

# Create NuGet CI/CD pipeline

Create new project in Azure DevOps.

## Create new project



Project name \*

NuGet Demo

Description

Visibility



Public

Anyone on the internet can view the project. Certain features like TFVC are not supported.



Private

Only people you give access to will be able to view this project.



Advanced

## Clone empty repo

Azure DevOps

AllianceBuildServer / Nuget-Demo / Repos / Files / Nuget-Demo

Nuget-Demo +

Overview

Boards

Repos

Files

Commits

Nuget-Demo is empty. Add some code!

Clone to your computer

HTTPS

SSH

https://AllianceBuildServer@dev.azure.com/AllianceBuildServer/Nuget



OR



Clone in VS Code



Generate Git Credentials

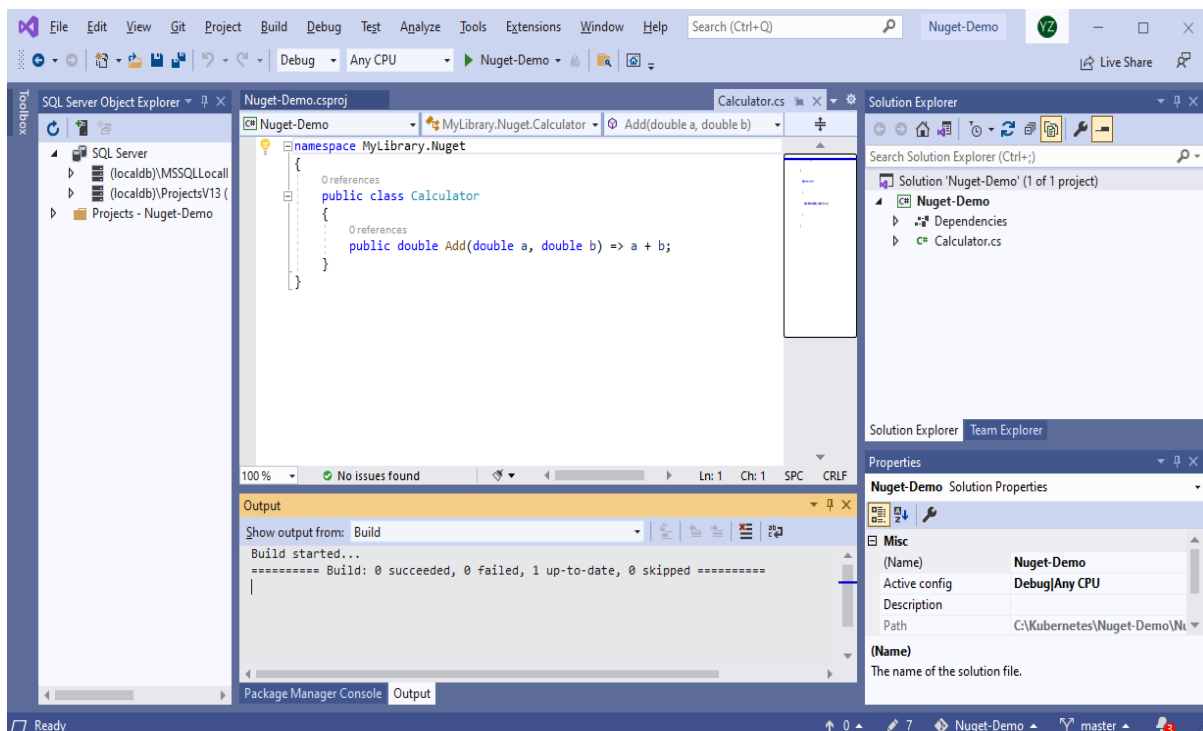
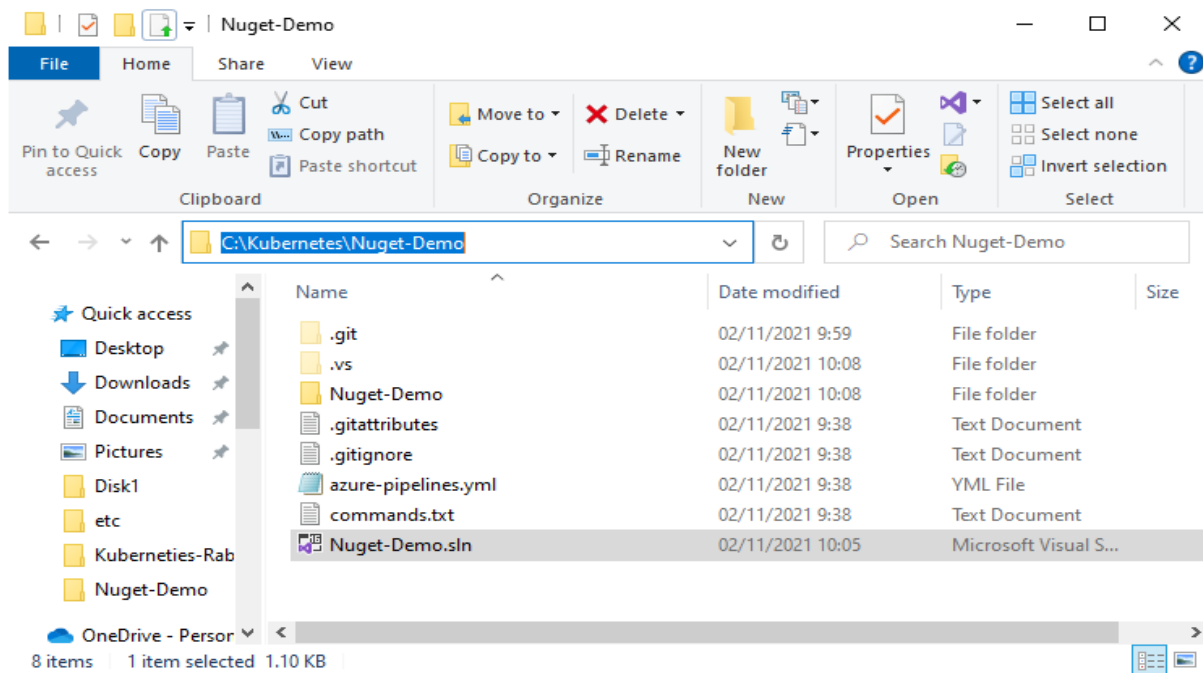
Having problems authenticating in Git? Be sure to get the latest version [Git for Windows](#) or our plugins for [IntelliJ](#), [Eclipse](#), [Android Studio](#) or [Windows command line](#).

```
Administrator: Command Prompt

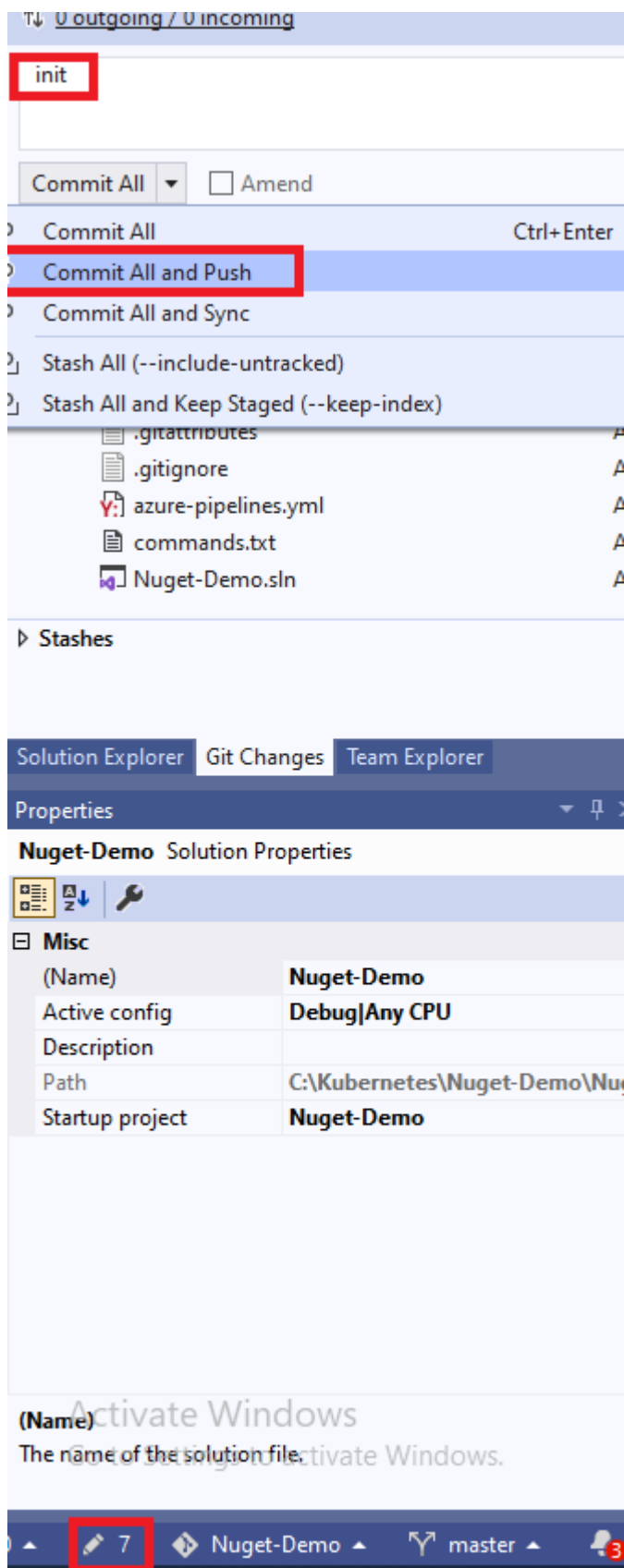
C:\Kubernetes>git clone https://AllianceBuildServer@dev.azure.com/AllianceBuildServer/Nuget-Demo/_git/Nuget-Demo
Cloning into 'Nuget-Demo'...
warning: You appear to have cloned an empty repository.

C:\Kubernetes>
```

