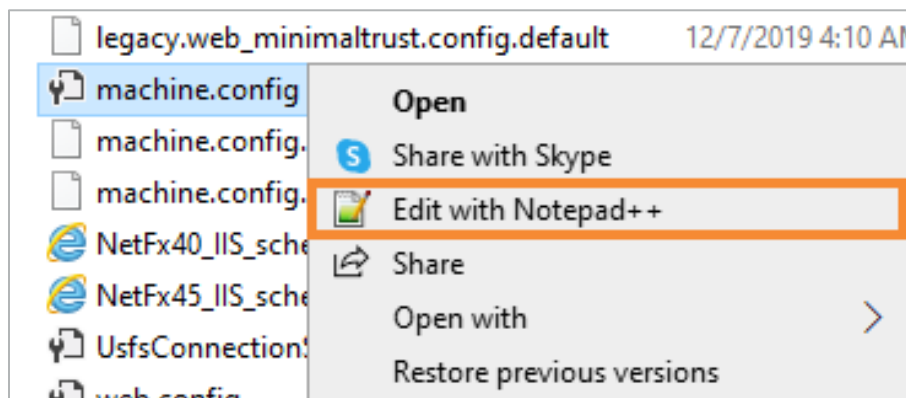
- Repeat steps 5-9 in the **Framework64** folder (The config file you edited needs to be pasted into both the Framework and Framework64 config folders)



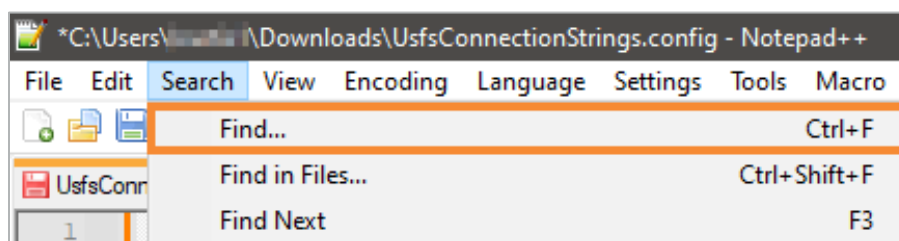
## EDIT MACHINE.CONFIG FILE

- In the Framework64 folder, right click the **machine.config** file

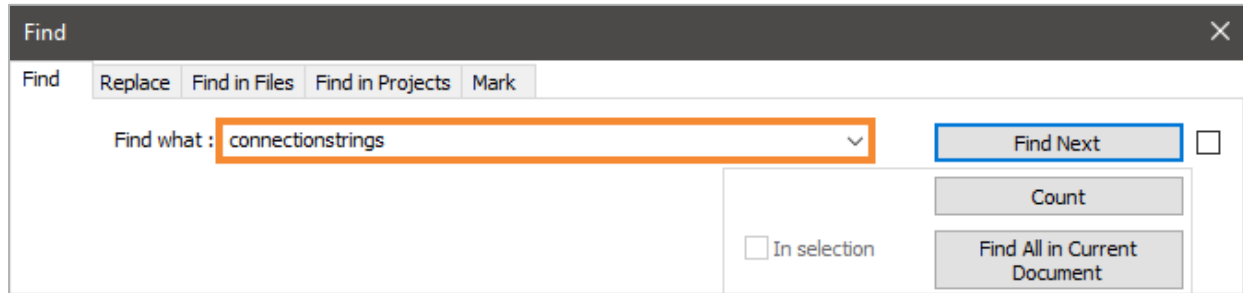
**File path:** C:\Windows\Microsoft.NET\Framework64\v4.0.30319\Config



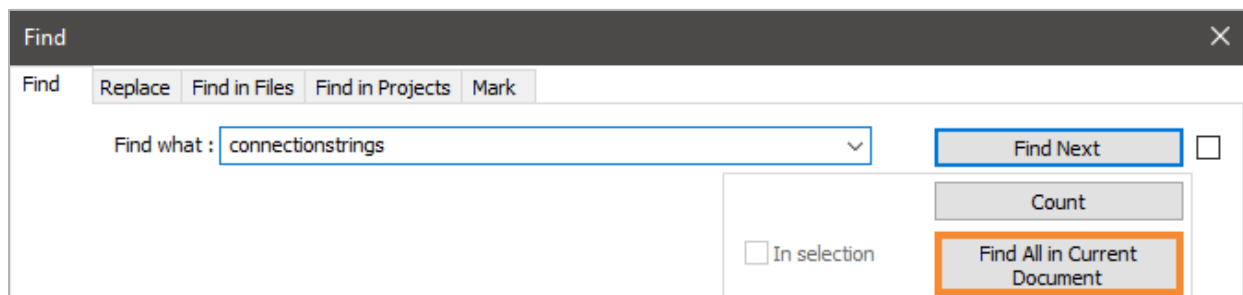
- In Notepad++ go to **Search > Find**



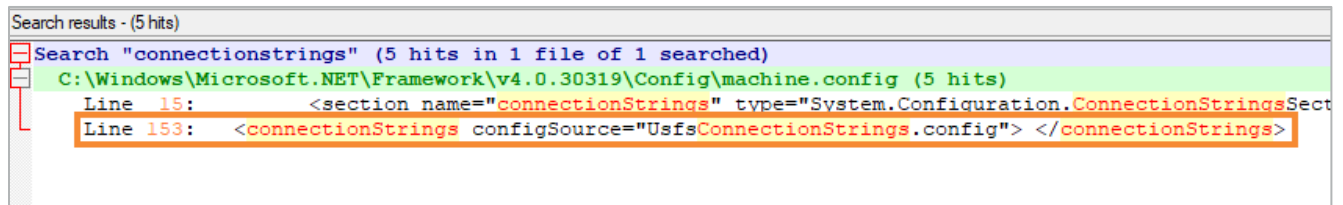
4. In the Find what box, type **connectionstrings**



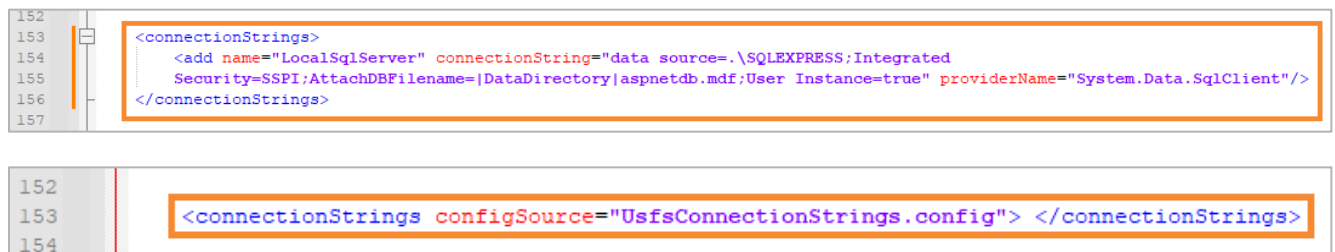
5. Click **Find All in Current Document**



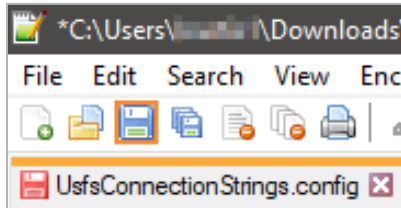
6. Double click the **second line** containing connectionstrings



7. Replace this line with: **<connectionStrings configSource="UsfsConnectionStrings.config"> </connectionStrings>**

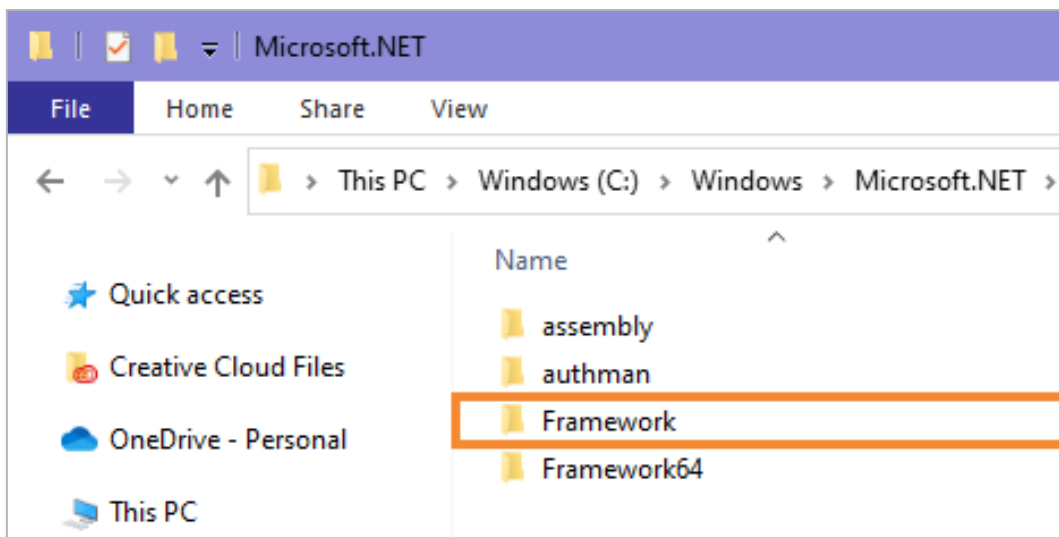


8. Click **Save**



9. Repeat steps 1-9 in the **Framework folder**

**File path:** C:\Windows\Microsoft.NET\Framework\v4.0.30319\Config



\*\* INTERNAL USE ONLY \*\*

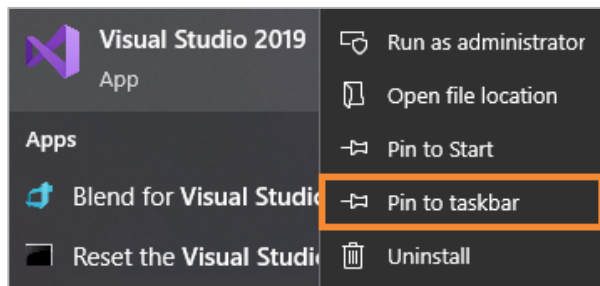
## SET VISUAL STUDIO TO OPEN AS ADMIN

Follow the steps below to open Visual Studio as an admin. You should always open the application as an admin.

1. Search **Visual Studio 2019**



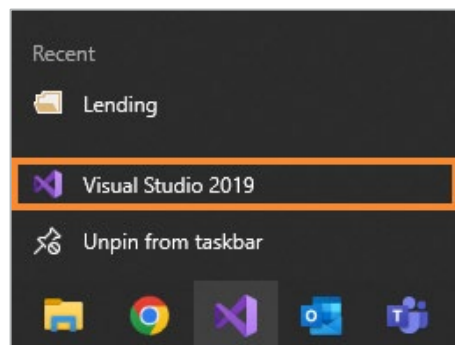
2. Right click and click **Pin to taskbar**



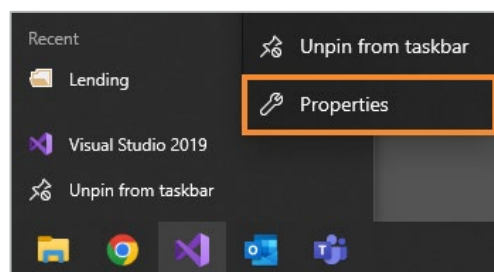
3. Now that Visual Studio is pinned to the taskbar, right click the **Visual Studio** icon



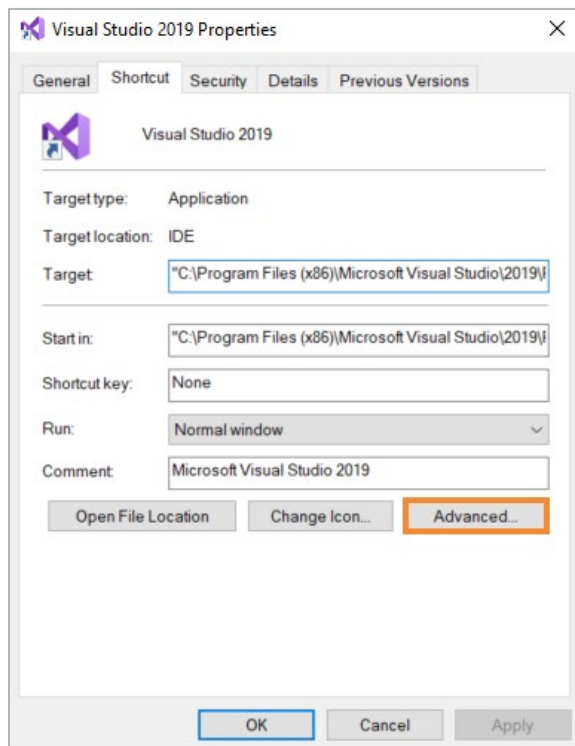
4. Right click **Visual Studio 2019**



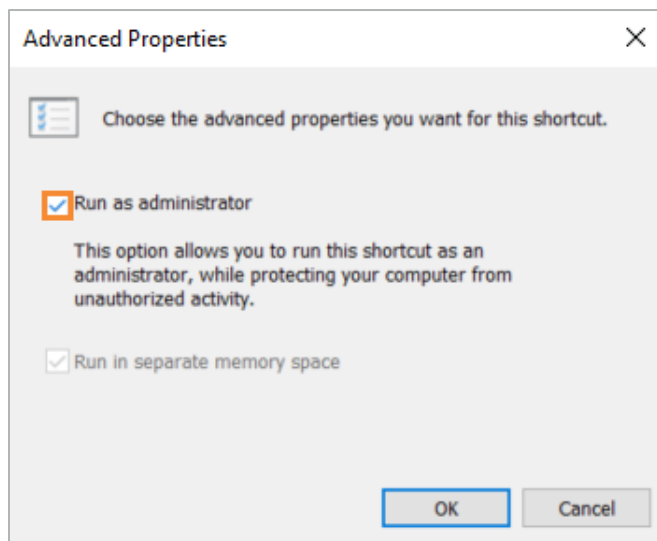
5. Click **Properties**



6. Click **Advanced**

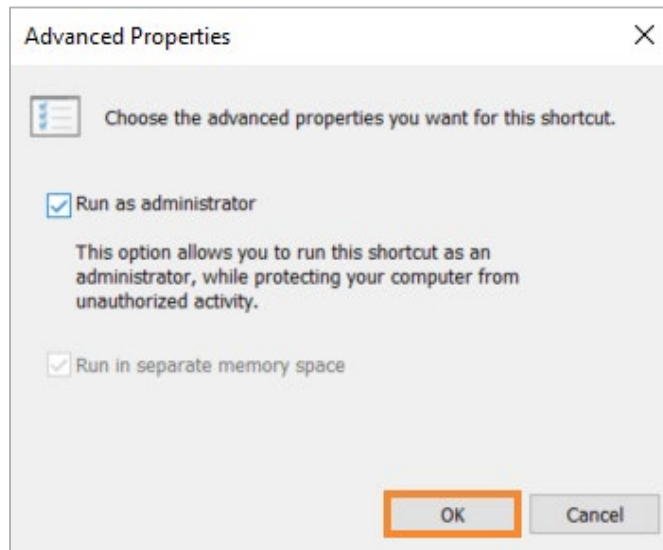


7. Check **Run as Admin**

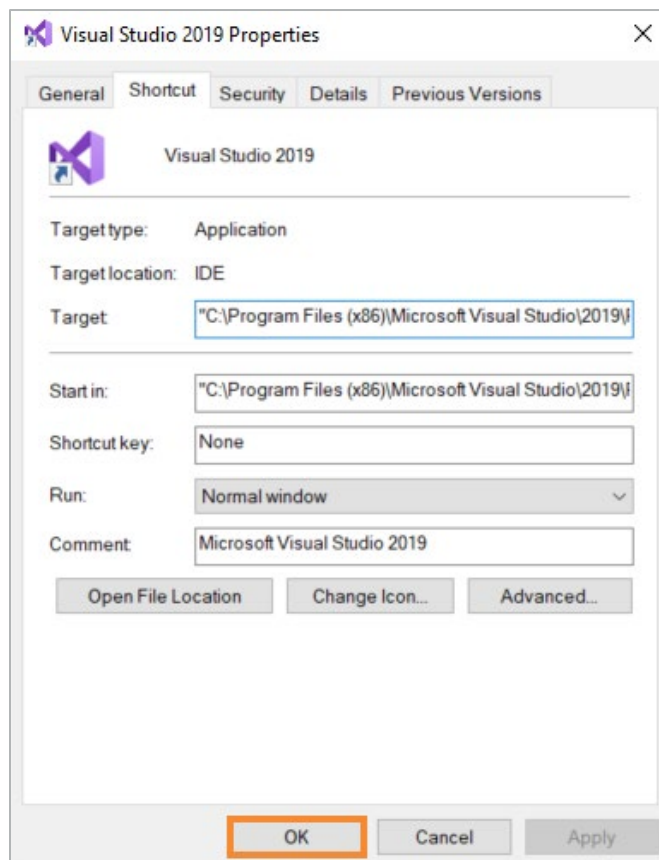




8. Click **OK**



9. Click **OK**



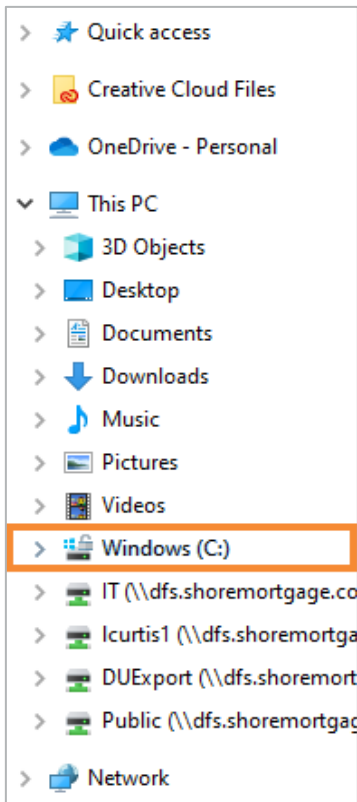
## CREATE LOCAL FOLDERS

Follow the steps below to create the files that Visual Studio will point to locally.

