

How to Debug Vault Applications (EN-GB)

Prerequisites

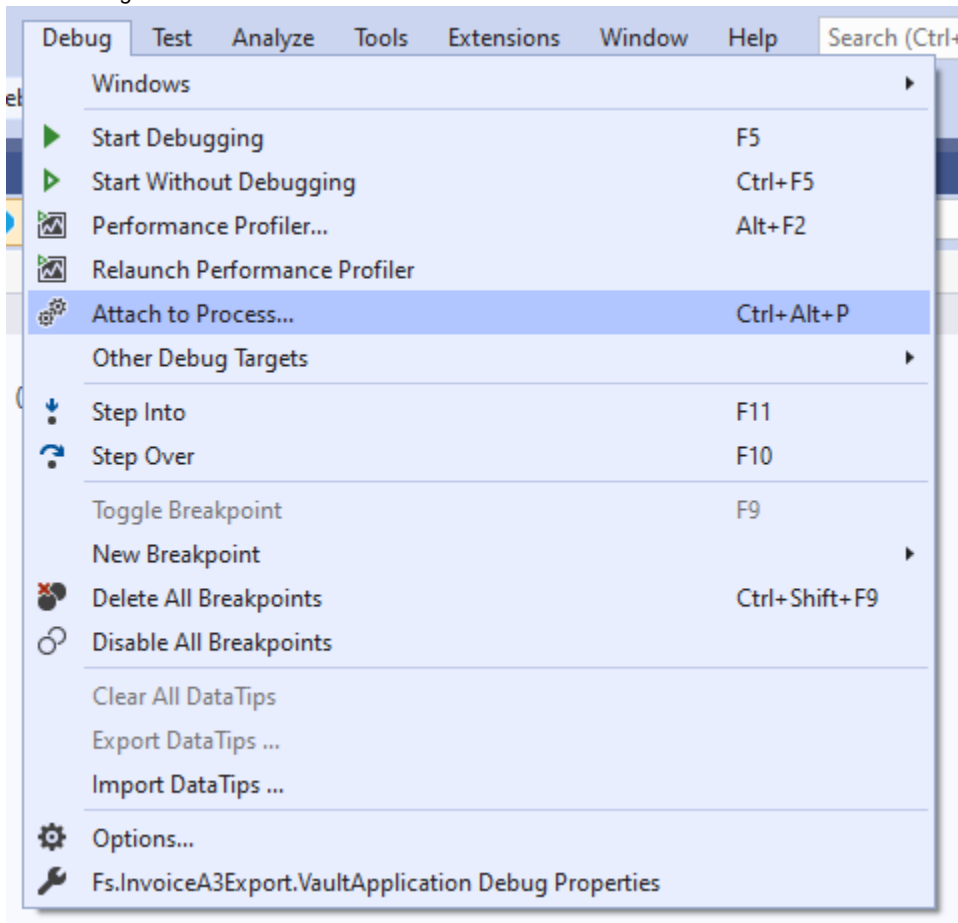
To debug an M-Files Vault Application (locally), the following requirements must be met:

- The Vault Application must be installed in a local Vault.
- The local M-Files Server must be running and the Vault must be online.
- You need local admin rights.