Open the Nuget solution and check that the build compilation is working with no errors.



Commit and push to repo on Azure DevOps.



Now the reop in Azure DevOps contains the files.

The screenshot displays the Azure DevOps web interface. The left sidebar contains navigation links for Overview, Boards, Repos, Files, Commits, Pushes, Branches, Tags, Pull requests, Pipelines, Test Plans, and Artifacts. The main area shows the 'Files' view of the 'Nuget-Demo' repository. A file explorer on the left lists the repository's contents: .gitattributes, .gitignore, azure-pipelines.yml, commands.txt, and Nuget-Demo.sln. The main pane shows a table of file history.

Name	Last change	Commits
Nuget-Demo	Just now	9bb71bac init Yaron
.gitattributes	Just now	9bb71bac init Yaron
.gitignore	Just now	9bb71bac init Yaron
azure-pipelines.yml	Just now	9bb71bac init Yaron
commands.txt	Just now	9bb71bac init Yaron
Nuget-Demo.sln	Just now	9bb71bac init Yaron

At the bottom right, there is a message: "Activate Windows Go to Settings to activate Windows."

## Go to Artifacts and create new feed

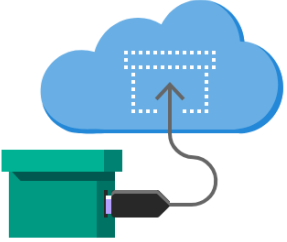
**Azure DevOps** AllianceBuildServer / Nuget-Demo / Artifacts / Packages

**Nuget-Demo** +

- Overview
- Boards
- Repos
- Pipelines
- Test Plans
- Artifacts**

① You can now search for packages across feeds. Try searching for a package in the search box. [Learn more.](#)

AllianceBuildSer... ▾ **+ Create Feed** 🔗 Connect to feed 🗑️ Recycle Bin



Connect to the feed to get started

**🔗 Connect to feed**

[Learn more about Azure Artifacts](#)

## Create new feed



Feeds host your packages and let you control permissions.

Name

Nuget-Demo

This name will appear in the URL for your feed

### Visibility

- ☐ Members of your Azure Active Directory  
Any member of your AAD can view the packages in this feed
- ☒ Members of AllianceBuildServer  
Any member of your organization can view the packages in this feed
- ☐ Specific people  
Only users you grant access to can view the packages in this feed

### Upstream sources

- ☐ Include packages from common public sources

For example: nuget.org, npmjs.com

### Scope

- ☒ Project: Nuget-Demo (Recommended)  
The feed will be scoped to the Nuget-Demo project. [Learn more.](#)
- ☐ Organization

Activate Windows

Go to Settings to activate Windows.