1. On the taskbar, open the **File Explorer**

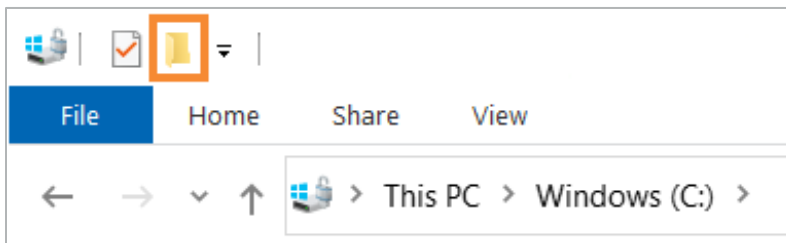


2. Select **Windows (C:)**

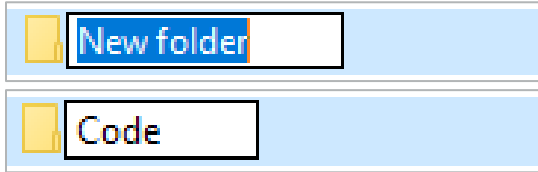


3. Inside the (C:) Drive, create a **New Folder**

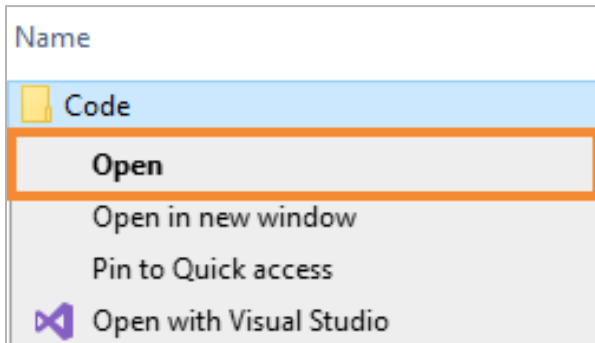
**NOTE:** If you already have a Code folder created in the (C:) drive, skip to step 5 of this section



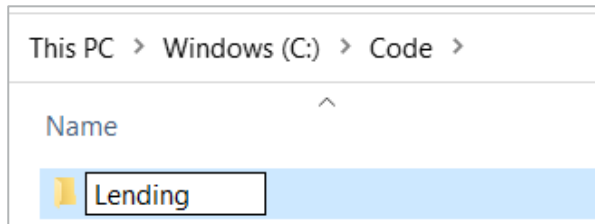
4. Label this folder **Code**



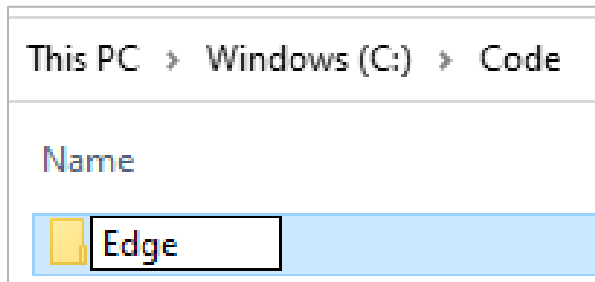
5. Right click and **Open** the Code folder you created



6. In the Code folder, create another New Folder based on which repository you will be pulling from. The folder will be used in later steps.
- If working in Lending, create a folder called **Lending**



- If working in Edge, create a folder called **Edge**

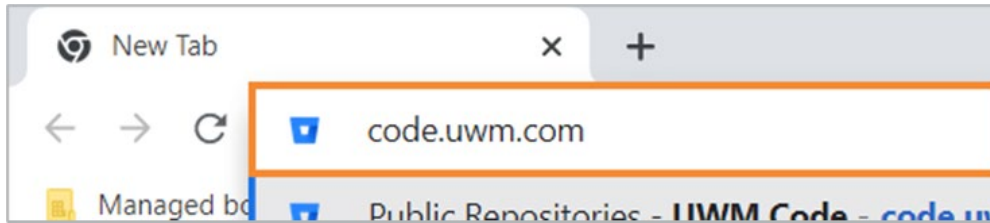


## CREDENTIAL MANAGEMENT

Credential management is important to maintain the security of sensitive information within our organization. The following steps will walk you through how to set up your own credentials to help UWM maintain a standard for security.

### CREATE A TOKEN ON BITBUCKET

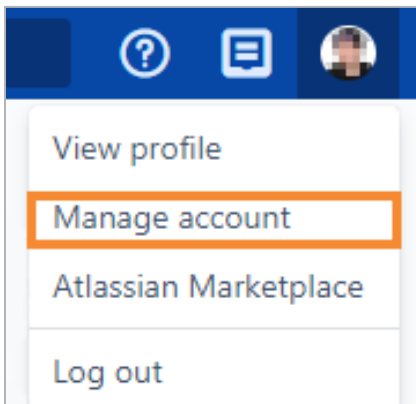
1. Navigate to [code.uwm.com](https://code.uwm.com)<sup>3</sup>



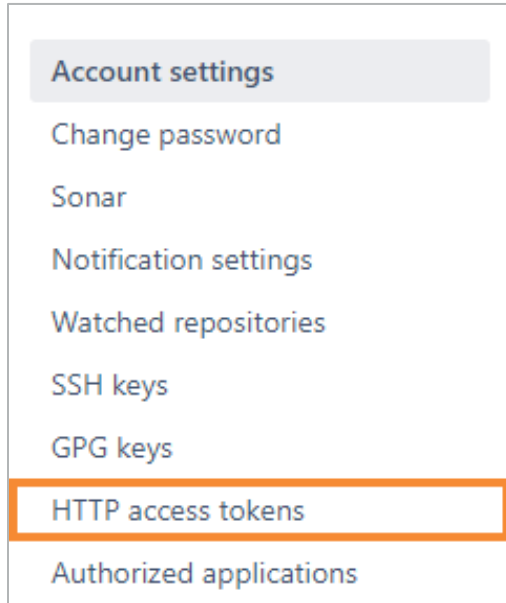
2. Click your **Account icon** in the upper right corner



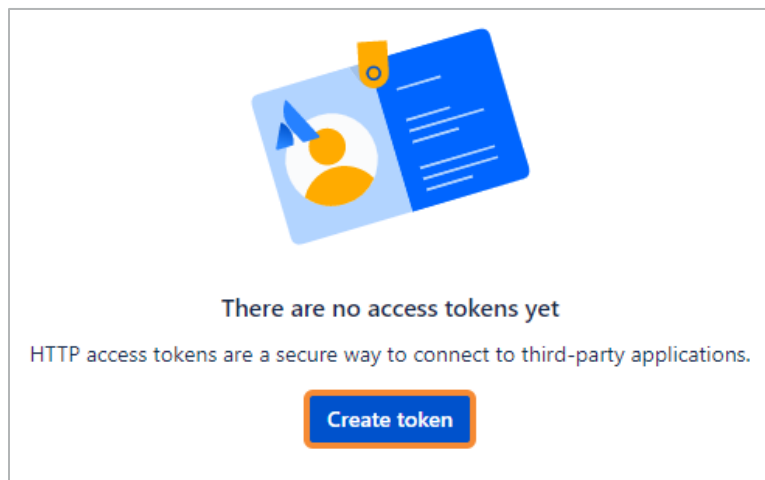
3. Click **Manage account**



4. Click **HTTP access tokens** under Account settings on the left-hand side



5. Click **Create token**



6. Create the token

1. **Name** your token

**NOTE:** A token name can be whatever you want but it's recommended that it reflects the environment where it will be used. Example: "laptop-VisualStudio"

2. Set Project permissions to **Project admin**
3. Set Repository permissions to **Repository admin (inherited)**
4. Set Expire to **Do not expire**
5. Click **Create**

### Create an access token

Token name

1

**Permissions**

Tokens are like another password, so their permissions will default to the level of access you have. Because of this, it is recommended that you restrict the token's permission to the level it will need.

Project permissions

Project admin

2

Repository permissions

Repository admin (inherited)

3

This access token will allow the supplied third-party application to:

- ✓ Create and fork repositories
- ✓ Update project settings and permissions
- ✓ Update repository settings and permissions
- ✓ Push to repositories and perform pull request actions
- ✓ Pull and clone repositories

**Expiry**

For added security, you can set this token to automatically expire. If you set an expiry date, you won't be able to edit it once you've created the token.

☒ Do not expire
 ☐ Expire automatically

4

Create

Cancel

5

- NOTE:** You will not be able to access this token again and you will need it for a later step

New access token created

 You'll not be able to view this token again.

<http://www.elsevier.com/locate/jmb>

Copy

**Continue**

- New access token created

 You'll not be able to view this token again.

[Return to the top of the page](#)

Copy

**Continue**

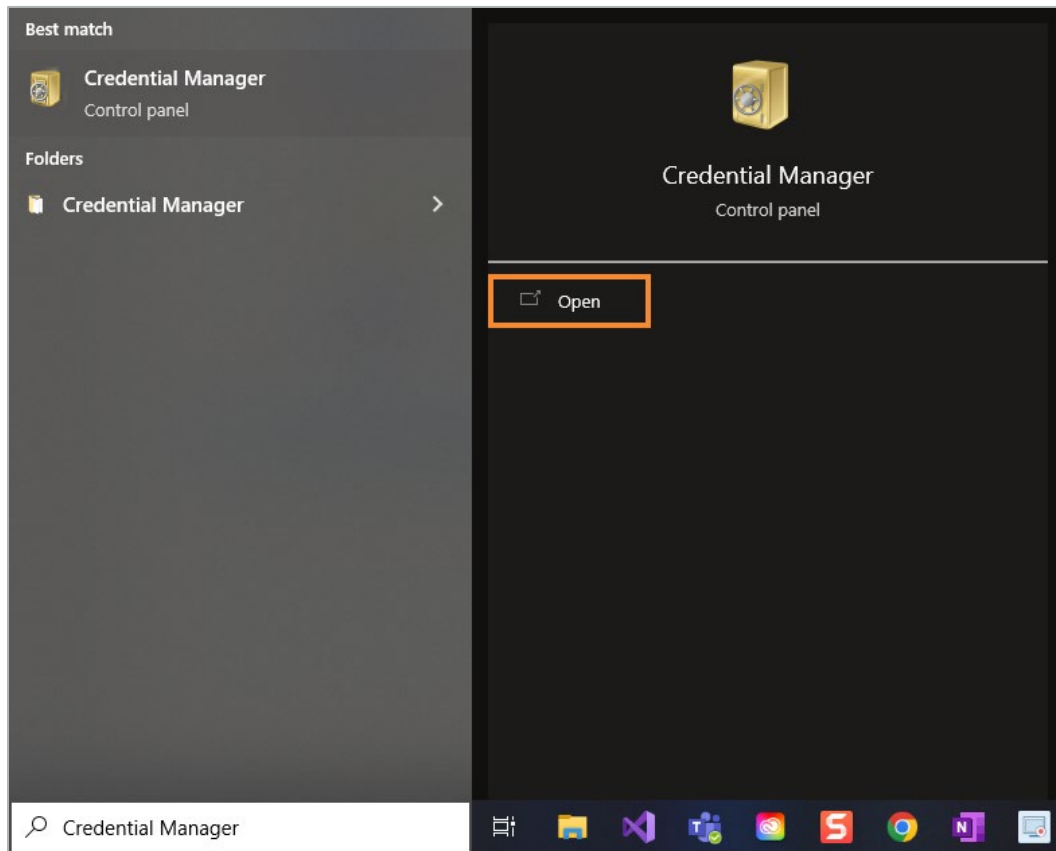
## 1. Taskbar search **Credential Manager**



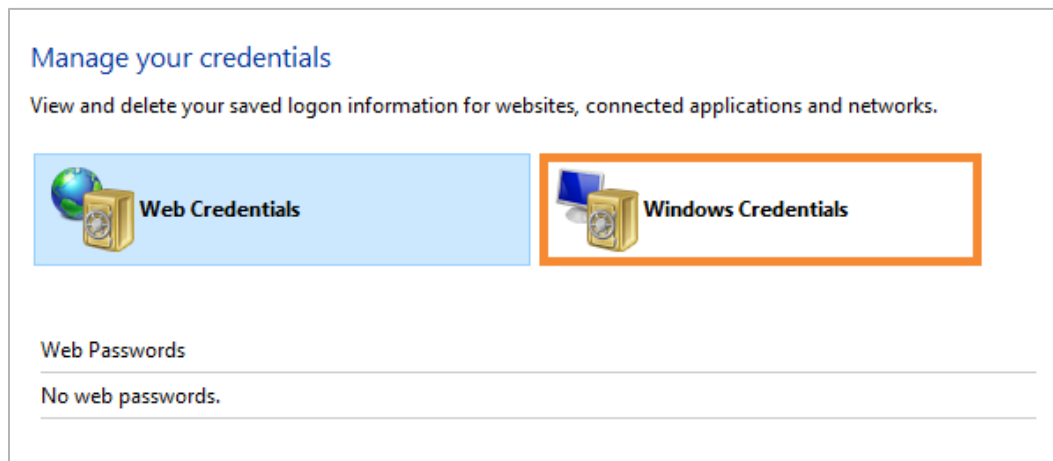
🔍 Credential Manager



2. Click **Open**



3. Click **Windows Credentials**







#### 4. Click **Add a generic credential**

**Manage your credentials**

View and delete your saved login information for websites, connected applications and networks.

 **Web Credentials**
 **Windows Credentials**

[Back up Credentials](#) [Restore Credentials](#)

**Windows Credentials** [Add a Windows credential](#)

No Windows credentials.

**Certificate-Based Credentials** [Add a certificate-based credential](#)

No certificates.

**Generic Credentials** [Add a generic credential](#)

ACDC.com Adobe acc prep/2M09370280421 (20449)...	Modified: 6/30/2022	⌵
Adobe App Info (COMMUNITY/USM/MS/JS/3040MJA...	Modified: Today	⌵
Adobe App Info (COMMUNITY/USM/MS/JS/3040MJA...	Modified: Today	⌵
Adobe App Info (COMMUNITY/USM/MS/JS/3040MJA...	Modified: Today	⌵
Adobe App Info (COMMUNITY/USM/MS/JS/3040MJA...	Modified: Today	⌵
Adobe App Info (COMMUNITY/USM/MS/JS/3040MJA...	Modified: Today	⌵
Adobe App Info (COMMUNITY/USM/MS/JS/3040MJA...	Modified: Today	⌵
Adobe App Info (COMMUNITY/USM/MS/JS/3040MJA...	Modified: Today	⌵

#### 5. Fill out the credential information

1. Enter **https://code.uwm.com** as Internet or Network address
2. Enter your **UWM username** (without the email address @)
3. Use the access token you created as the **password**
4. Click **OK**

**Type the website address and your credential information**

Make sure that the user name and password that you type can be used to access the location.

