

ArtifactDemo

Wednesday, 21 July 2021 7:46 AM

1. Create a **new (private) project** in Azure DevOps (**name=Utilities**)
 - a. Do not clone.
 - b. Do not add any files.
2. Click **Artifacts**
 - a. -> **create feed, name=MathStuff**
 - i. tick "**Include packages from common public sources**"
3. Create an **empty folder in c:\junk called DDLUtilities**

4. **dotnet new classlib**

- a. Add this function to the class

```
public static int Cube(int x)
{
    return x * x * x;
}
```

5. back in the portal, Click **connect to feed**
 - a. choose **dotnet** (it's dotnet core)
 - i. -> click **Get the tools**.
 - 1) click **Download and install the credential provider**.
 - ◆ Scroll down and **right-click, PowerShell helper script**. Choose **SaveAs**, download and run it.
6. Go back to **VSCoDe**.
 - a. Run this command

```
dotnet pack -o pack --configuration Release -p:Version=1.0.0
```

7. **Get the feedURL**, its here: (it's on the "**connect to feed page**")

Project setup

Ensure you have installed the latest version of the **Azure Artifacts credential provider** from the "Get the tools" menu.

Add a **nuget.config** file to your project, in the same folder as your **.csproj** or **.sln** file

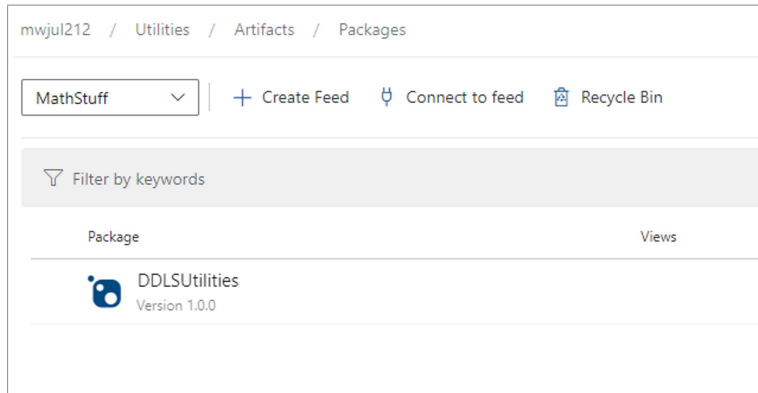
```
<?xml version="1.0" encoding="utf-8"?>
<configuration>
  <packageSources>
    <clear />
    <add key="MathStuff" value="https://pkgs.dev.azure.com/mwjul212/Utilities/_packaging/MathStuff/nuget/v3/index.json" />
  </packageSources>
</configuration>
```

8. Go back to **VSCode**.
 - a. Run this command (substituting the feed url)

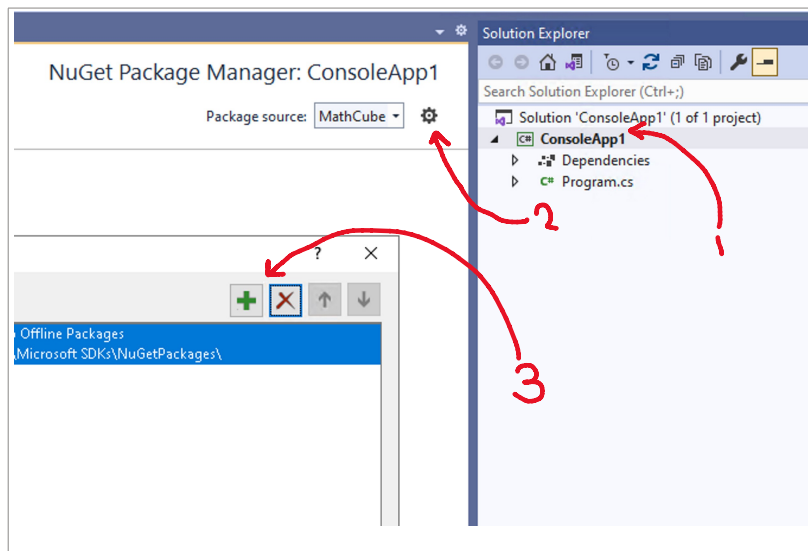
```
dotnet nuget push --source "https://pkgs.dev.azure.com/mwjul212/Utilities/ packaging/MathStuff/nuget/v3/index.json" --api-key  
az ./pack/DDLSUtilities.1.0.0.nupkg --interactive
```

- b. Sign-in when asked.