Cancel

Create

Create new pipeline



## Create your first Pipeline

Automate your build and release processes using our wizard, and go from code to cloud-hosted within minutes.

Create Pipeline



Connect

Select

Configure

New pipeline

## Where is your code?



Azure Repos Git

YAML

Free private Git repositories, pull requests, and code search



Bitbucket Cloud

YAML

Hosted by Atlassian



GitHub

YAML

Home to the world's largest community of developers



GitHub Enterprise Server

YAML

The self-hosted version of GitHub Enterprise



Other Git

Any generic Git repository



Subversion

Centralized version control by Apache

Use the [classic editor](#) to create a pipeline without YAML.

✓ Connect

Select

Configure

Review

New pipeline

## Select a repository

Filter by keywords

Nuget-Demo




Nuget-Demo




## Remove the 'push' task

```
Settings
...-task: DotNetCoreCLI@2
...-inputs:
...-command: 'push'
...-packagesToPush: '$(Build.ArtifactStagingDirectory)/*.nupkg'
...-nuGetFeedType: 'internal'
...-publishVstsFeed: 'fb88a87b-67b7-41b4-be61-67d32036fe1a/f5f2b936-eb62-49bd-b5a4-14c10ad3931e'
```

## Click show assistant and select .NET Core

 Show assistant

 .NET Core  
Build, test, package, or publish a dotnet applicatio...

## Select nuget push

← .NET Core ⓘ

Command \* ⓘ

build

✓ build  
nuget push  
pack  
publish  
restore  
run  
test  
custom

← .NET Core ⓘ

Command \* ⓘ

nuget push

Path to NuGet package(s) to publish \* ⓘ

\$(Build.ArtifactStagingDirectory)/\*.nupkg

Target feed location \*

- ☒ This organization/collection
- ☐ External NuGet server (including other organizations/collections)

Target feed \* ⓘ

Nuget-Demo

Advanced

Activate Windows

Go to Settings to activate Windows.

[About this task](#)

Add

## Push task added to pipeline script

```
Settings
...-task: DotNetCoreCLI@2
...-inputs:
...-command: 'push'
...-packagesToPush: '$(Build.ArtifactStagingDirectory)/*.nupkg'
...-nuGetFeedType: 'internal'
...-publishVstsFeed: 'ffe5d7b9-1461-4e9d-873d-b2e412fe97c0/1c6cc111-44f4-43ff-8bef-235105fc6f38'
```

Save and run



## Save and run



Saving will commit azure-pipelines.yml to the repository.

Commit message

Set up CI with Azure Pipelines

Optional extended description

Add an optional description...

- ☒ Commit directly to the master branch
- ☐ Create a new branch for this commit

Activate Windows

Go to Settings to activate Windows.

Save and run

← Jobs in run #20211102.1  
Nuget-Demo

Build Stage

✓	Build Nuget packages	20s
✓	Initialize job	1s
✓	Checkout Nuget-Demo@master t...	1s
✓	DotNetCoreCLI	2s
✓	DotNetCoreCLI	6s
✓	DotNetCoreCLI	2s
✓	DotNetCoreCLI	5s
✓	Post-job: Checkout Nuget-Demo...	<1s
✓	Finalize Job	<1s
✓	Report build status	<1s

✓ Build Nuget packages

```
1 Pool: Azure Pipelines
2 Image: ubuntu-18.04
3 Queued: Just now [manage_parallel_jobs]
4 Agent: Hosted Agent
5 Started: Just now
6 Duration: 20s
7
8 The agent request is already running or has already completed.
9 ► Job preparation parameters
10 Job live console data:
11 Starting: Build Nuget packages
12 Finishing: Build Nuget packages
```

Connect to feed.