Internet or network address:  1

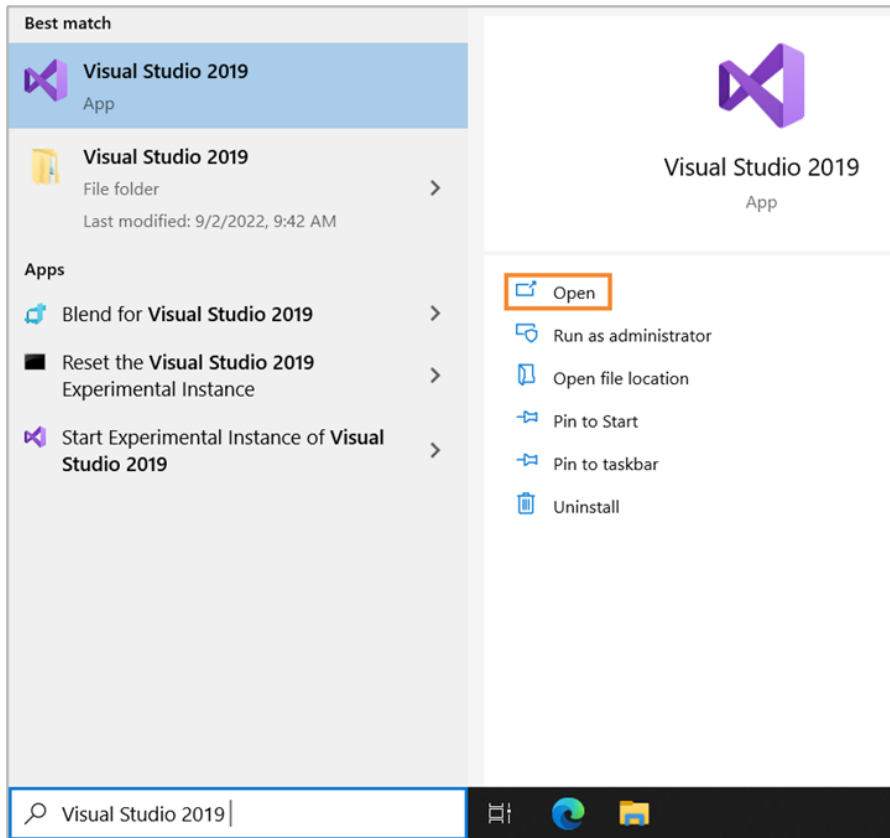
User name:  2

Password:  3

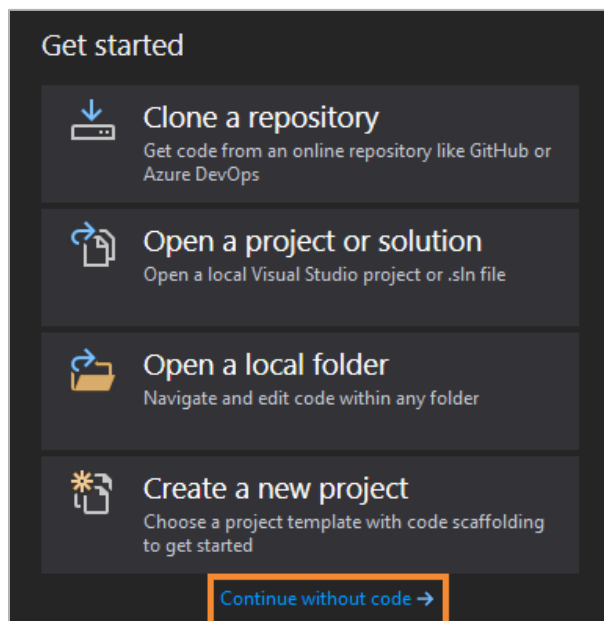
4

## SET SECURE CHANNEL

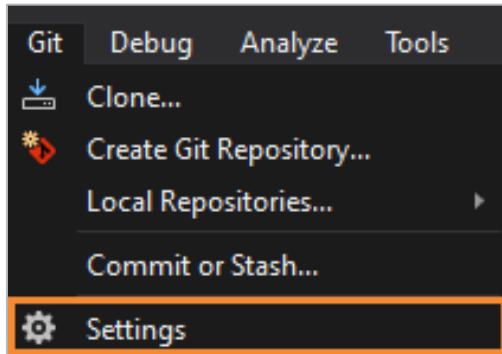
1. Open **Visual Studio 2019**



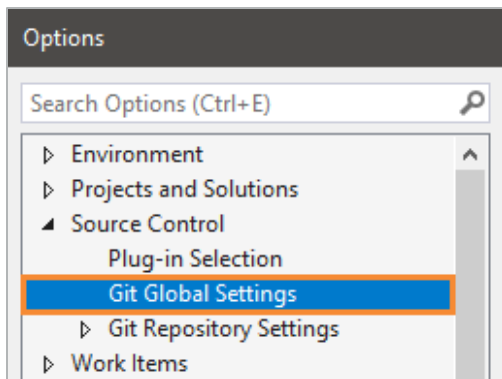
2. Click **Continue without code**



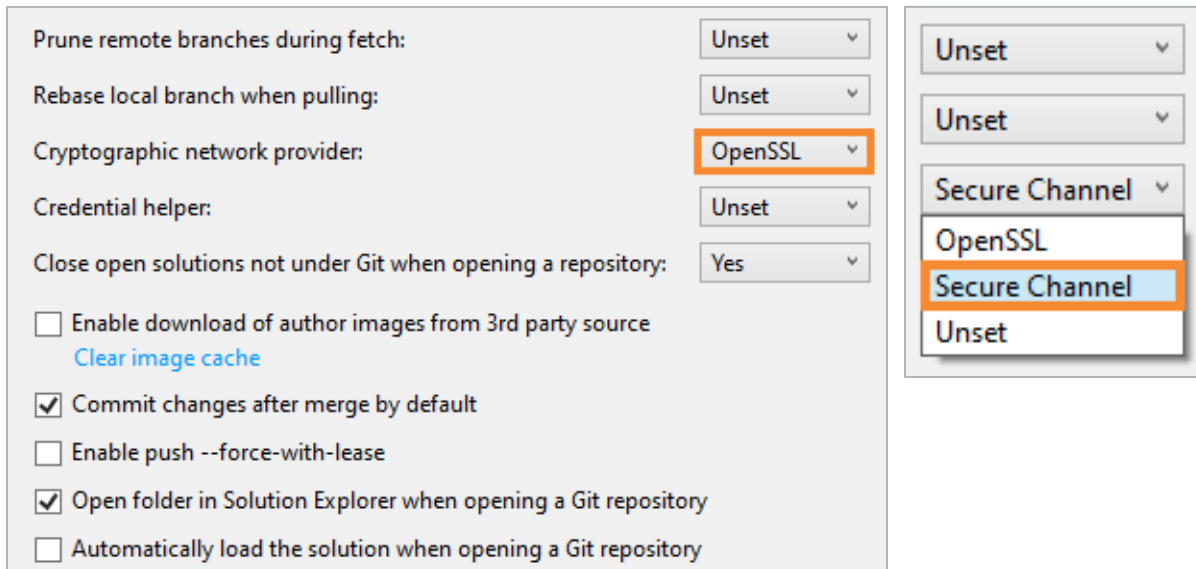
3. Click **Git > Settings**



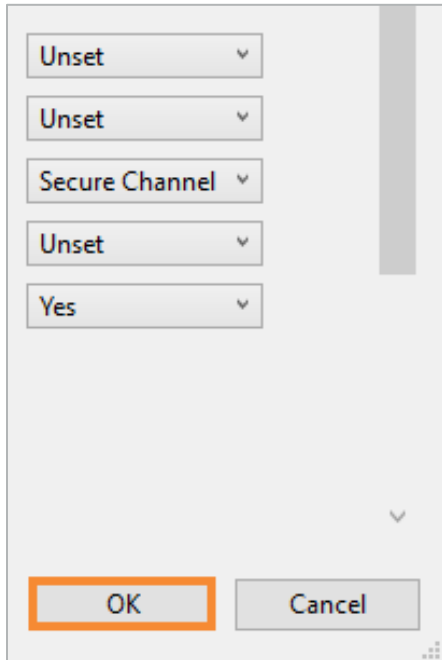
4. Click **Git Global Settings** (if not already selected)



5. Change Cryptographic network provider to **Secure Channel**



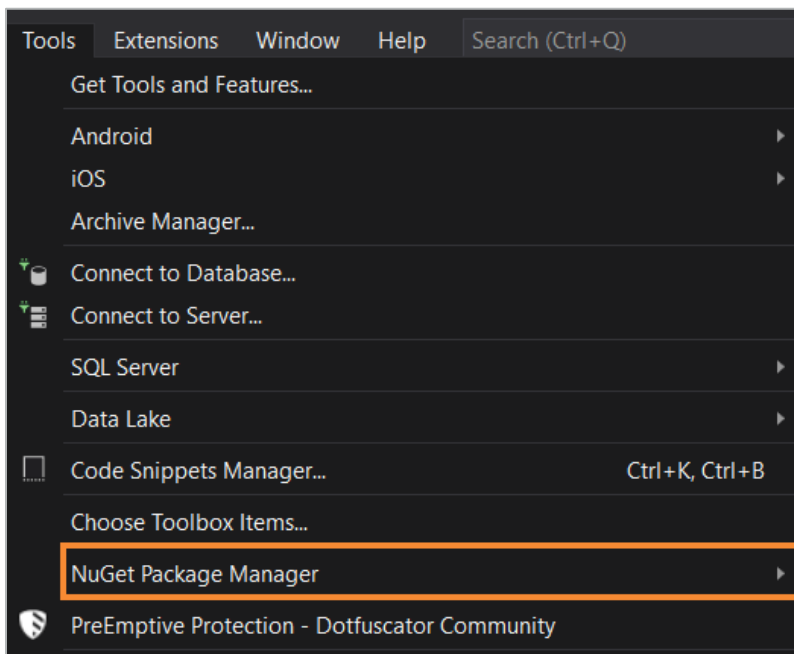
6. Click **OK**



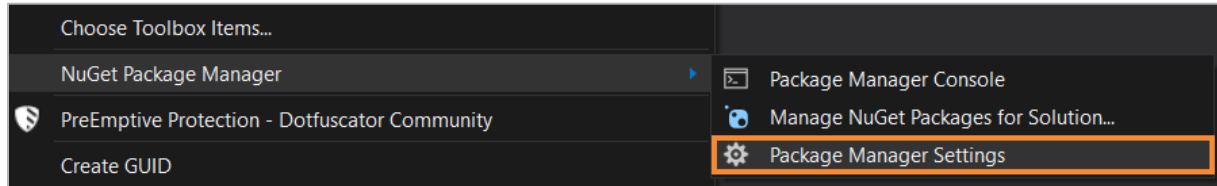
## ADJUST NUGET PACKAGES

Our applications depend on internal NuGet packages, this is where we establish the connection to the correct NuGet Package repository.

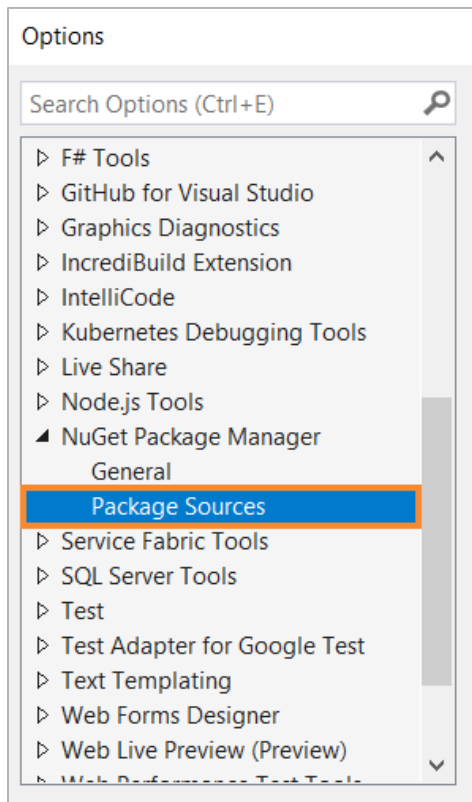
1. Go to **Tools > NuGet package manager**



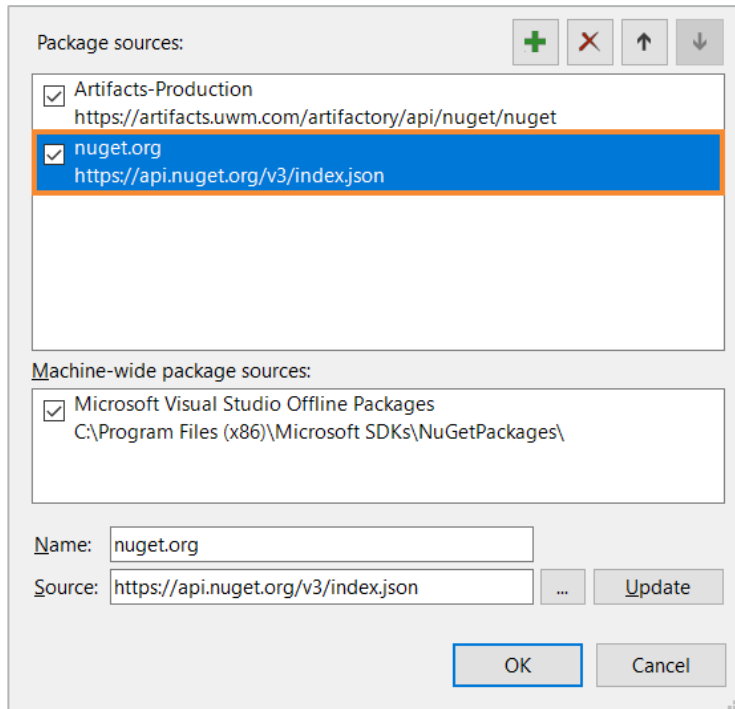
## 2. Select **Package Manager Settings**



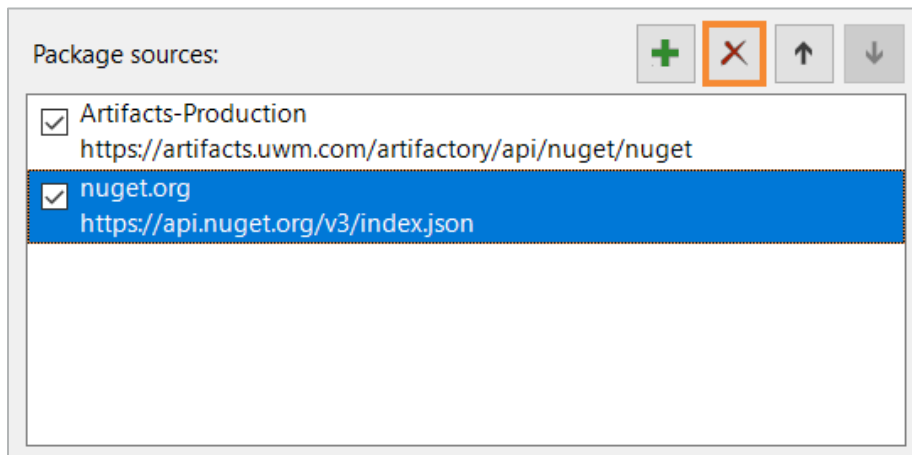
## 3. Under NuGet Package Manager, select **Package Sources**



4. Select **NuGet.org**

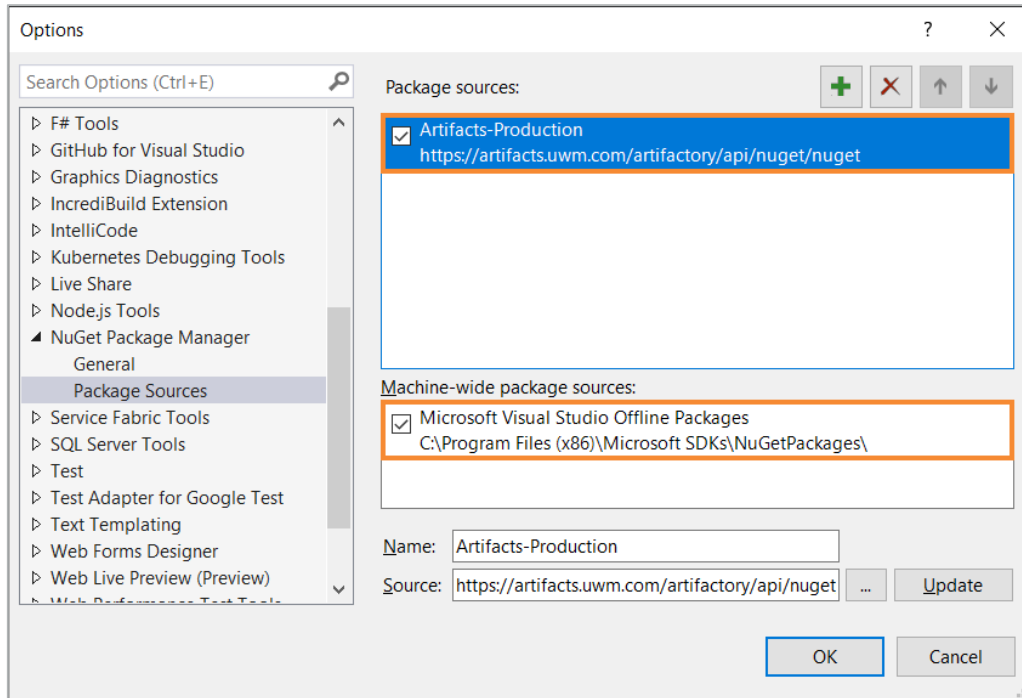


5. Click on the **X** to remove nuget.org

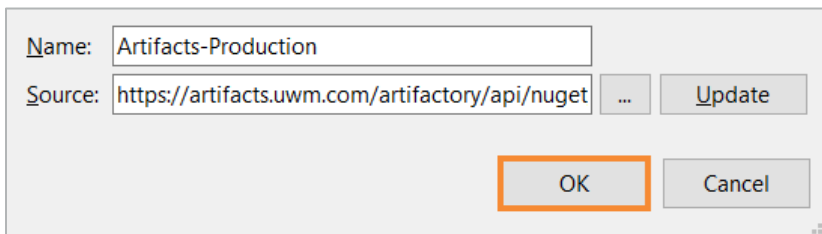


6. Ensure the only two sources left are **Artifacts-Production** and **Microsoft Visual Studio Offline Packages**

**NOTE:** If Artifacts-Production is missing [click here](#)



7. Click **OK**



## NAVIGATE TO THE RELEVANT REPOSITORY

Select which repository you need to set up — Lending or Edge. Clicking on the relevant tile will take you to the necessary page.

**LENDING**

**EDGE**

**\*\* INTERNAL USE ONLY \*\***

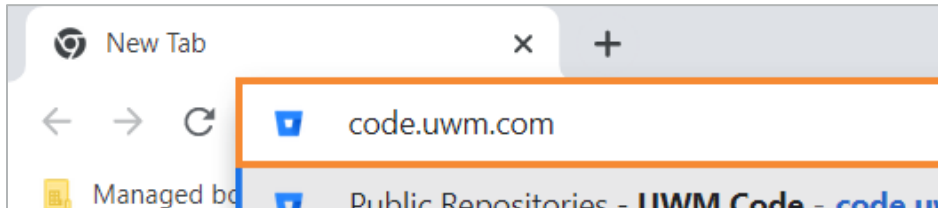


## CLONE LENDING REPOSITORY

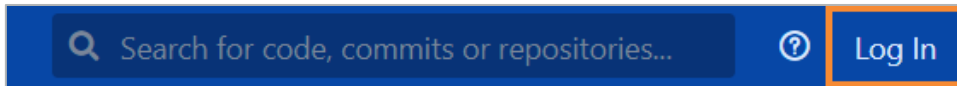
Retrieving a copy of the source code for Lending.