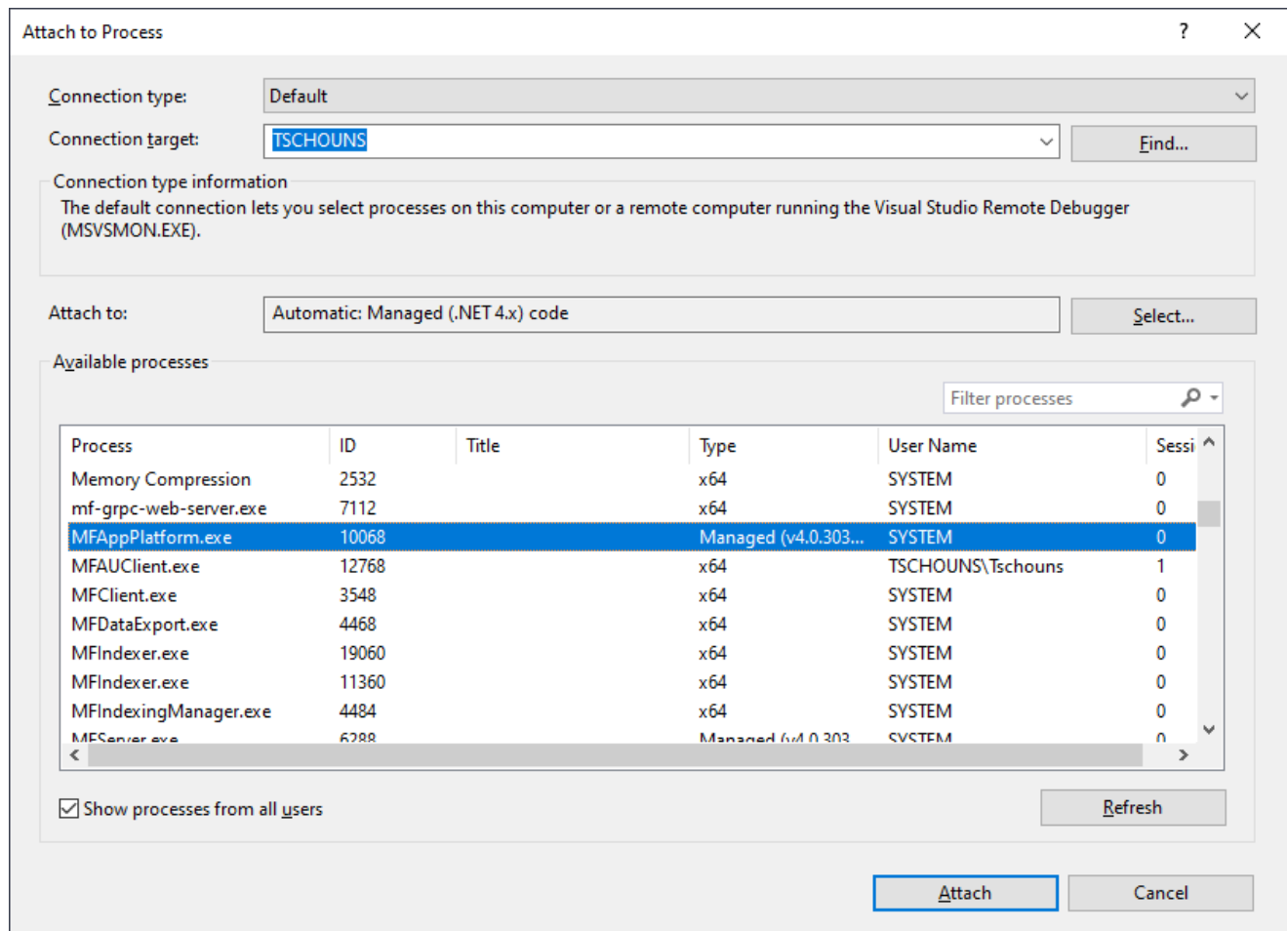
Debugging (manually)

To debug, one must open the corresponding code state in Visual Studio and attach the debugger to the "MFAppPlatform.exe" process:

1. Menu: *Debug Attach to Process...*



2. Check the *Show processes from all users* checkbox
3. Select the process "MFAppPlatform.exe"
4. Button *Attach*



Automate Attach to Process..

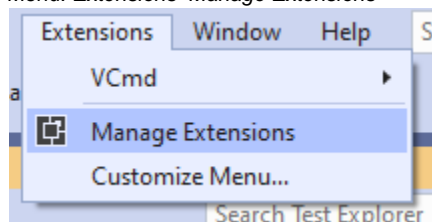
The "Attach to Process..." step can be automated with a custom menu entry.

To do this, install the Visual Studio Extension "Visual Commander" and create a new command (Visual Studio Macro).