Azure DevOps

AllianceBuildServer / Nuget-Demo / Artifacts / Packages

Nuget-Demo

Overview

Boards

Repos

Pipelines

Test Plans

Artifacts

Nuget-Demo

+ Create Feed

Connect to feed

Recycle Bin

Filter by keywords

Package	Views	Last pushed	Description
<div>MyLibraries.Nuget Version 1.0.1</div>		Just now	Test project for Nuget and CI/CD

**Nuget-Demo**

Overview

Boards

Repos

Pipelines

Test Plans

**Artifacts**

You can now search for packages across feeds

**Connect to feed**

NuGet

dotnet

NuGet.exe

Visual Studio

npm

**Visual Studio**
Get the tools

Learn about restoring packages

First time using Azure Artifacts with Visual Studio on this machine?

Get the tools

**Machine setup**

On the Tools menu, select Options > NuGet Package Manager > Package Sources. Select the green plus in the upper-right corner and enter the name and source URL below.

Name

Nuget-Demo

Source

[https://pkgs.dev.azure.com/AllianceBuildServer/Nuget-Demo/\\_packaging/Nuget-Demo/nuget/v3/index.json](https://pkgs.dev.azure.com/AllianceBuildServer/Nuget-Demo/_packaging/Nuget-Demo/nuget/v3/index.json)

Note: You need to do this on every machine that needs access to your packages. Use the NuGet.exe instructions if you want to complete setup once and check it into your repository.