### NAVIGATE TO CODE.UWM.COM

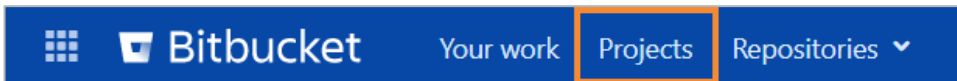
1. In your web browser, navigate to [code.uwm.com](https://code.uwm.com)<sup>3</sup>



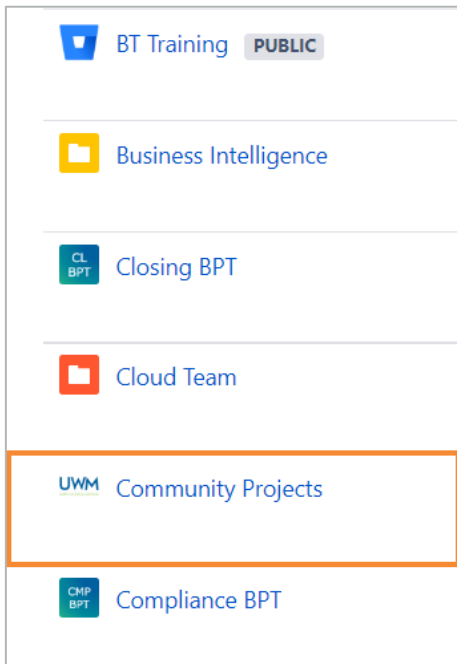
2. **Login** if you are not already



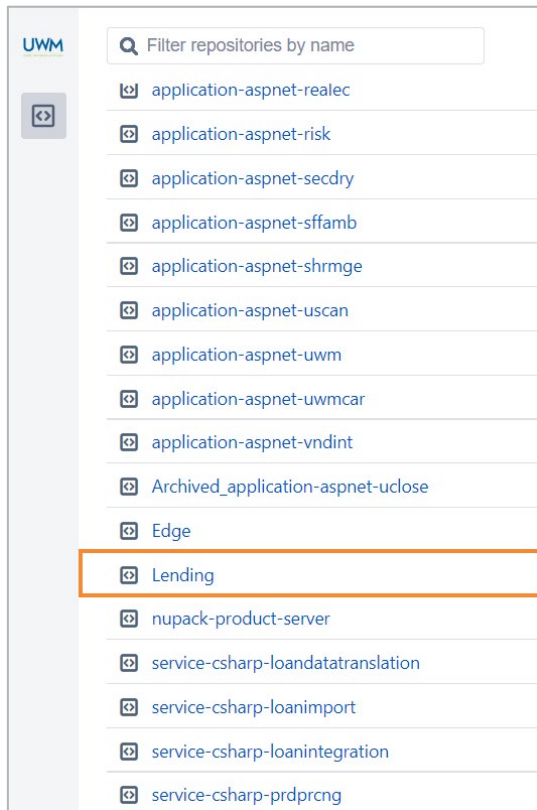
3. Click on **Projects**



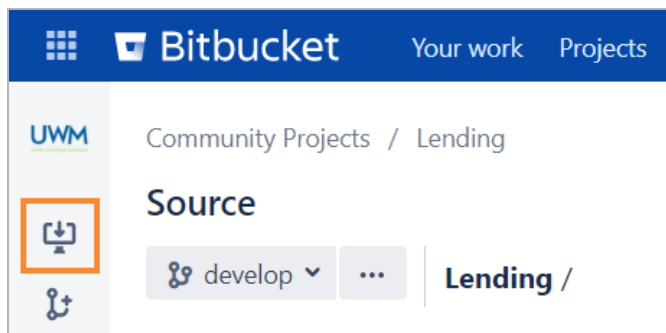
4. Scroll down and click on **Community Projects**



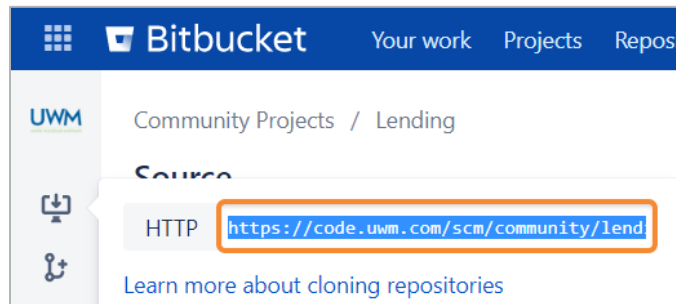
5. Scroll down and click on **Lending**



6. On the left-hand side, click on the top icon to **Clone**

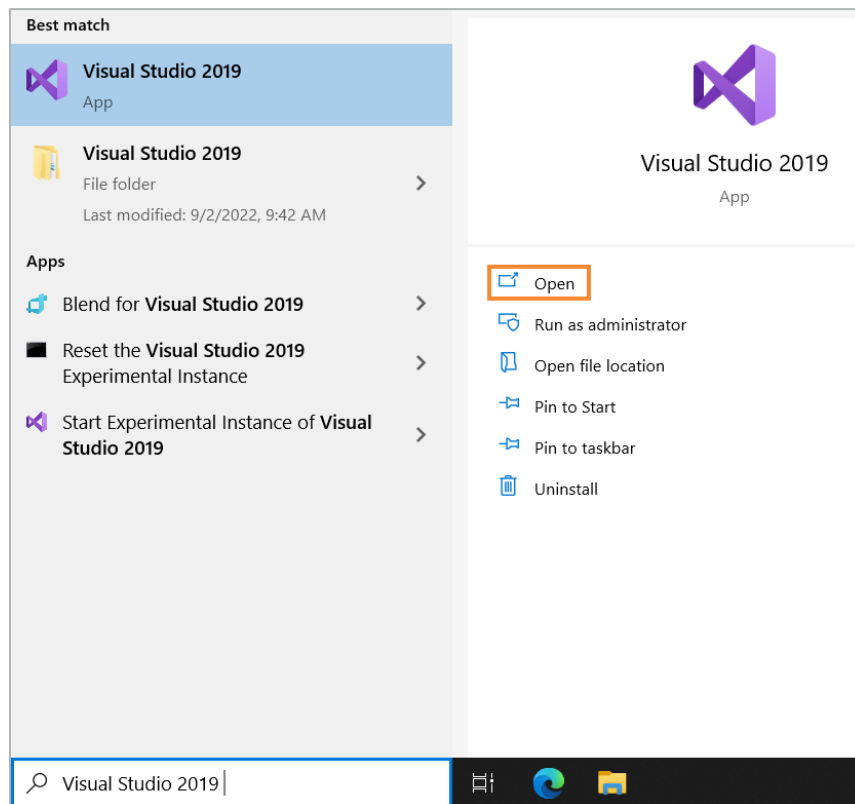


## 7. CTRL + C to **Copy**

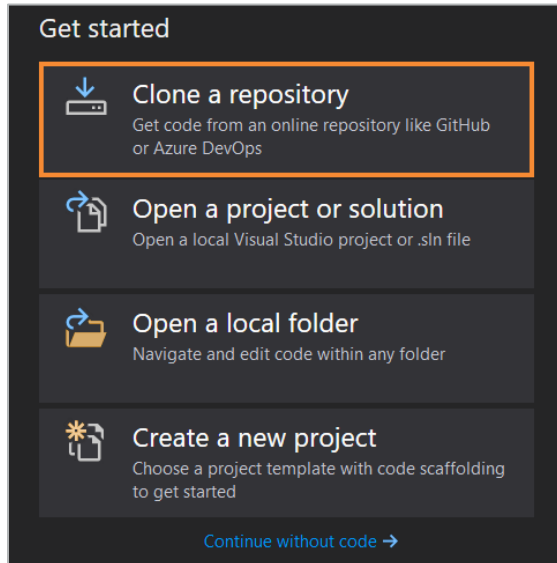


## INSERT REPOSITORY LOCATION

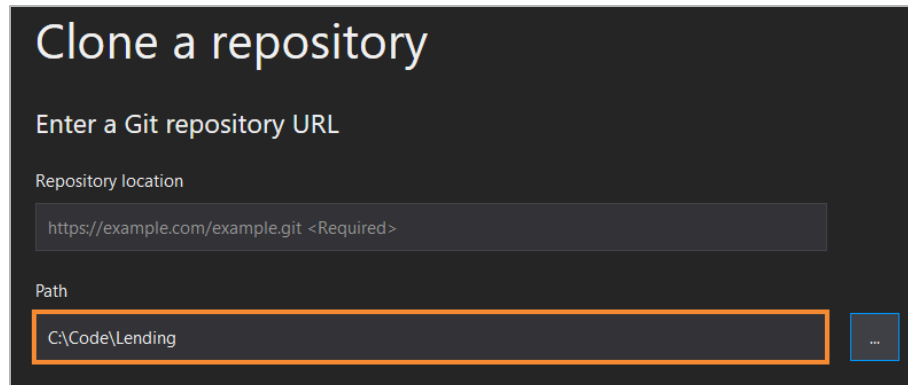
1. **Open** Visual Studio Professional 2019 (close and reopen if it was already open)



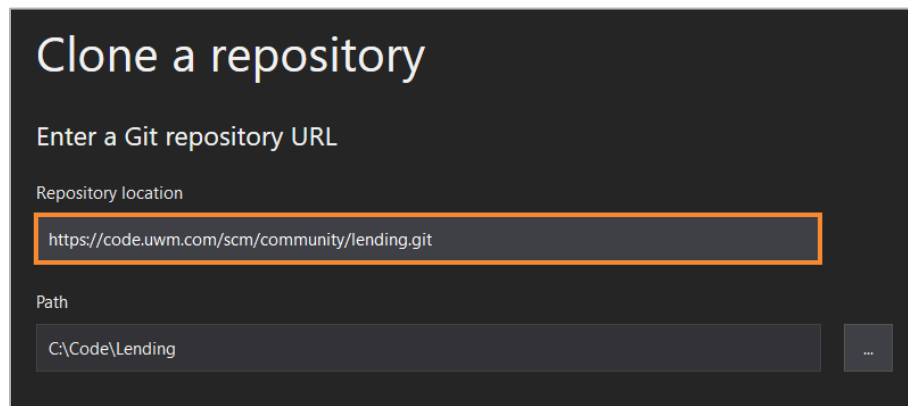
2. Click **Clone a repository**



3. Change Path to **C:/Code/Lending**

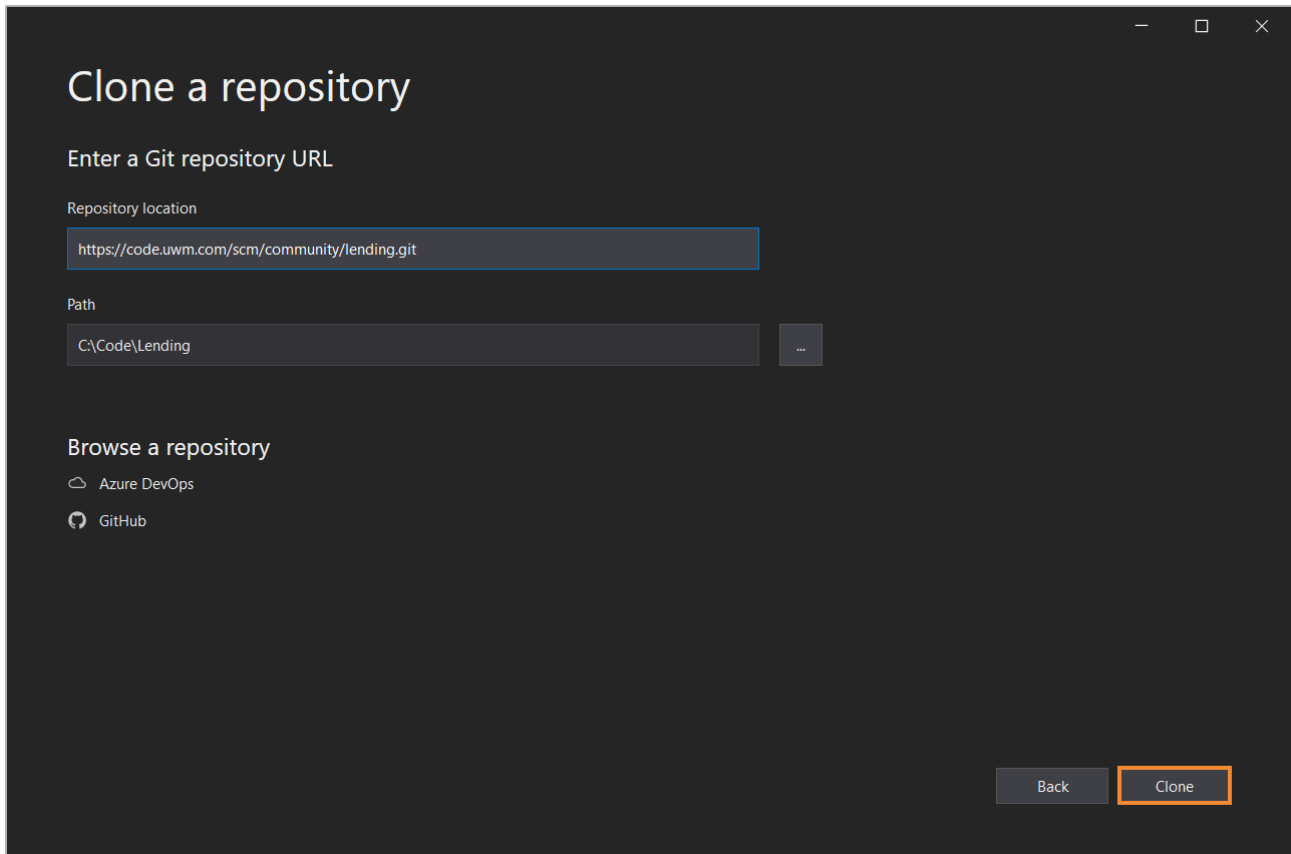


5. In the box labeled Repository location, CTRL + V to **paste** the cloned path



6. Click **Clone**

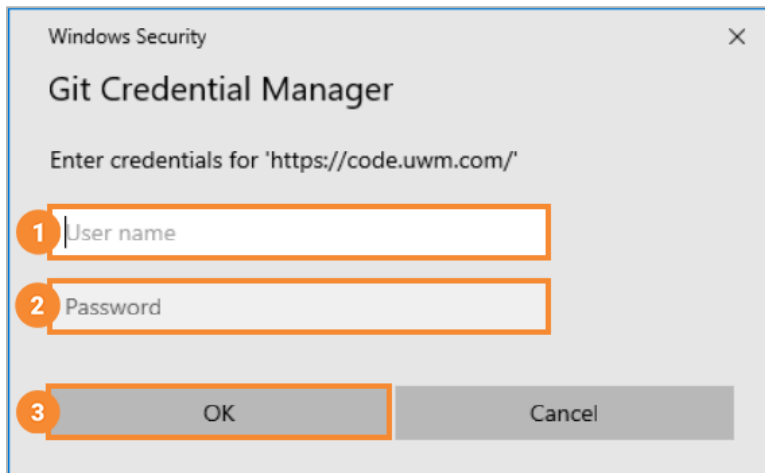
**NOTE:** If you are prompted with a "Git failed with a fatal error" pop up **click here**



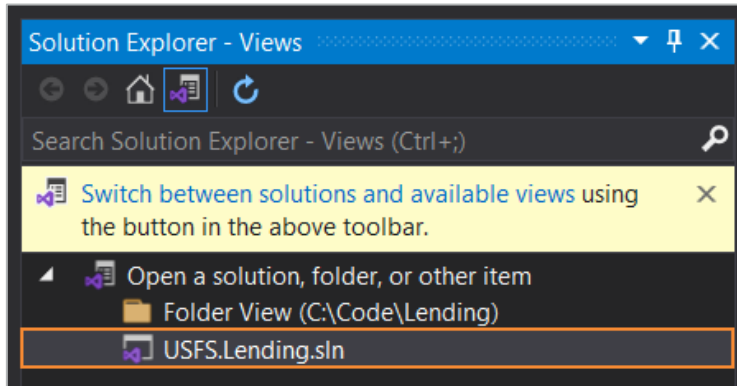
\*\* INTERNAL USE ONLY \*\*

7. The Git Credential Manager may show up, if it doesn't, you can skip this step:

1. Enter **UWM Username**
2. Enter **UWM Password**
3. Click **OK**

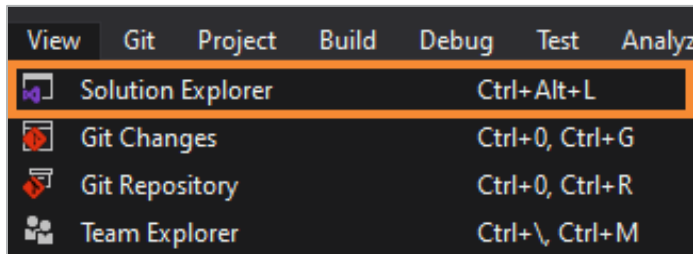


- In the solution explorer, double click **USFS.Lending.sln**

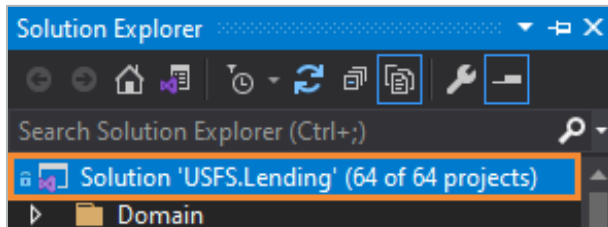


## RESTORE NUGET PACKAGES

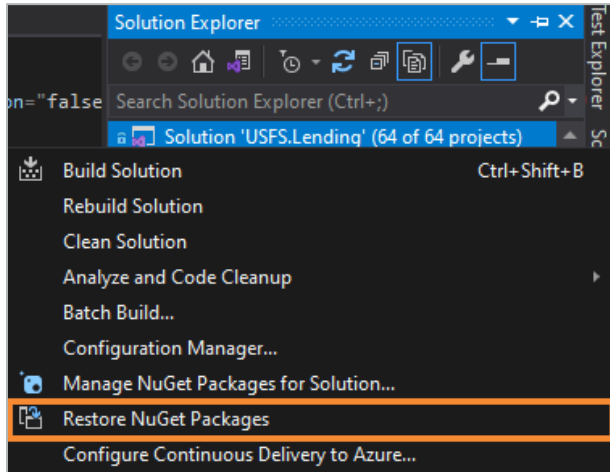
- Open the Solution Explorer from **View > Solution Explorer**



- Right click **Solution 'USFS.Lending'**



### 3. Click **Restore NuGet Packages**

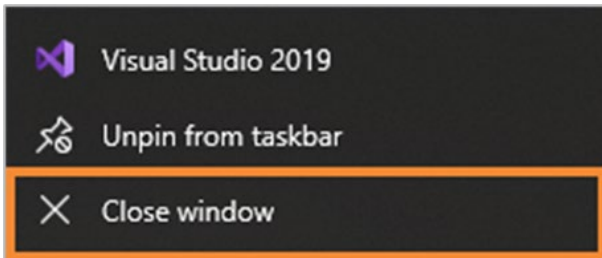


## RUN LENDING LOCALLY

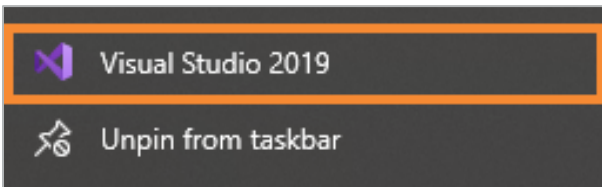
Run an instance of Lending on your own local machine to test that your project is configured correctly.