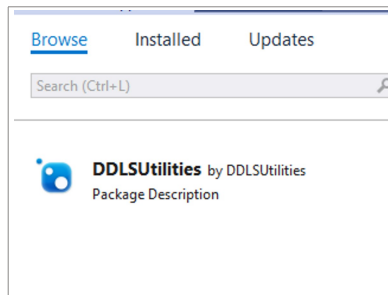
9. Go back to portal, refresh the page, you should see this:



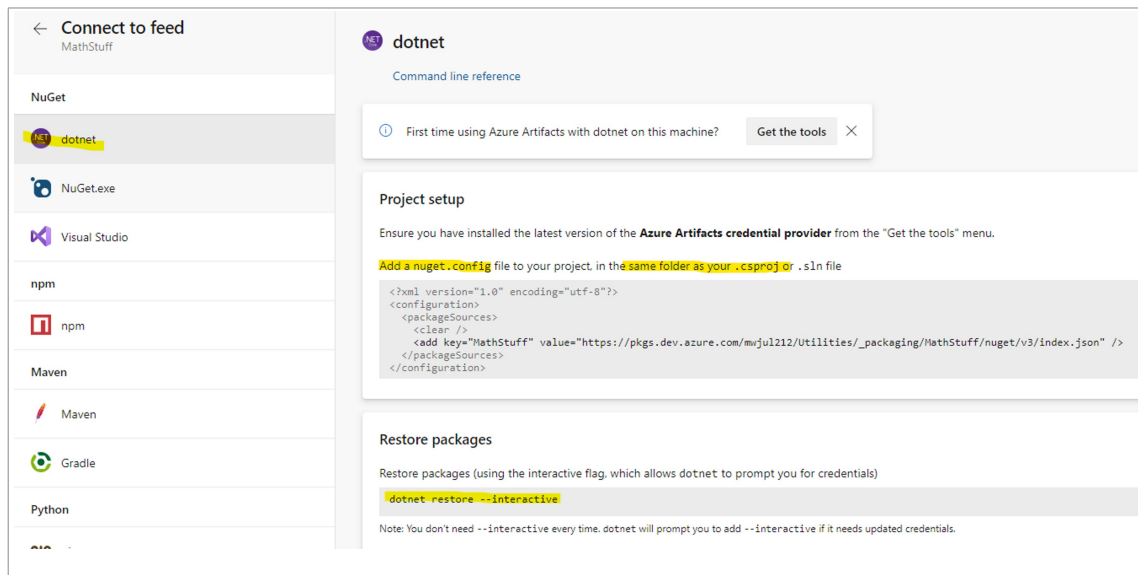
10. Open **Visual Studio 2019**.
 - a. Create **new Console** application
 - b. Click on the **nuGet Utility** and add the **feed URL**:



- c. Click the **Browse** tab in the nuget utility. Install and use the package (**DDLSUtilities.Class1.Cube(5)**).



11. **For VSCode,**
- Create new folder **c:\junk\UtilClient**
 - Dotnet new console**
 - Do what is says on the **connect to feed** page.



IMPORTANT! It's a good idea to add this file to the DDLSUtilities project because it allows upstream packages to be stored in Azure DevOps Articles. To see, try doing a **dotnet add package newtonsoft.json** to DDLSUtilities.

- d. Then run **dotnet add package DDLSUtilities**
- e. Finally you can have this code

```

class Program
{
    0 references
    static void Main(string[] args)
    {
        Console.WriteLine("Hello World!");
        int x = DDLSUtilities.Class1.Cube(4);
    }
}

```

For New version of Package:

1. Go to the DDLSUtilities code and change the cube function
2. dotnet pack -o pack --configuration Release -p:Version=1.1.0
3. dotnet nuget push --source "https://pkgs.dev.azure.com/mwjul212/Utilities/_packaging/MathStuff/nuget/v3/index.json" --api-key az ./pack/DDLSUtilities.1.1.0.nupkg --interactive

Test in VS2019.

1. Go to the nuget package manager and you can see and install the new package.

Test in VSCode.