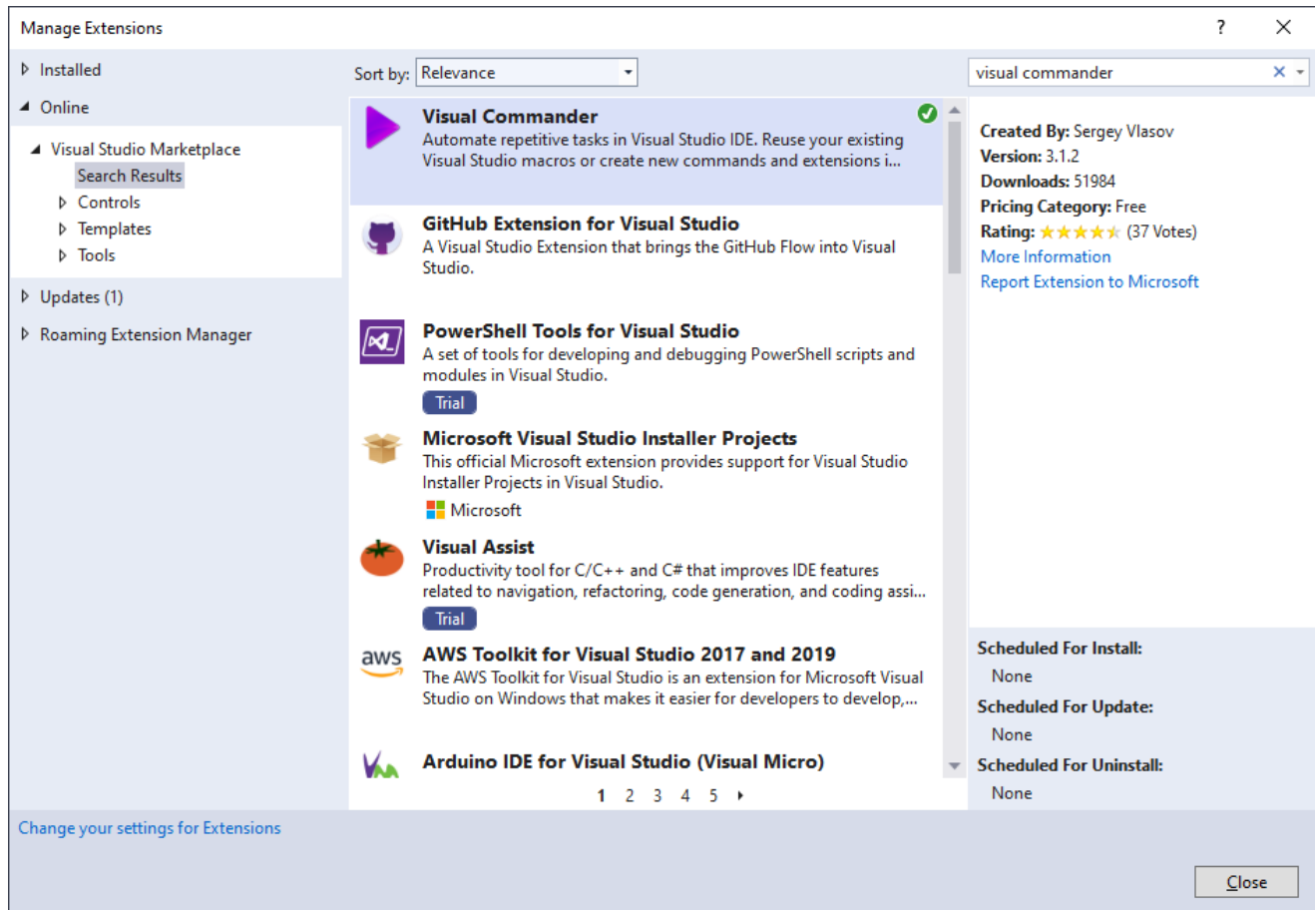
The following instructions are step-by-step.