### CLEAN AND REBUILD

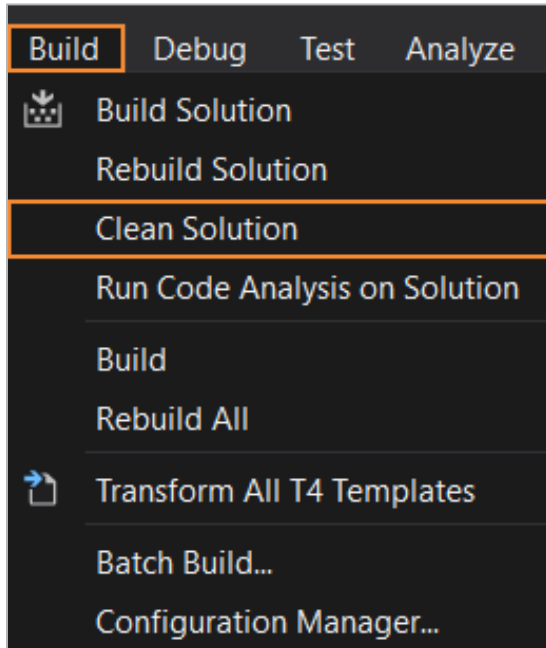
#### 1. Close **Visual Studio**



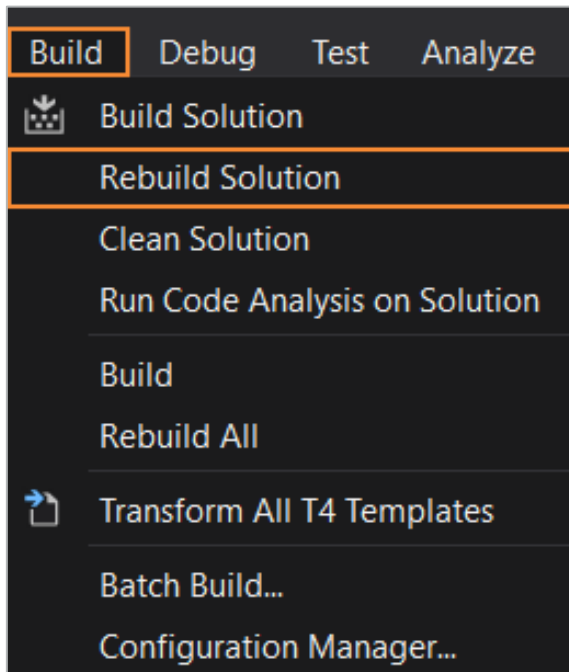
#### 2. Reopen **Visual Studio**



3. Go to **Build > Clean Solution**



4. Go to **Build > Rebuild Solution**





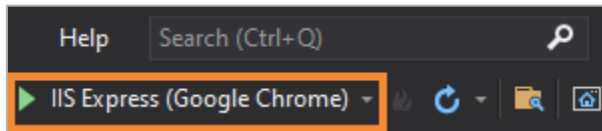
- Let the build run, check that the build solution succeeded after it finishes

```

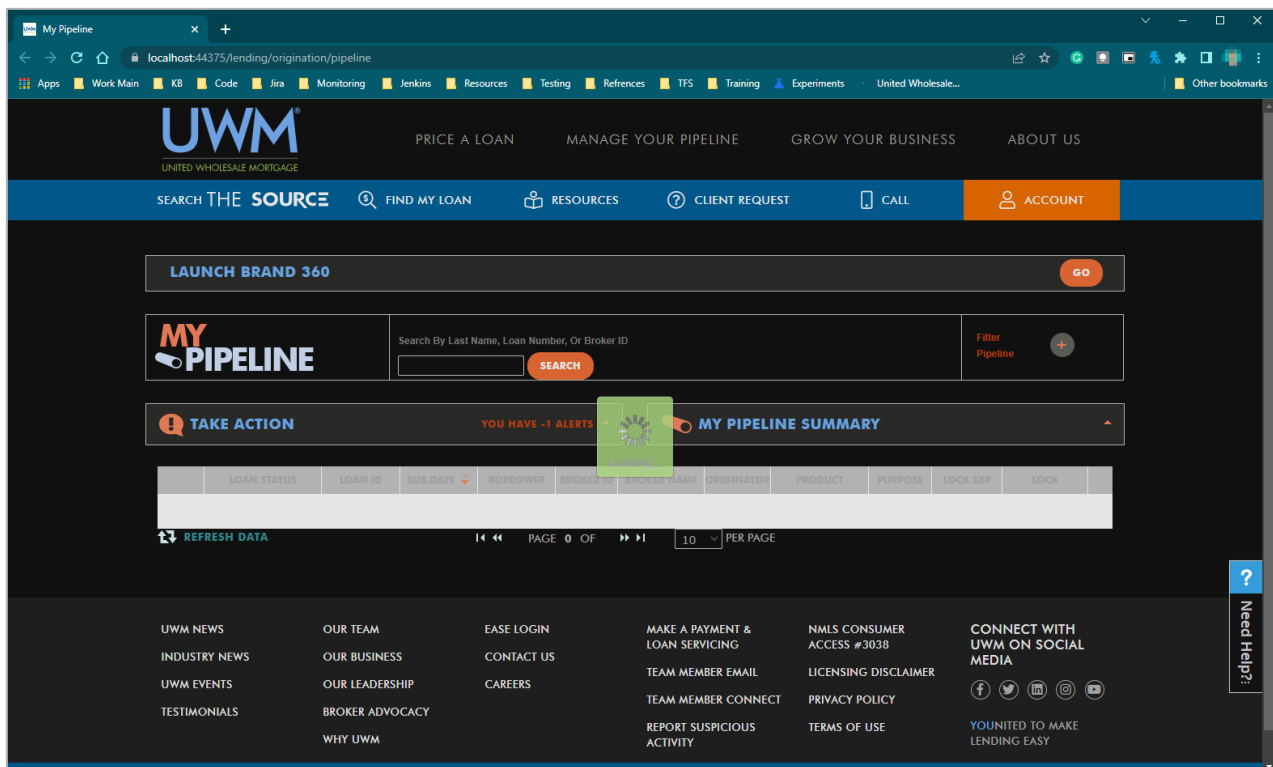
Output
Show output from: Build
64>C:\Program Files (x86)\Microsoft Visual Studio\2019\Professional\MSBuild\Current\Bin
64>C:\Program Files (x86)\Microsoft Visual Studio\2019\Professional\MSBuild\Current\Bin
64>C:\Program Files (x86)\Microsoft Visual Studio\2019\Professional\MSBuild\Current\Bin
64>C:\Program Files (x86)\Microsoft Visual Studio\2019\Professional\MSBuild\Current\Bin
64>C:\Program Files (x86)\Microsoft Visual Studio\2019\Professional\MSBuild\Current\Bin
64> USFS.WebUI.Home.UnitTests -> C:\Code\Lending\USFS.WebUI.Home.UnitTests\bin\Debug\US
===== Build: 64 succeeded, 0 failed, 0 up-to-date, 0 skipped =====
  
```

## RUN IIS EXPRESS

- Click **IIS Express**



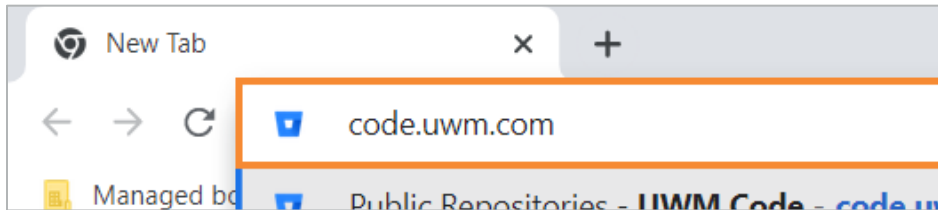
- If successful, your pop-up window should look similar to this:



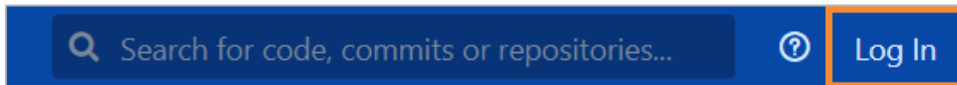
## CLONE EDGE REPOSITORY

### NAVIGATE TO CODE.UWM.COM

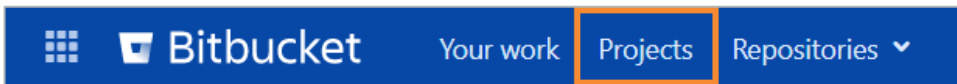
8. In your web browser, navigate to [code.uwm.com](https://code.uwm.com)<sup>3</sup>



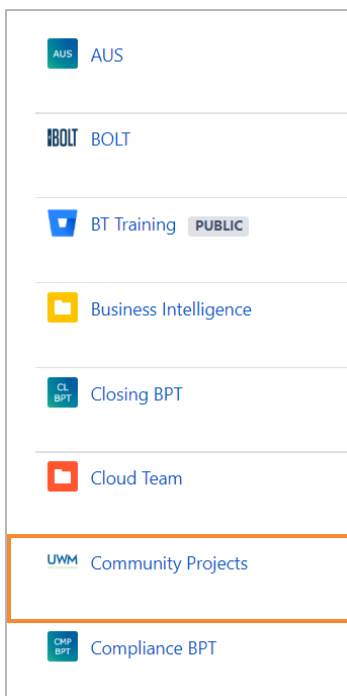
9. **Login** if you are not already



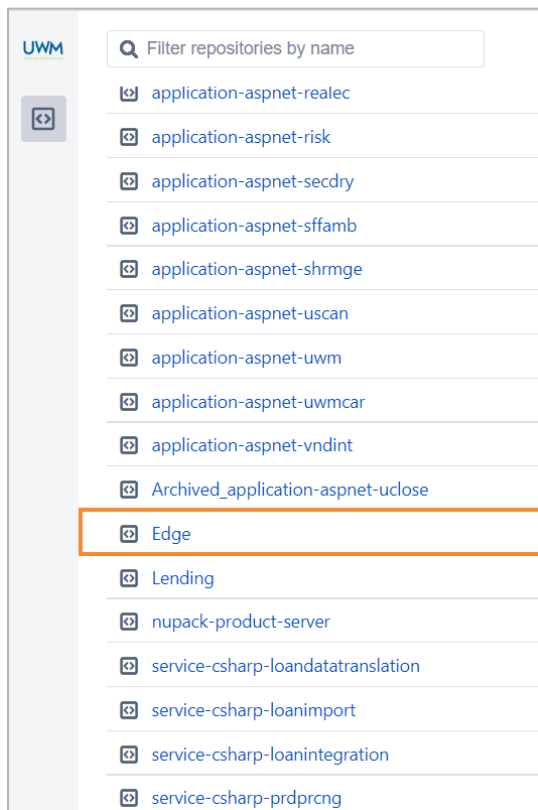
10. Click on **Projects**



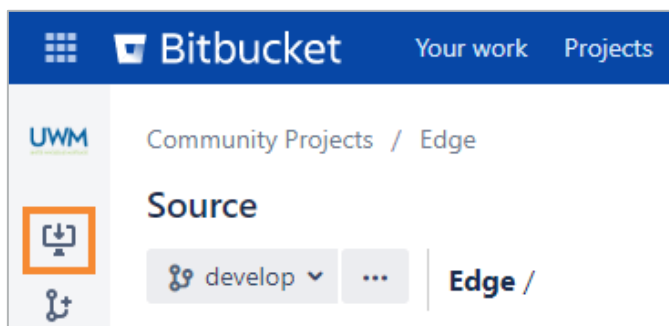
11. Scroll down and click on **Community Projects**



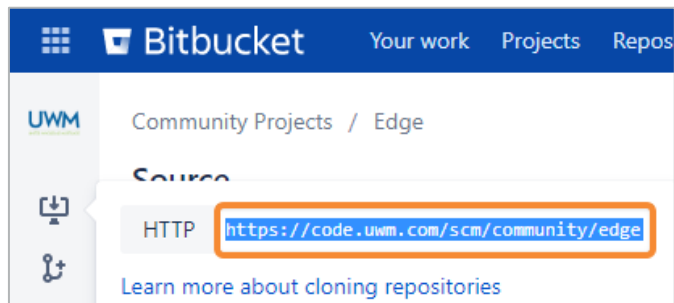
12. Scroll down and click on **Edge**



13. On the left-hand side, click on the top icon to **Clone**

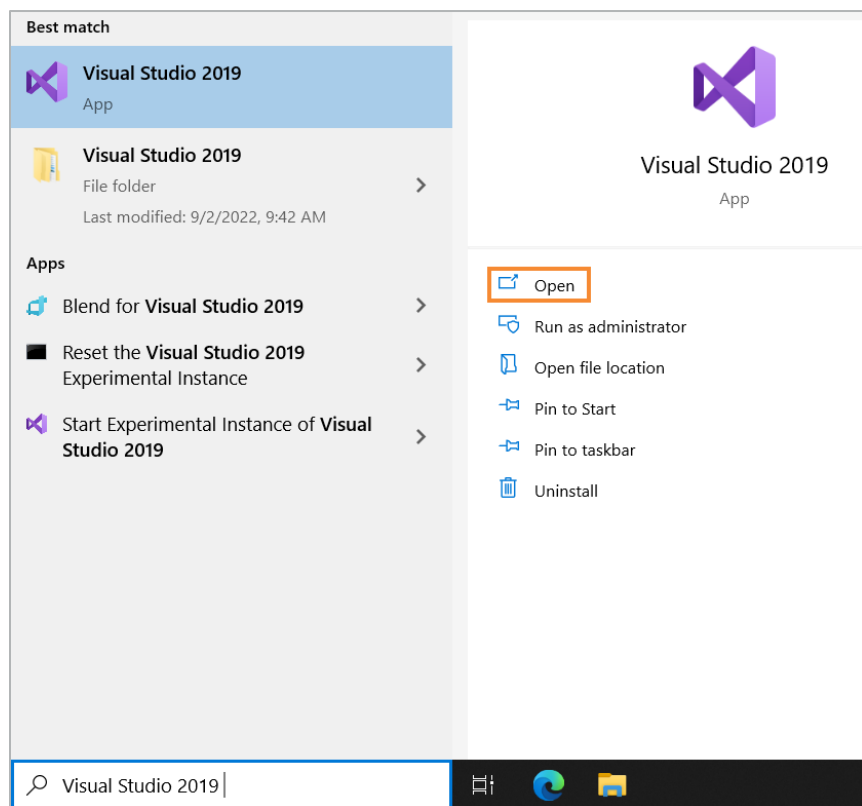


#### 14. CTRL + C to **Copy**

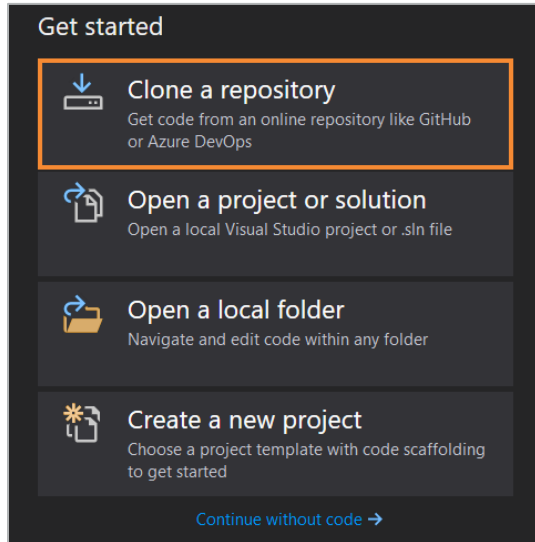


## INSERT REPOSITORY LOCATION

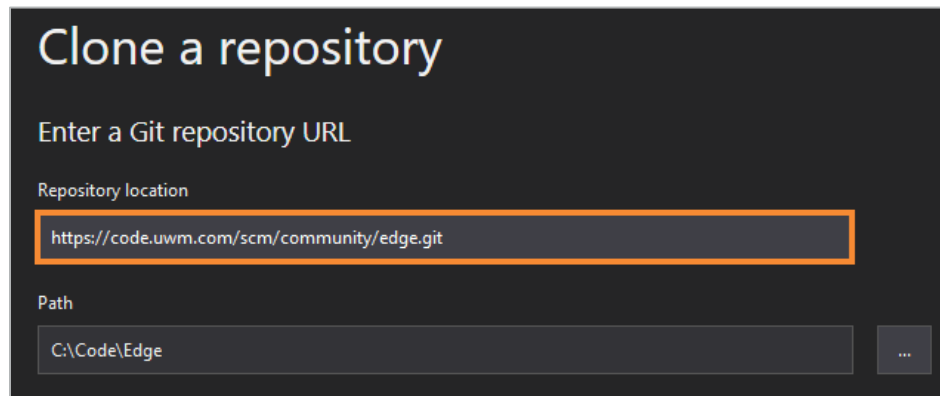
4. **Open** Visual Studio Professional 2019 (close and reopen if it was already open)