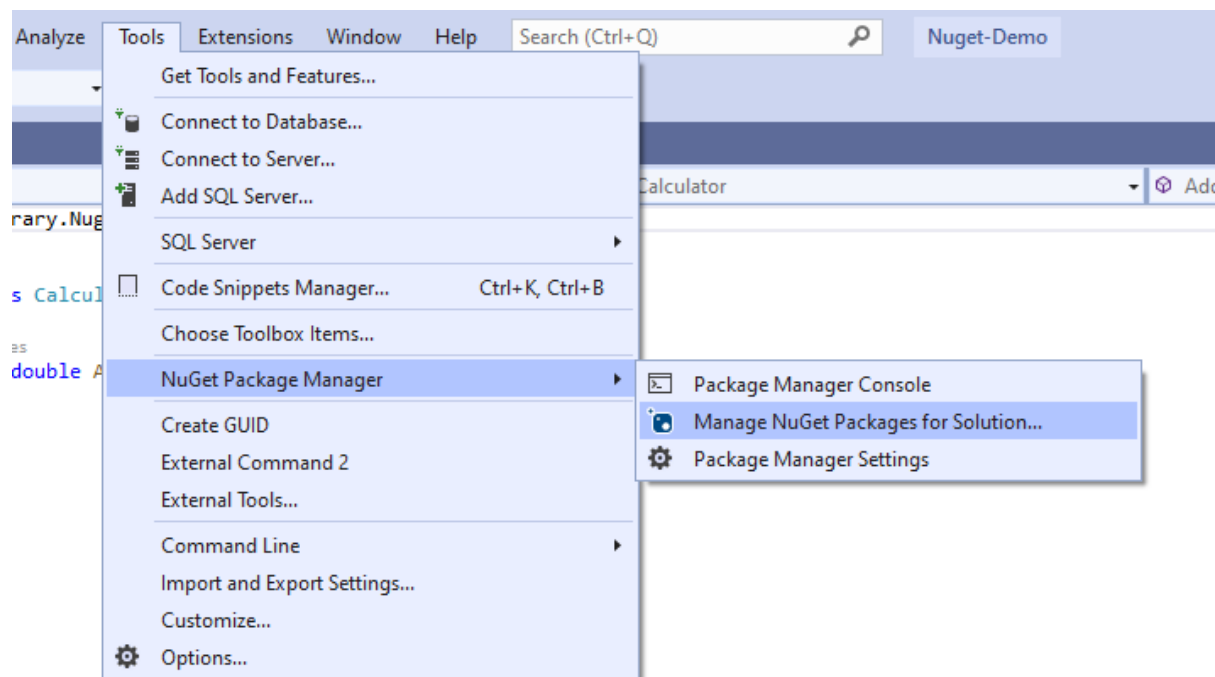
Copy to Clipboard

**Restore packages**

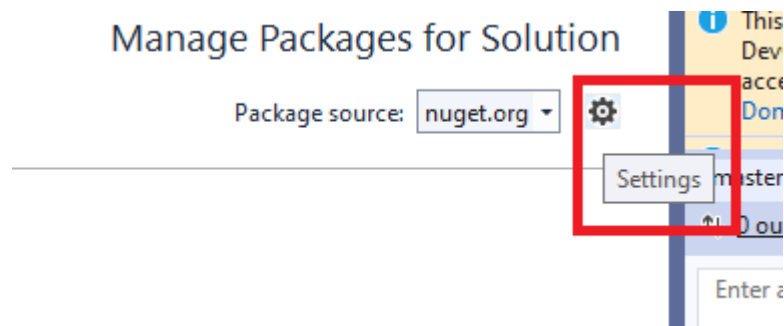
URL for Nuget package.

[https://pkgs.dev.azure.com/AllianceBuildServer/Nuget-Demo/\\_packaging/Nuget-Demo/nuget/v3/index.json](https://pkgs.dev.azure.com/AllianceBuildServer/Nuget-Demo/_packaging/Nuget-Demo/nuget/v3/index.json)

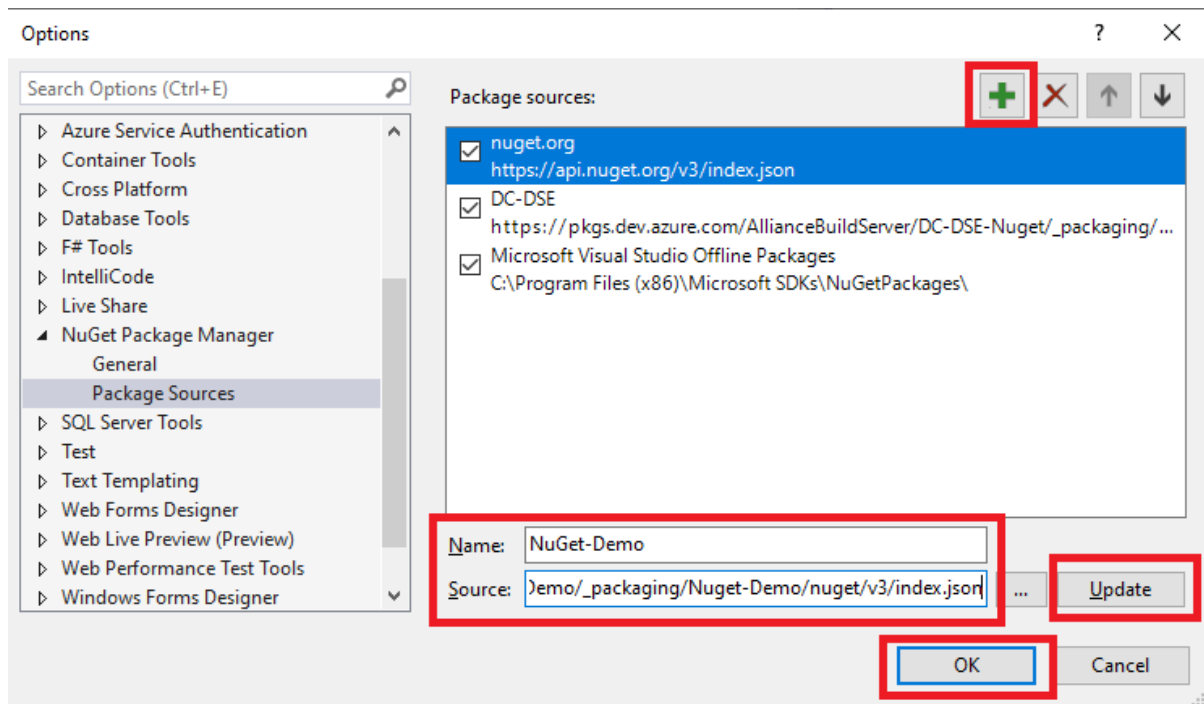
VS 2019 -> Tools -> NuGet Package manager -> Manage NuGet Packages for Solution