Install Visual Commander

1. Menu: *Extensions* *Manage Extensions*



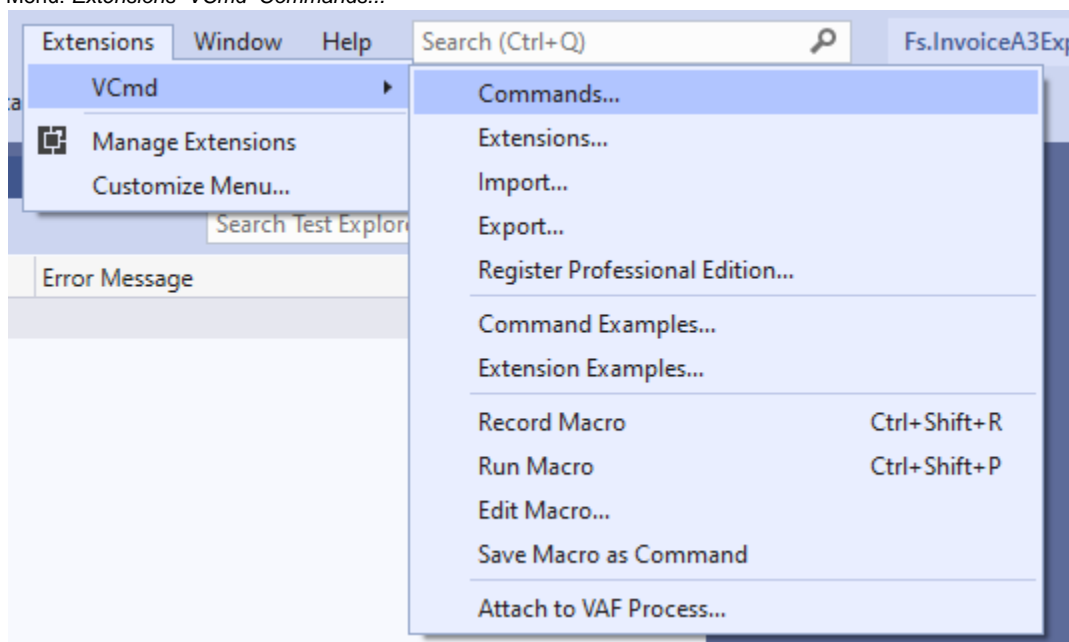
2. Search for "Visual Commander" under *Online*
3. "Select "Visual Commander"
4. *Download* button



5. Restart Visual Studio, run VSIX installer

Create new *Attach to VAF Process...* Command

1. Menu: *Extensions* *VCmd* *Commands...*



2. Button *Add*
3. Enter "Attach to VAF Process..." at *Name*
4. Select "CSharp v4.0" under *Language*
5. Enter the following macro code in the *code* field

```

using EnvDTE;
using EnvDTE80;
using System.Management;
using System;

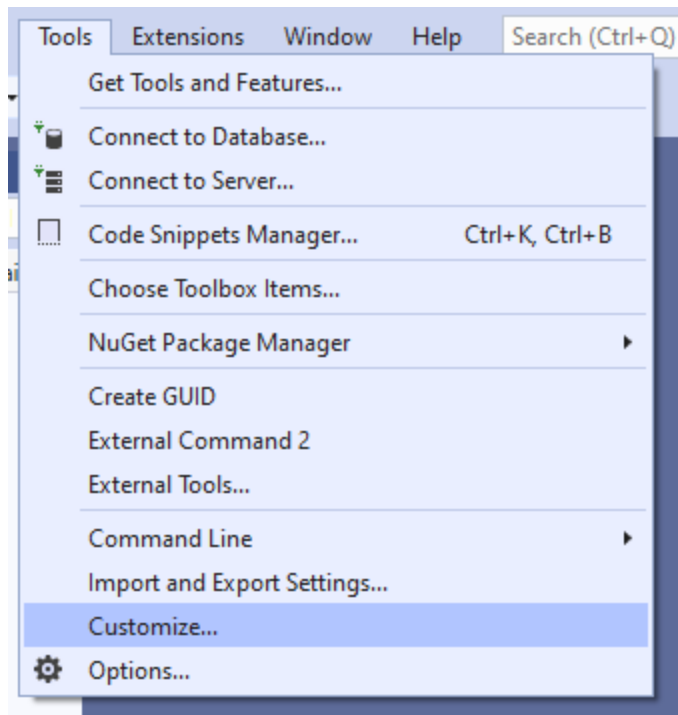
public class C : VisualCommanderExt.ICommand
{
    public void Run(EnvDTE80.DTE2 DTE, Microsoft.VisualStudio.Shell.
Package package)
    {
        bool attached = false;
        foreach(Process proc in DTE.Debugger.LocalProcesses)
        {
            if(proc.Name.ToString().EndsWith("MFAppPlatform.exe"))
            {
                proc.Attach();
                attached = true;
            }
        }
        if (attached)
            return;
        else
            System.Windows.MessageBox.Show("There are no
MFAppPlatform.exe processes to attach to.");
    }
}