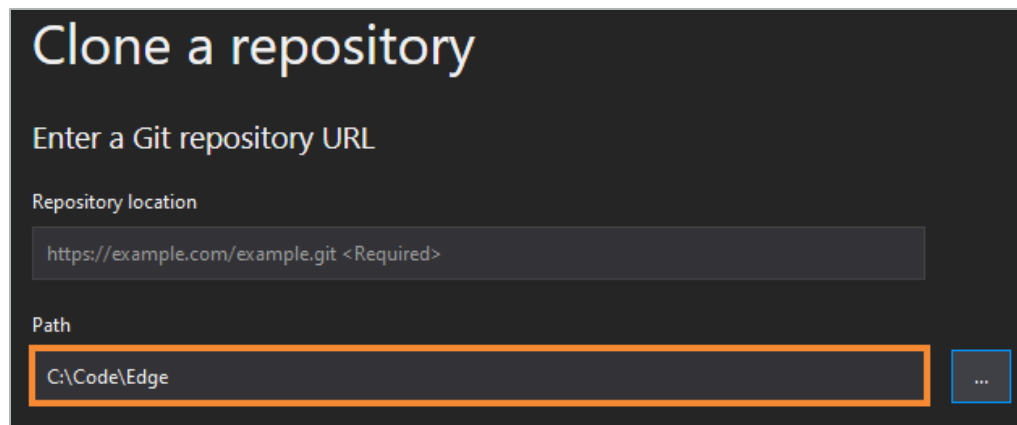
5. Click **Clone a repository**



6. Change Path to **C:/Code/Edge**

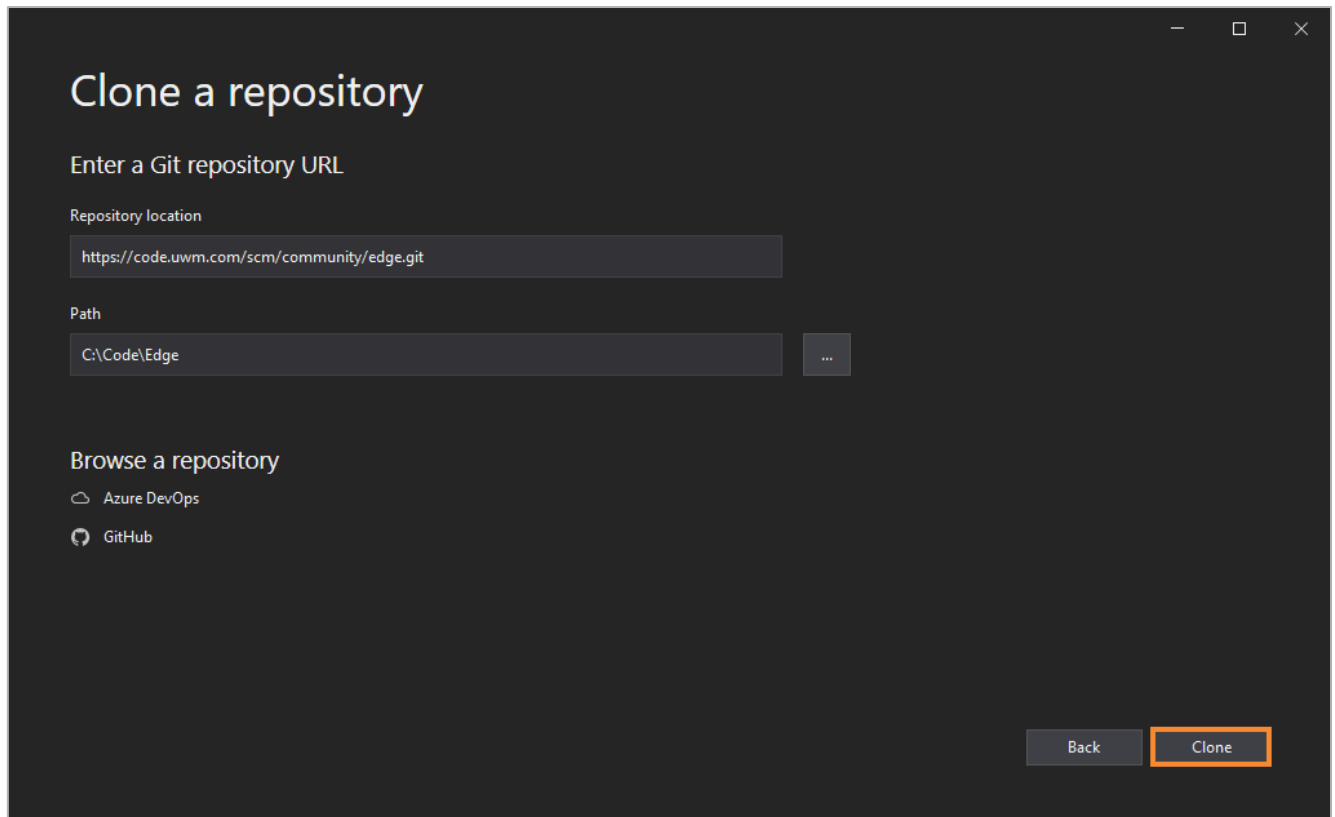


7. In the box labeled Repository location, CTRL + V to **paste** the cloned path



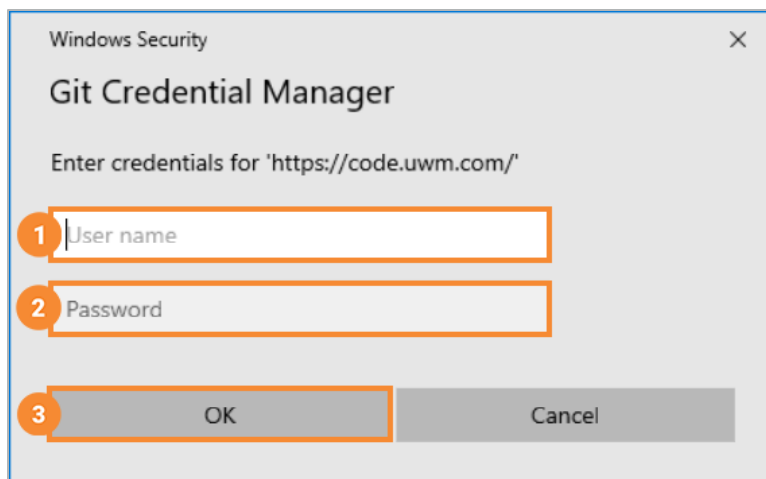
8. Click **Clone**

**NOTE:** If you are prompted with a "Git failed with a fatal error" pop up **click here**

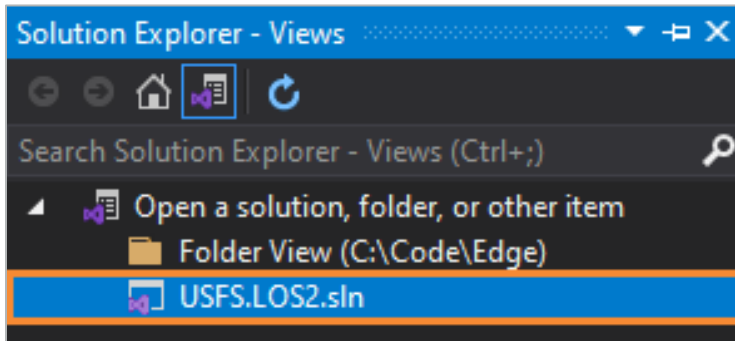


9. The Git Credential Manager may show up, if it doesn't, you can skip this step:

1. Enter **UWM Username**
2. Enter **UWM Password**
3. Click **OK**

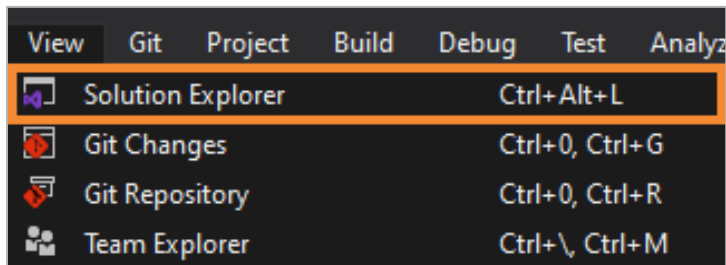


10. In the solution explorer, double click **USFS.LOS2.sln**

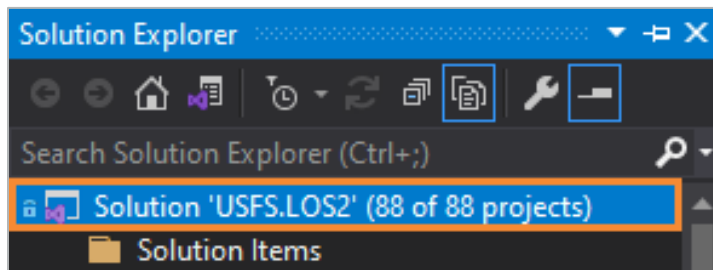


## RESTORE NUGET PACKAGES

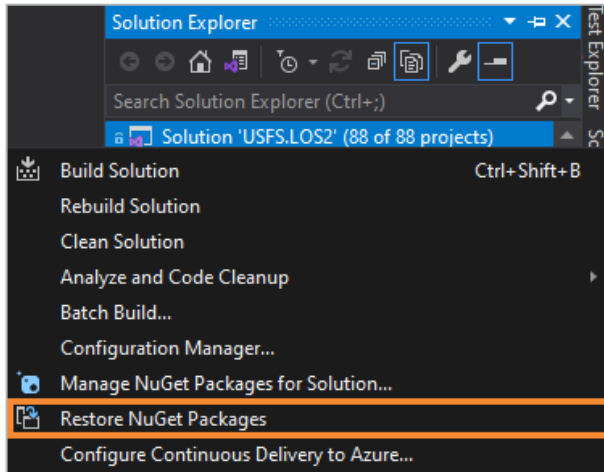
4. Open the Solution Explorer from **View > Solution Explorer**



5. Right click **Solution 'USFS.LOS2'**



6. Click **Restore NuGet Packages**

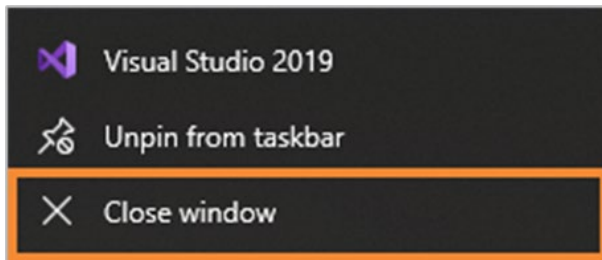


## RUN EDGE LOCALLY

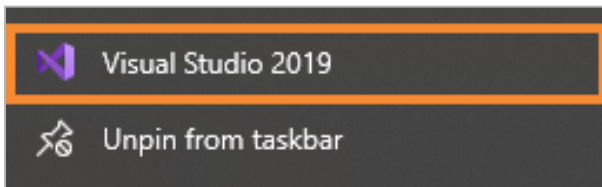
Run an instance of Edge on your own local machine to test that your project is configured correctly.

## CLEAN AND REBUILD

3. Close **Visual Studio**

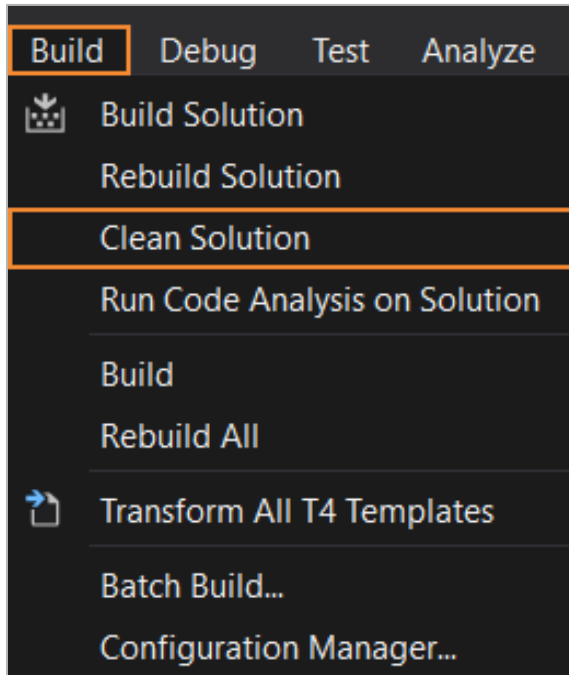


4. Reopen **Visual Studio**

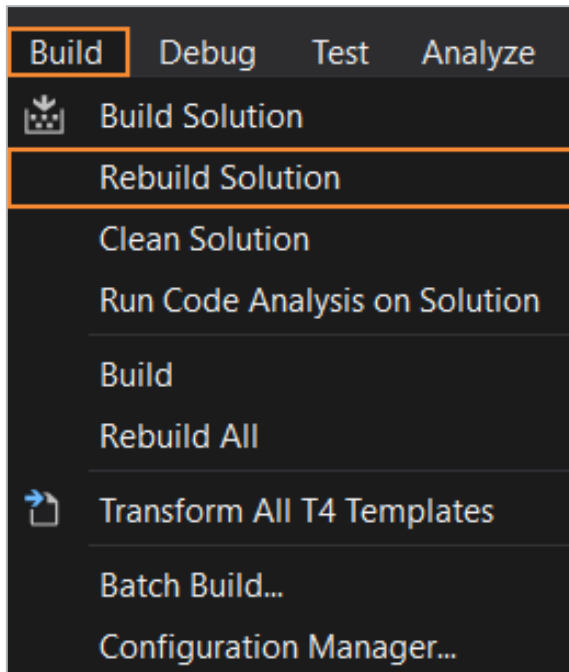




6. Go to **Build > Clean Solution**



7. Go to **Build > Rebuild Solution**



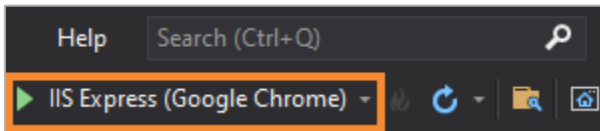
- Let the build run, check that the build solution succeeded after it finishes

```

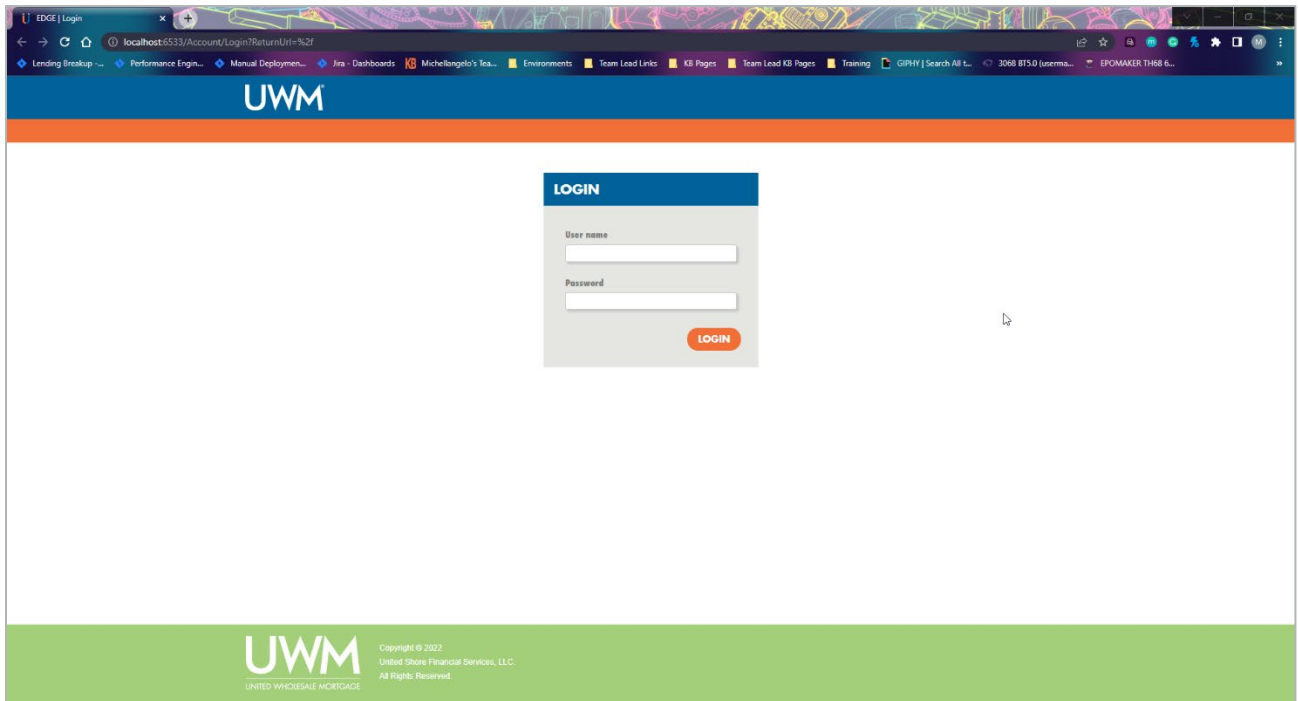
Output
Show output from: Build
64>C:\Program Files (x86)\Microsoft Visual Studio\2019\Professional\MSBuild\Current\Bin
64>C:\Program Files (x86)\Microsoft Visual Studio\2019\Professional\MSBuild\Current\Bin
64>C:\Program Files (x86)\Microsoft Visual Studio\2019\Professional\MSBuild\Current\Bin
64>C:\Program Files (x86)\Microsoft Visual Studio\2019\Professional\MSBuild\Current\Bin
64>C:\Program Files (x86)\Microsoft Visual Studio\2019\Professional\MSBuild\Current\Bin
64> USFS.WebUI.Home.UnitTests -> C:\Code\Lending\USFS.WebUI.Home.UnitTests\bin\Debug\US
===== Build: 64 succeeded, 0 failed, 0 up-to-date, 0 skipped =====
  
```

## RUN IIS EXPRESS

- Click **IIS Express**



- If successful, your pop-up window should look similar to this:



## TROUBLESHOOTING

This section is used to fix errors that you may run into while setting up Visual Studio for Lending

### INSTALL VISUAL STUDIO 2019

Visual Studio should come preinstalled on developer laptops, but if it is not, follow the steps below to install it on your company issued laptop.