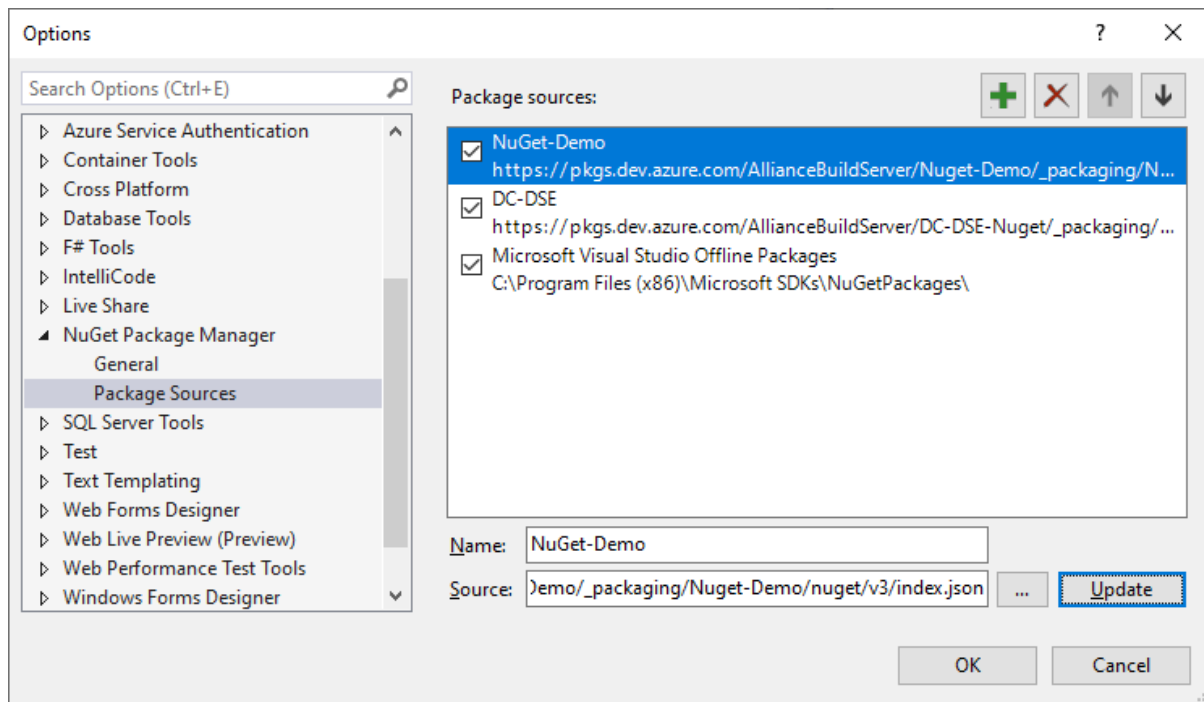
Click Settings



Clik + -> Name and paste the Source -> Update



OK





Update the package version and push to Azure repo



```
<Project Sdk="Microsoft.NET.Sdk">
  <PropertyGroup>
    <TargetFramework>netcoreapp3.1</TargetFramework>

    <PackageId>Nuget-Demo</PackageId>
    <Version>1.0.1</Version>
    <Authors>Yaron Zlotolov</Authors>
    <Description>Test project for Nuget and CI/CD</Description>
    <IsPackable>true</IsPackable>
  </PropertyGroup>
</Project>
```

New pipeline automatically generated after pushing the code

← Nuget-Demo

Runs Branches Analytics

Description	Stages
#20211102.2 Merge branch 'master' of https://dev.azure.com/AllianceBuildServer/Nuget-Demo/_git/Nug... Individual CI for master 30664674	
#20211102.1 Set up CI with Azure Pipelines Individual CI for master ecf45c4b	