```

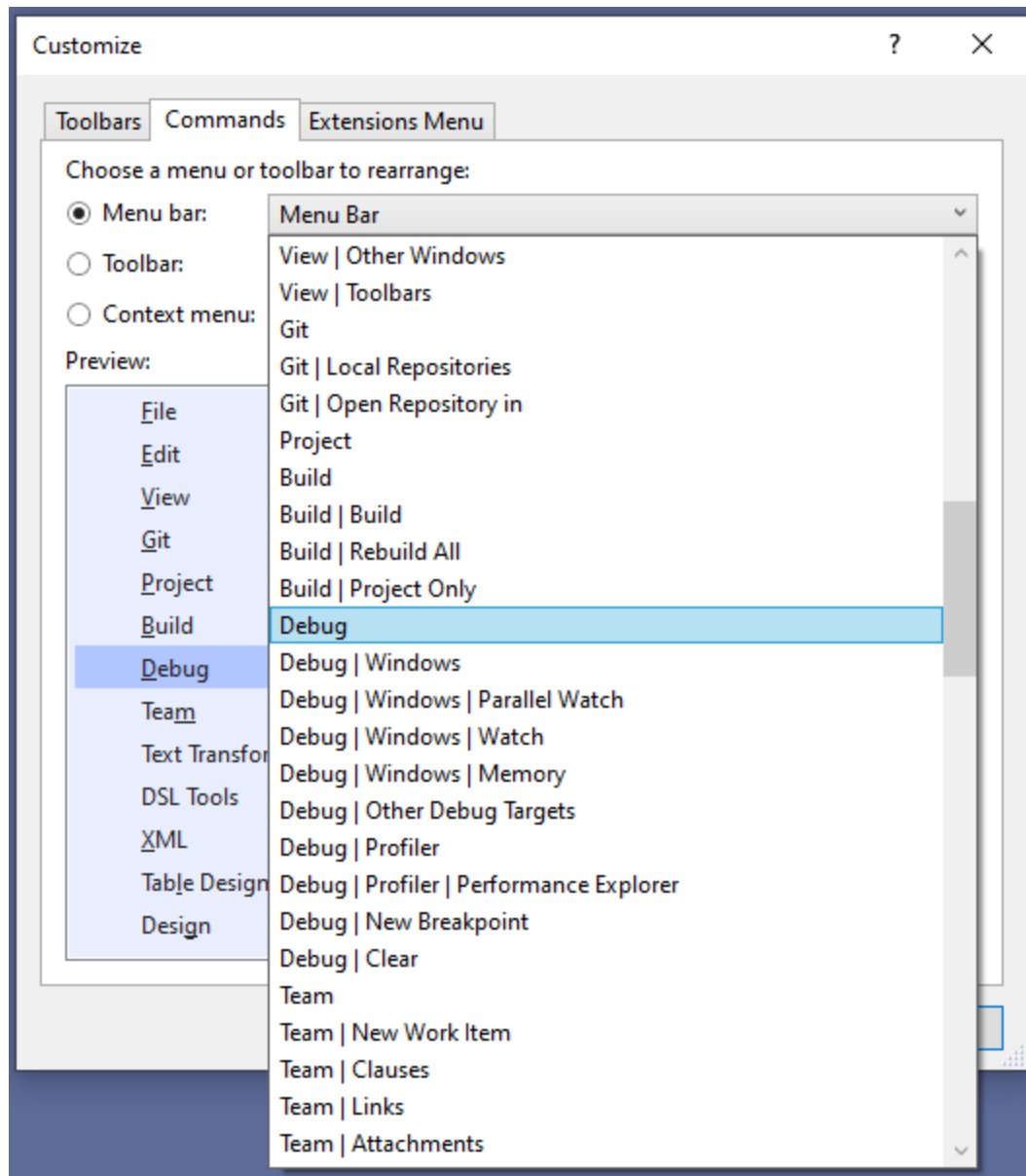
6. Button *Compile* (The status should be "Success".)
7. Button *Safe*
8. With *Run* the macro can be executed - if Visual Studio was started as Admin.