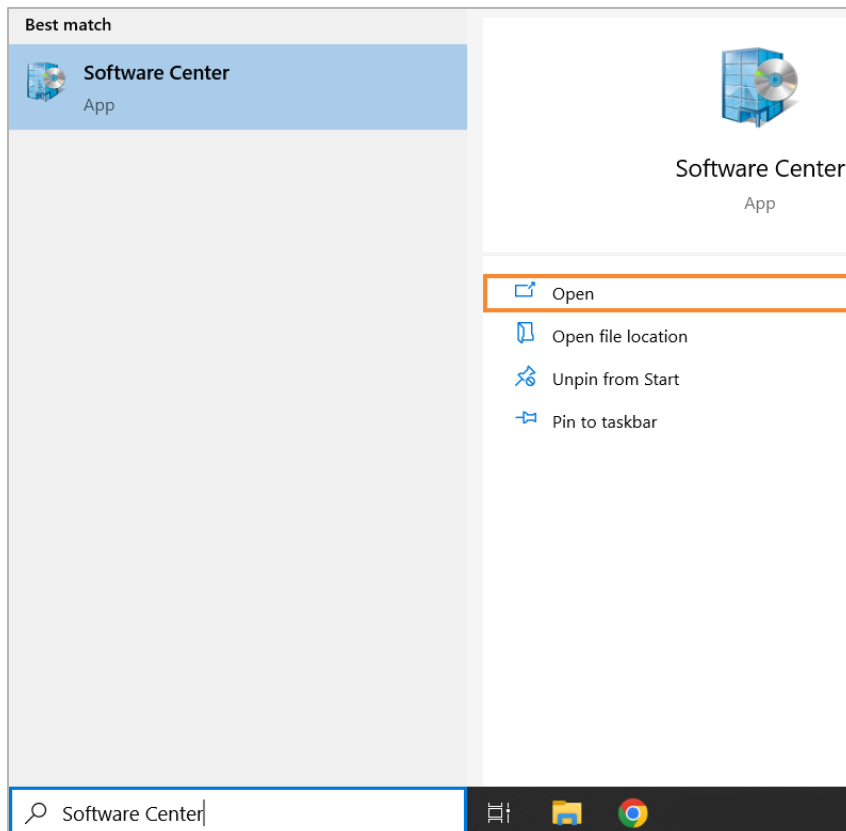
1. In the task bar, click your cursor in the **search bar**



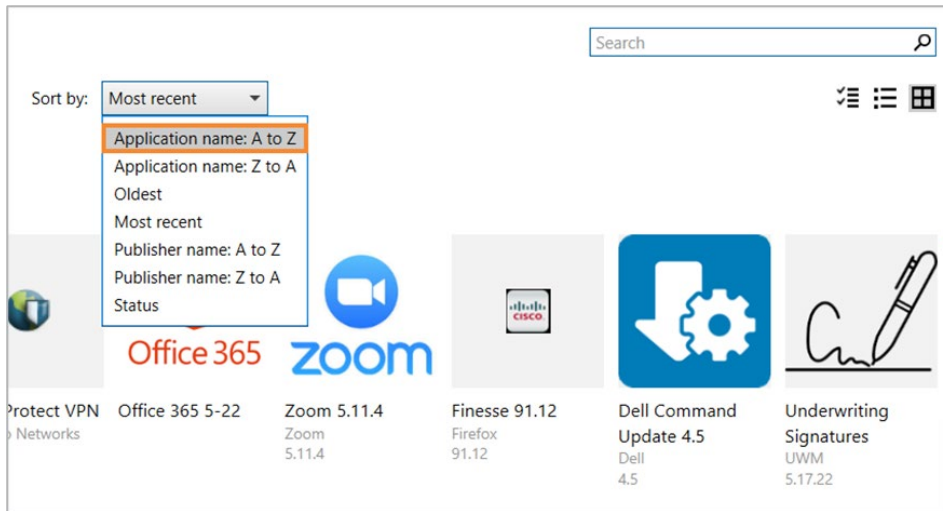
2. Type in the search bar: **Software Center**



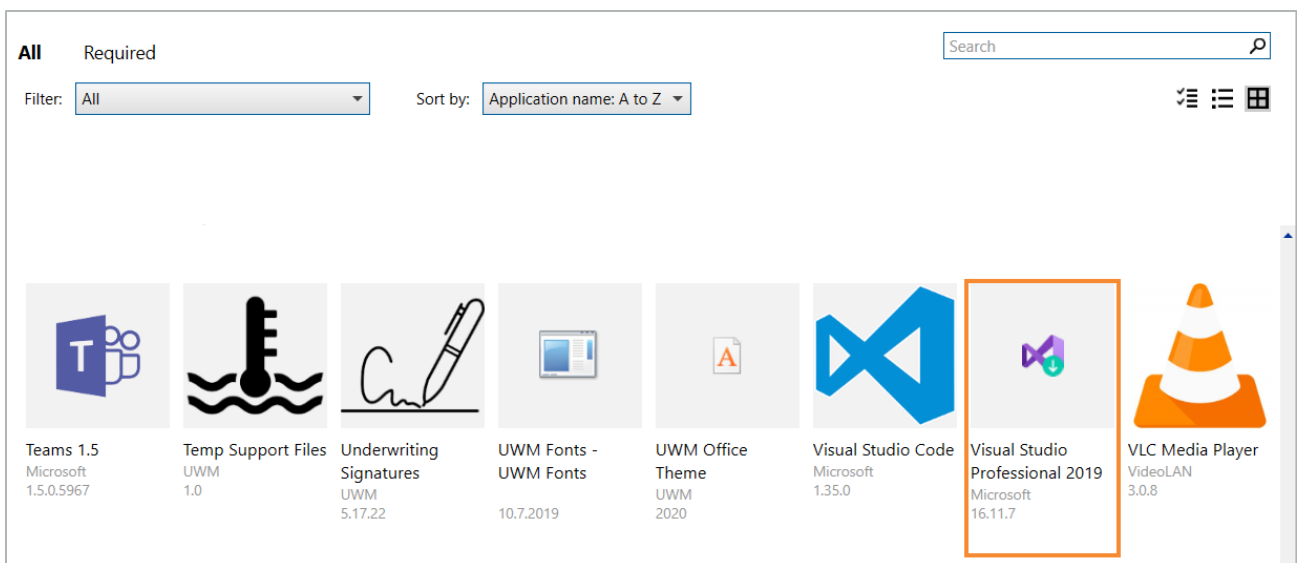
3. Click **Open**



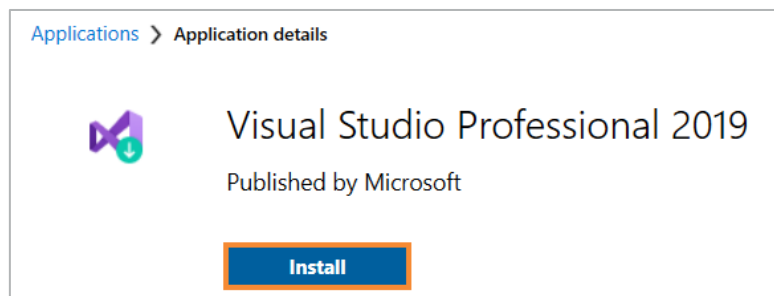
4. Sort by: **Application name: A to Z**



5. Scroll down to **Visual Studio Professional 2019** and click the program

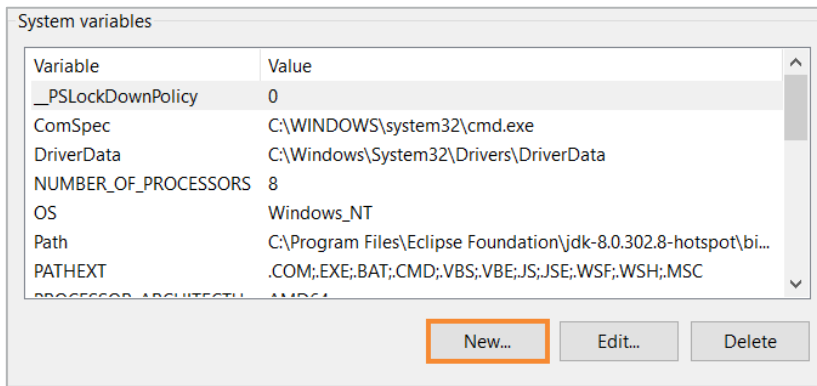


6. Click **Install**

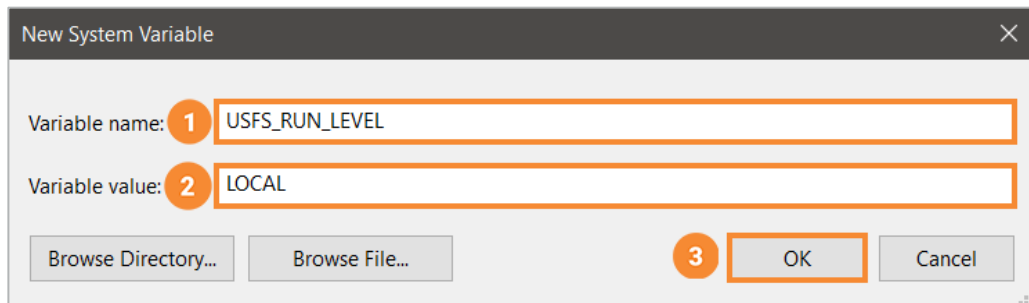


## MISSING LOCAL CREDENTIAL

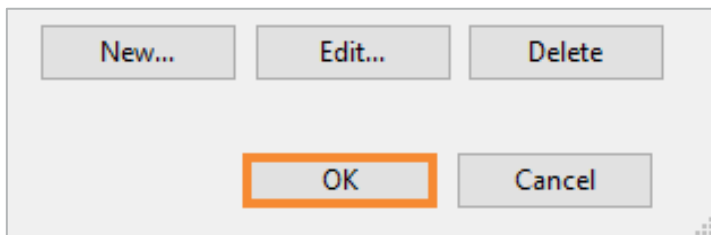
1. Click **New**



2. Fill out form
  1. In Variable name type **USFS\_RUN\_LEVEL**
  2. In Variable value type **LOCAL**
  3. Click **OK**



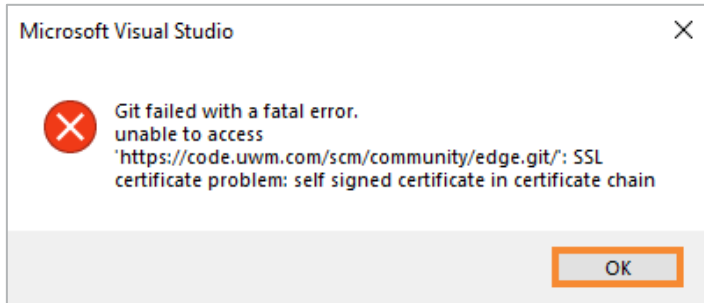
3. Click **OK**



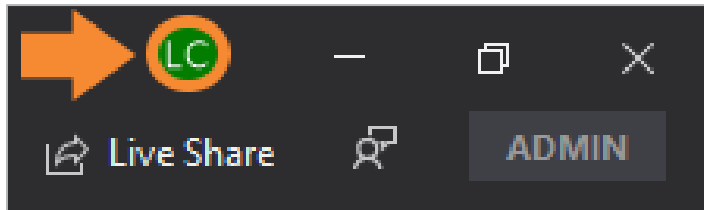
4. Click here to return to the next step

## GIT FAILED WITH A FATAL ERROR

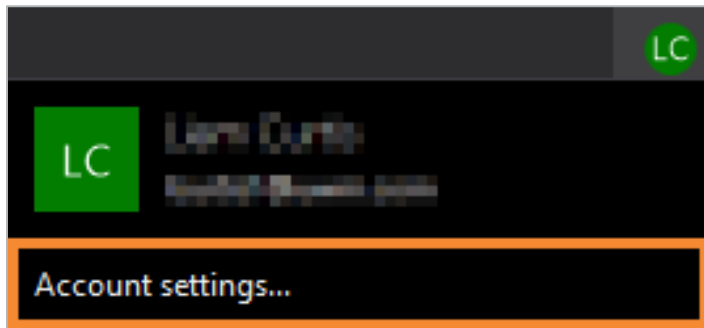
1. Click **OK**



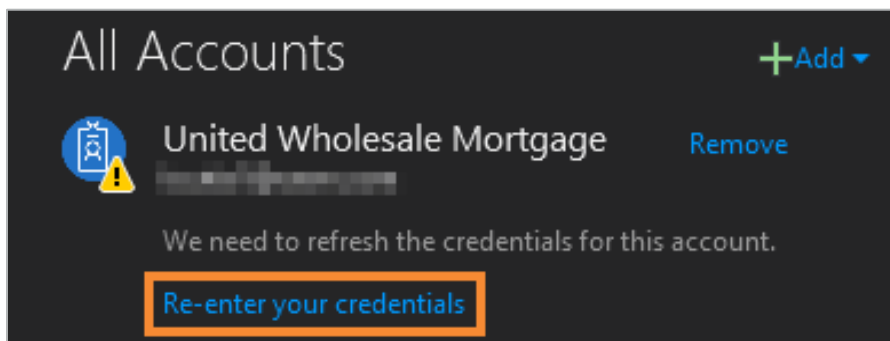
2. Click your **account in the upper right**



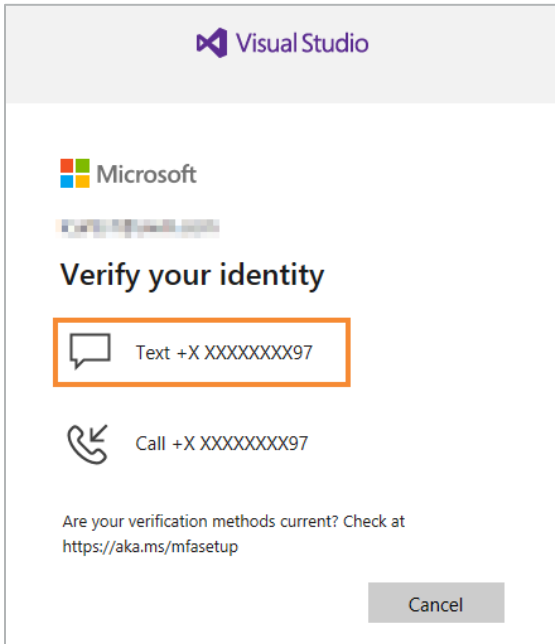
3. Click **Account settings**



4. Click **Re-enter your credentials**



## 5. Verify your **identity**



Visual Studio

Microsoft

Verify your identity

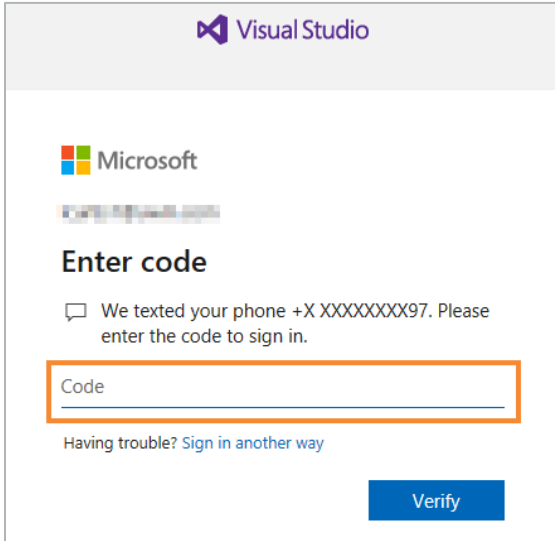
Text +X XXXXXXXXX97

Call +X XXXXXXXXX97

Are your verification methods current? Check at <https://aka.ms/mfasetup>

Cancel

## 6. Enter **code**



Visual Studio

Microsoft

Enter code

We texted your phone +X XXXXXXXXX97. Please enter the code to sign in.