Nuget package is ready in the feed

Azure DevOps AllianceBuildServer / Nuget-Demo / Artifacts / Packages



**Nuget-Demo** +

Overview Boards Repos Pipelines Test Plans **Artifacts**

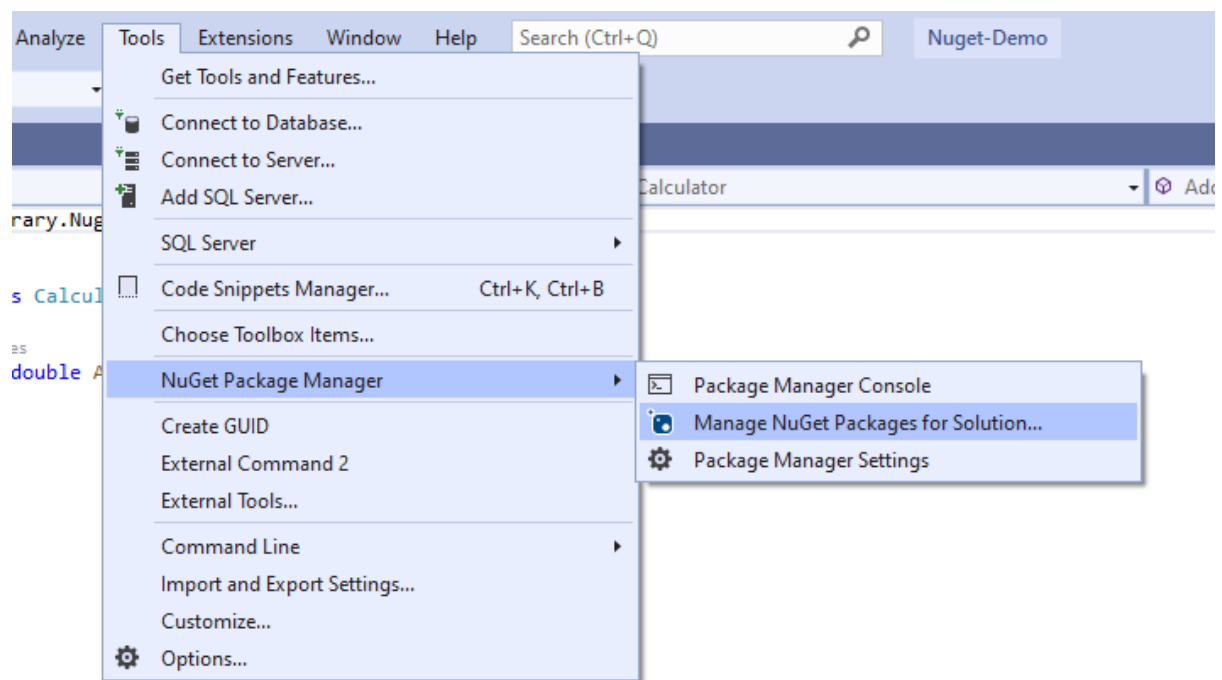
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Nuget-Demo ▾ + Create Feed 🔗 Connect to feed 🗑 Recycle Bin

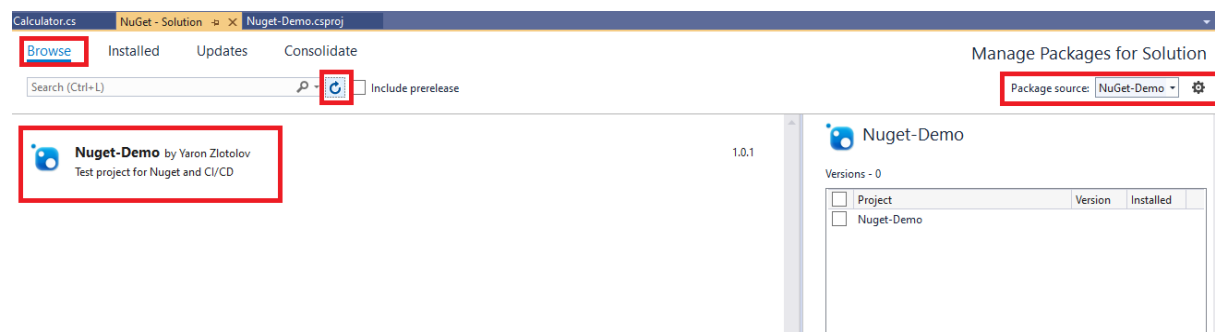
Filter by keywords

Package	View
 MyLibraries.Nuget Version 1.0.1	
 Nuget-Demo Version 1.0.1	

Back to NuGet Package manager



Refresh



Done!