Add Command as menu entry

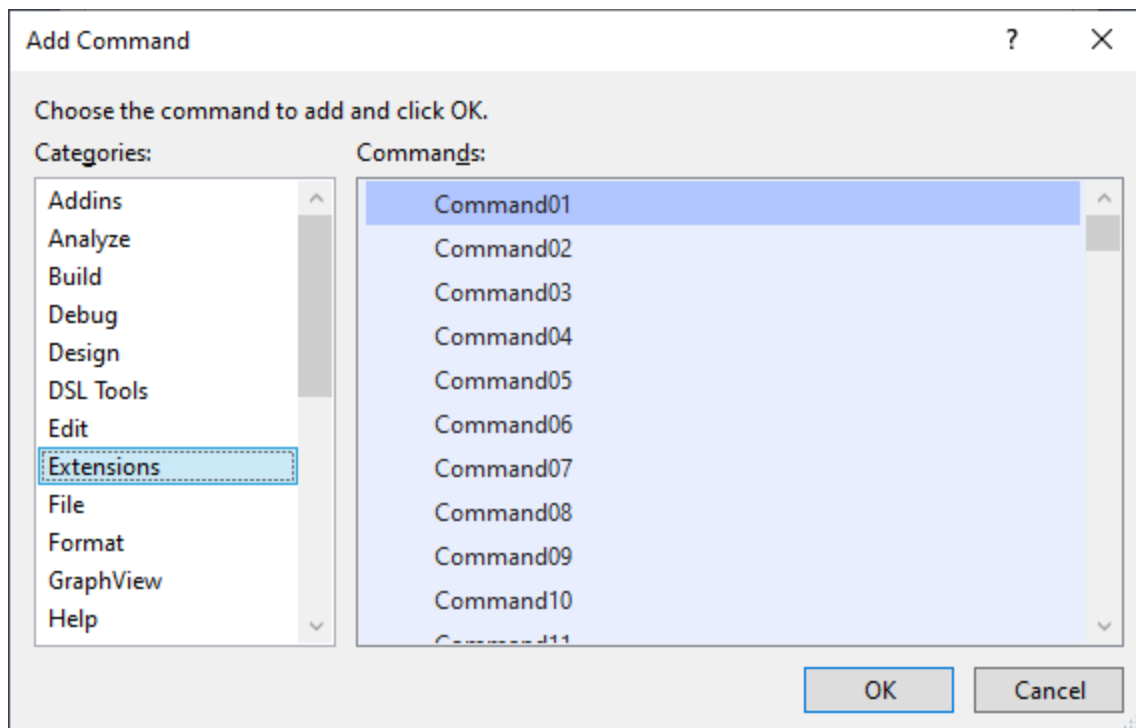
1. Menu: *Tools Customize...*



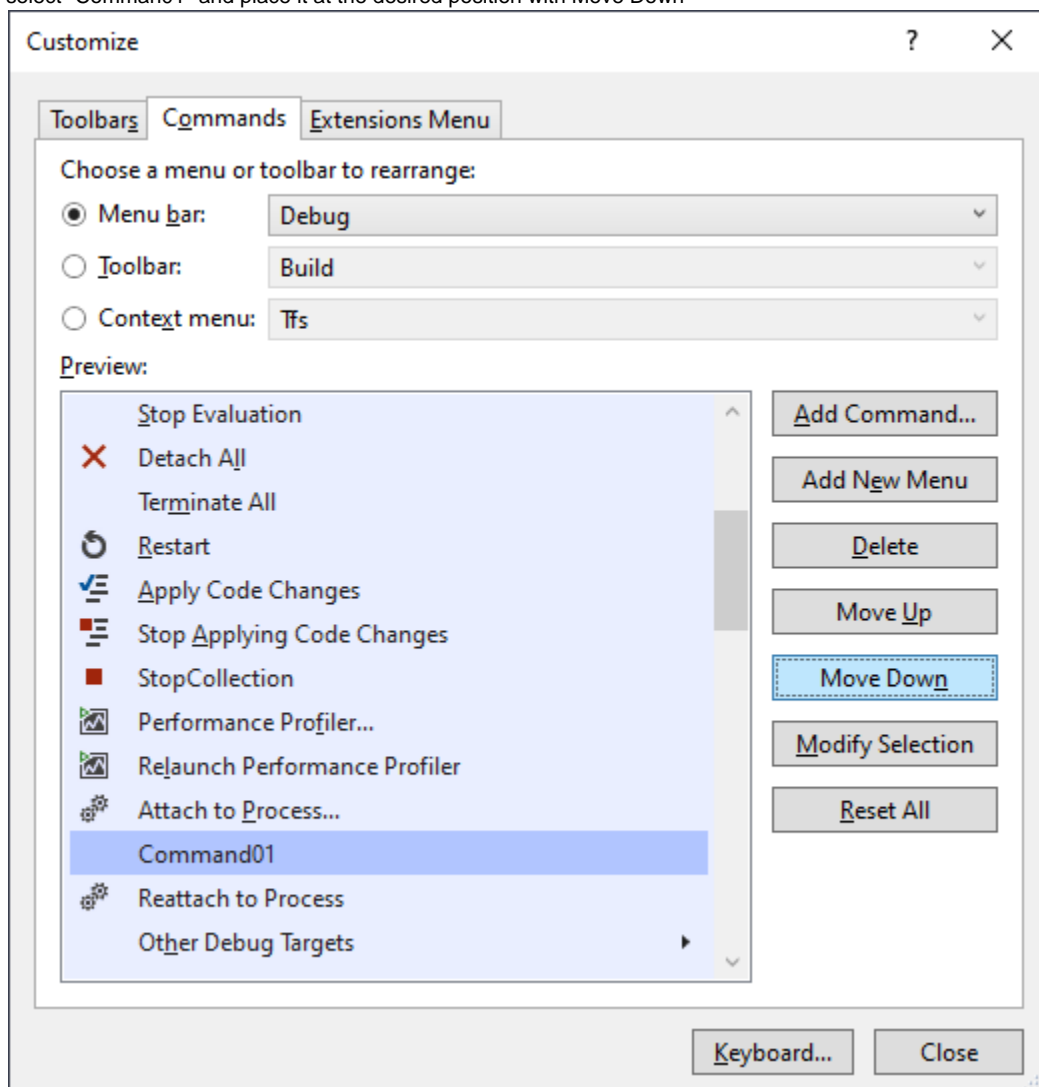
2. Under *Commands* select the *menu bar* "Debug