Code

Having trouble? [Sign in another way](#)

Verify

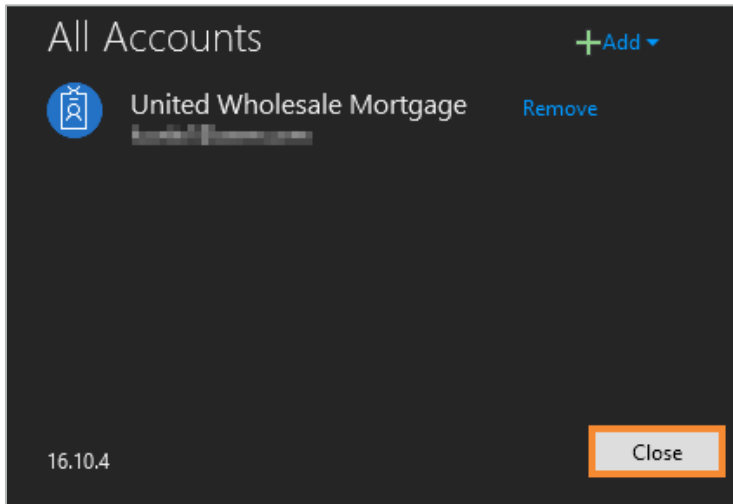
## 7. Click **Verify**

**NOTE:** You may have to enter code and verify twice



Verify

8. Click **Close**

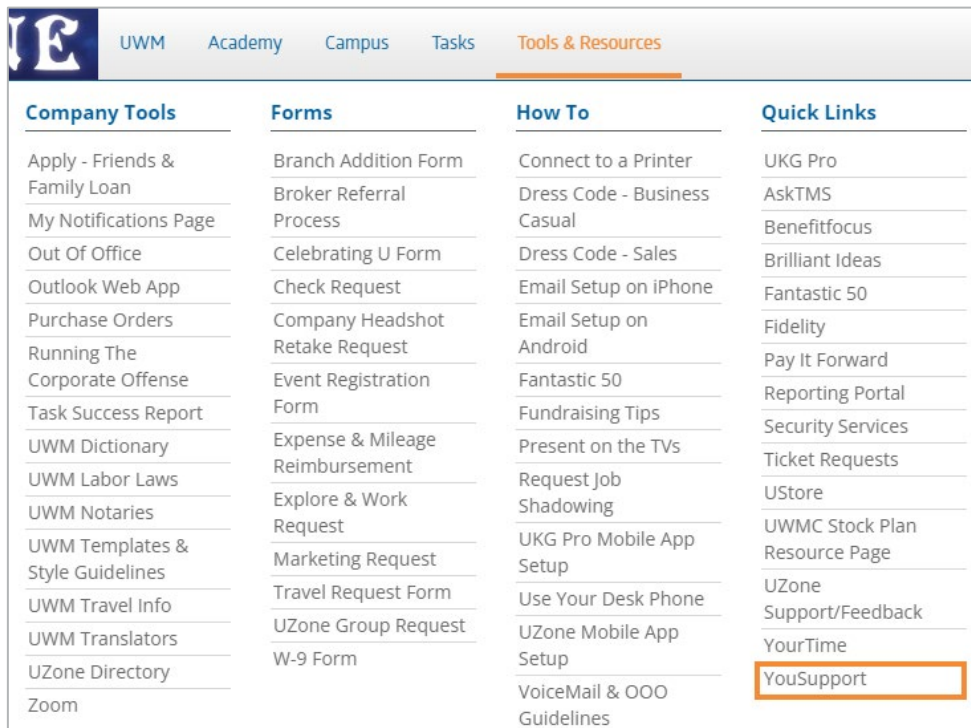


9. Relaunch Visual Studio and try **cloning the repository** again. Click here to return to the next step

## MISSING MICROSERVICE CERTS IN SOFTWARE CENTER

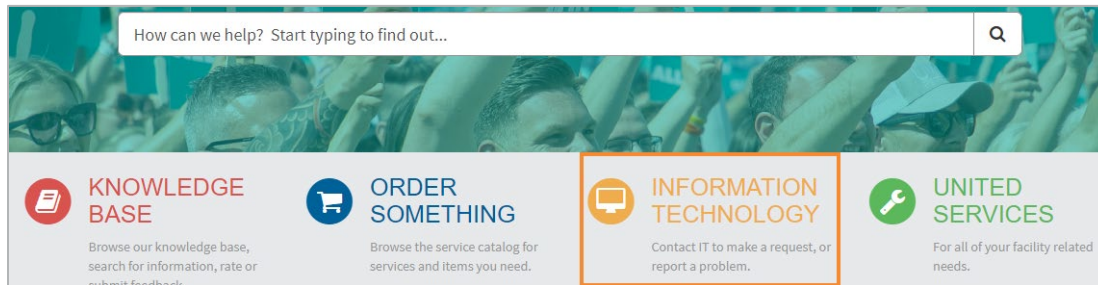
If you are missing the microservice certs in the Software Center, you must go to YouSupport to request the correct certs. The following steps will outline how to request them, as they are needed before continuing.

1. Navigate to **YouSupport** on Uzone

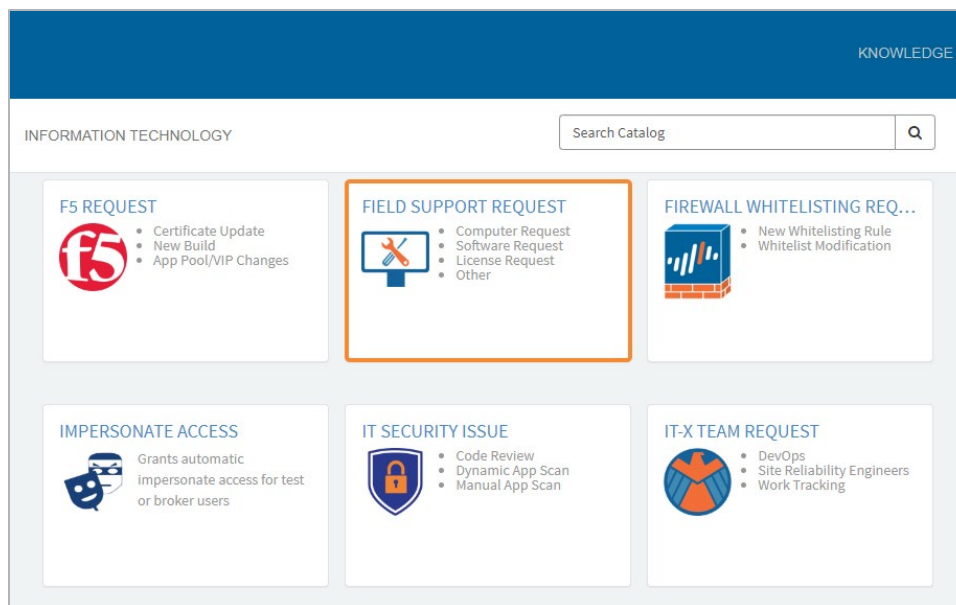




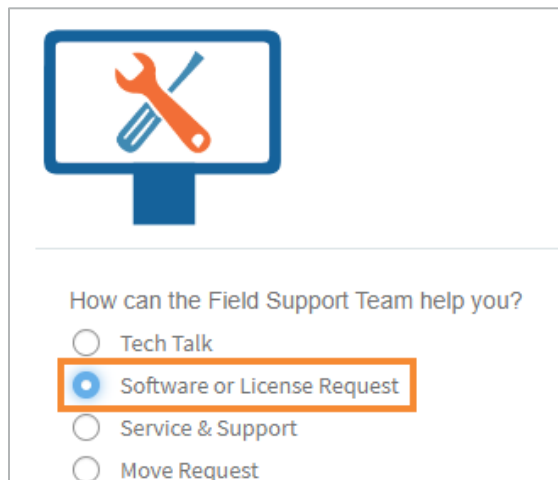
2. Click **Information Technology**



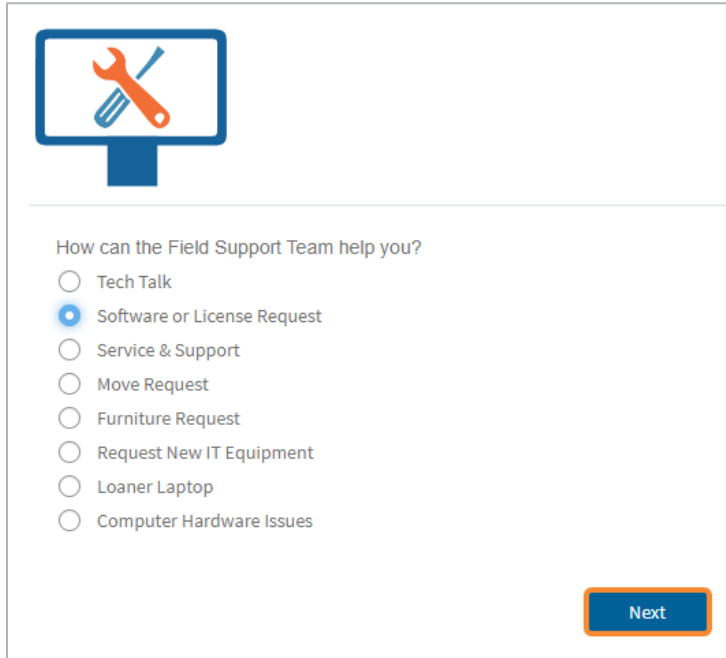
3. Scroll down and click on **Field Support Request**



4. Select **Software or License Request**



5. Click **Next**

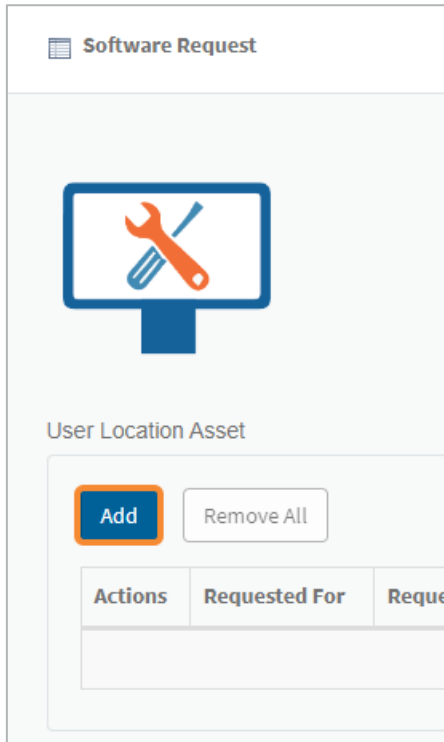


How can the Field Support Team help you?

- ☐ Tech Talk
- ☒ Software or License Request
- ☐ Service & Support
- ☐ Move Request
- ☐ Furniture Request
- ☐ Request New IT Equipment
- ☐ Loaner Laptop
- ☐ Computer Hardware Issues

**Next**

6. Click **Add**



**Software Request**

User Location Asset

**Add** Remove All

Actions	Requested For	Request

7. Fill out the form

1. Fill in **your name** (the form will expand once your name is filled in)
2. Fill in your **computer ID** (on the Property of UWM IT sticker on your laptop)
3. Fill in which **building you are located**
4. Type and select "**Microservice**"

ADD ROW ×

\*Requested For

1

Requested For Leader

2

\*Computer

3

\*In which building?

4

\*Please select the software/license needed

5

Cancel

Add

8. Click **Add**

Cancel

Add

9. Fill out **additional information**

User Location Asset

Add
Remove All

Actions	Requested For	Requested For Leader	Computer	In which building?	Please select the software/license needed	Is Approved?
	Microservice	Microservice	Microservice	Microservice	Microservice	No

\*Do we need additional information to process your request?

Who else needs to know about this?

Add attachments

10. Click **Next**

Previous

Next

11. Click **Submit**

FIELD SUPPORT REQUEST

Describe Needs
 Choose Options
 Summary

Order Guide Details	Quantity	Total Price	Recurring
Software Request	---	---	---

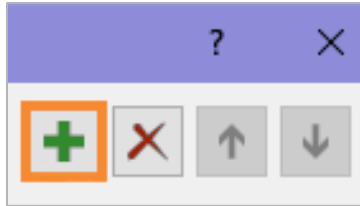
Edit Options
Submit

12. A field tech will be assigned to your case and will help you install the Microservice Certs

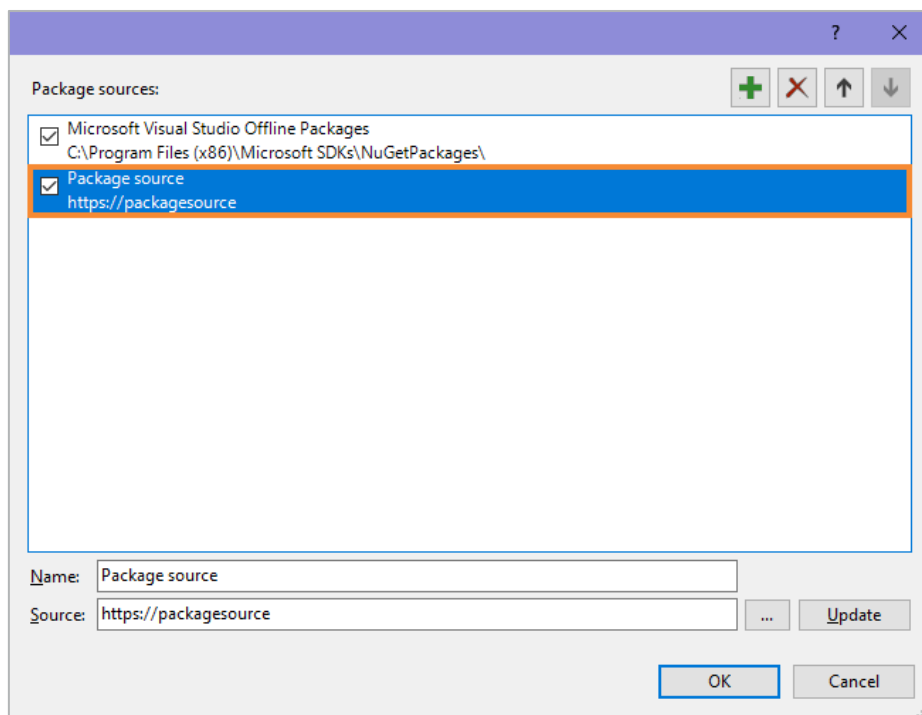
13. Click [here](#) to return to the next step

## ADD ARTIFACTS-PRODUCTION PACKAGE SOURCE

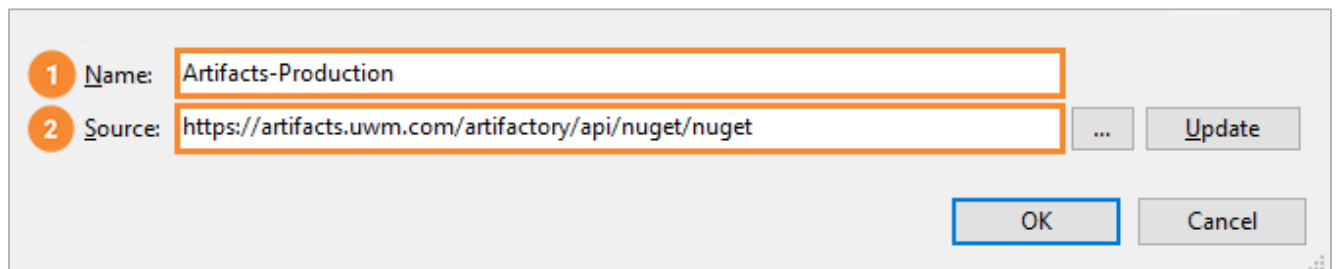
1. Click the **green +** to add a new package source



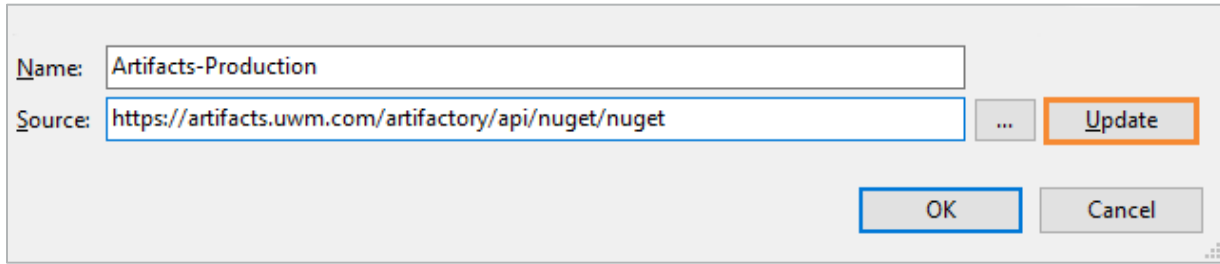
2. Select new **Package source**



3. You are going to manually add the package source
  1. In the **Name** box type: Artifacts-Production
  2. In the **Source** box copy and paste: <https://artifacts.uwm.com/artifactory/api/nuget/nuget>

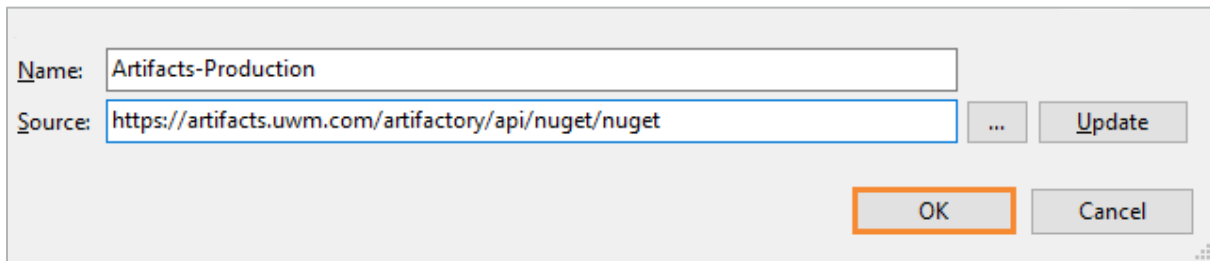


4. Click **Update**



A screenshot of a software dialog box. It has two input fields: 'Name' with the text 'Artifacts-Production' and 'Source' with the text 'https://artifacts.uwm.com/artifactory/api/nuget/nuget'. To the right of the 'Source' field is a button with three dots. Further right is a button labeled 'Update' which has an orange border. At the bottom right are two buttons: 'OK' and 'Cancel'.

5. Ensure Artifacts-Production is checked, click **OK**



A screenshot of the same software dialog box as above. The 'Name' and 'Source' fields remain the same. In this version, the 'OK' button at the bottom right is highlighted with an orange border, while the 'Update' button is no longer highlighted.

6. Click here to return to the next step

## DOCUMENT HYPERLINKS

<sup>1</sup><https://code.uwm.com/projects/MISC/repos/nupack-usfs-connection-strings/browse/Development/UsfsConnectionStrings.config>

<sup>2</sup><https://kb.uwm.com/pages/viewpage.action?spaceKey=DEV&title=App+Dev+Team+Environments+By+Team>

<sup>3</sup><https://code.uwm.com/dashboard>

**If you have any questions or concerns,  
please reach out to IT Training at [ITTraining@uwm.com](mailto:ITTraining@uwm.com)**