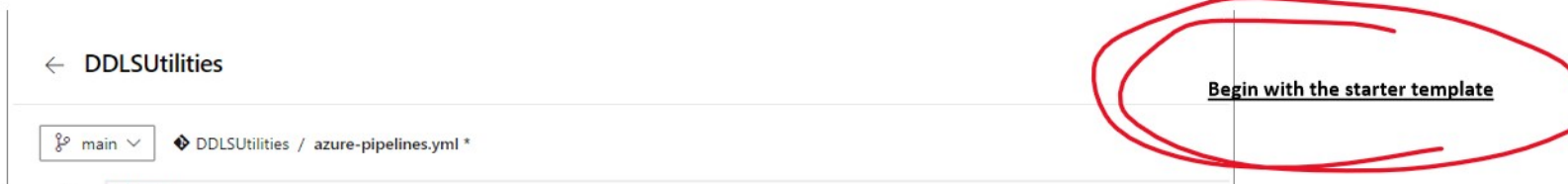
1. Run the following to clear out the local nuget cache:

dotnet nuget locals http-cache --clear

2. Change the version number in the .csproj
3. **dotnet restore**

Finally, this can be setup as CI/CD

1. initialise and clone the repo to c:\junk
 - a. Add the Class.Cs and .csproj files from DDLSUtilities
 - b. Git stage->commit->push
2. Go back to the portal and construct a pipeline like this:



← DDLSUtilities

main

DDLSUtilities / azure-pipelines.yml *

```
1 trigger:
2   - main
3
4 pool:
5   vmImage: ubuntu-latest
6
7 steps:
8   Settings
9   - task: DotNetCoreCLI@2
10     inputs:
11       command: 'restore'
12       projects: '**/*.csproj'
13       feedsToUse: 'select'
14       vstsFeed: '61f3e0e6-4949-4115-a054-00a7badac984/982c68bf-9b86-46ec-88a5-5590f5b9422b'
15
16   Settings
17   - task: DotNetCoreCLI@2
18     inputs:
19       command: 'pack'
20       packagesToPack: '**/*.csproj'
21       versioningScheme: 'byPrereleaseNumber'
22       majorVersion: '1'
23       minorVersion: '0'
24       patchVersion: '0'
25
26   Settings
27   - task: PublishBuildArtifacts@1
28     inputs:
29       PathToPublish: '$(Build.ArtifactStagingDirectory)'
30       ArtifactName: 'DDLSUtilPackage'
31       publishLocation: 'Container'
32
33   Settings
34   - task: NuGetCommand@2
35     inputs:
36       command: 'push'
37       packagesToPush: '$(Build.ArtifactStagingDirectory)/**/*.nupkg;!$(Build.ArtifactStagingDirectory)/**/*.symbols.nupkg'
38       nuGetFeedType: 'internal'
39       publishVstsFeed: '61f3e0e6-4949-4115-a054-00a7badac984/982c68bf-9b86-46ec-88a5-5590f5b9422b'
```

Begin with the starter template

You'll have to type that name in

You can choose that in the dropdown

Azure DevOps

elamark / DDLSUtilities / Artifacts / Packages

DDLSUtilities + DDLSUtilities > DDLSUtilities 1.0.0

Overview Versions Connect to feed

Version

1.0.0 (currently selected)
1.0.0-CI-20210721-001538
1.0.0-CI-20210721-000500
1.0.0-CI-20210720-235546
1.0.0-CI-20210720-235421
1.0.0-CI-20210720-234303
1.0.0-CI-20210720-234225

Overview Boards Repos Pipelines Test Plans Artifacts

Try right-clicking...you can promote to a release

1.0.0		39m ago
1.0.0-CI-20210721-001538	@Release	8m ago
1.0.0-CI-20210721-000500 (currently selected)		18m ago
✓ 1.0.0-CI-20210720-235546	⋮	28m ago
1.0.0-CI-20210720-235421		ago
1.0.0-CI-20210720-234303		ago
1.0.0-CI-20210720-234225		ago

- Open
- Open in new tab
- Get a link
- Copy install command
- Download 1.0.0-CI-20210720-235546
- Promote 1.0.0-CI-20210720-235546
- Unlist 1.0.0-CI-20210720-235546
- Delete 1.0.0-CI-20210720-235546