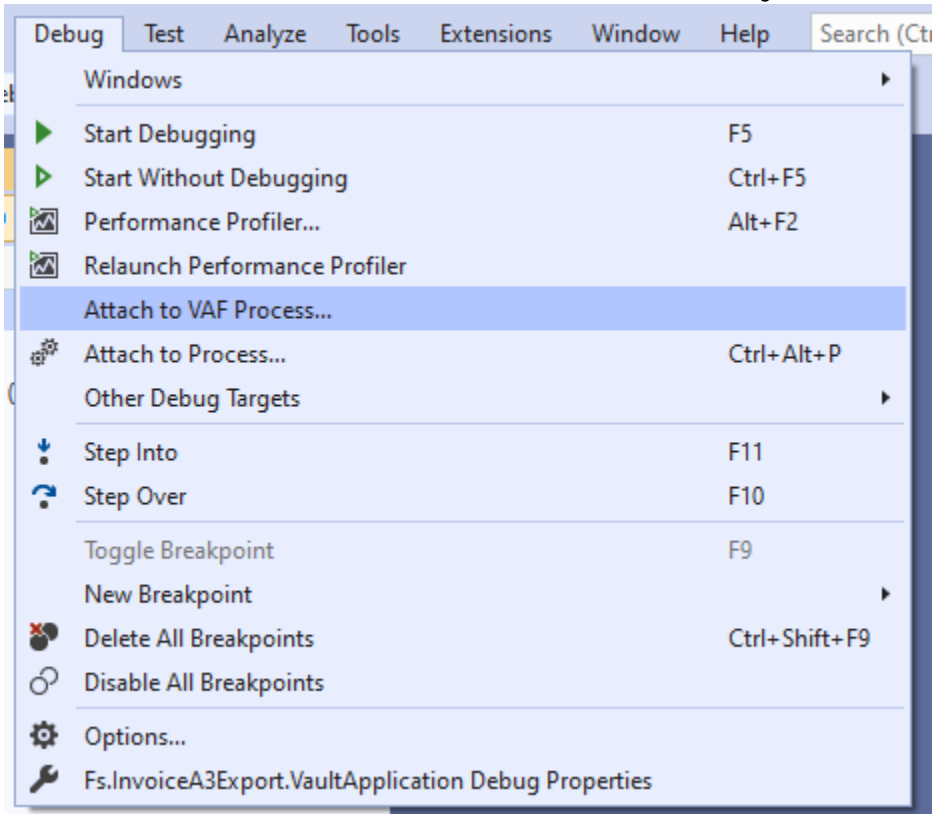
3. Button *Add Command...*
4. Select "Extensions" under *Categories*
5. Select "Command01" under Commands (If no other custom commands have been created, "Command01" should be the created "Attach to VAF Process..." command)
6. OK



7. select "Comman01" and place it at the desired position with Move Down



8. *Close* button
9. Restart Visual Studio
10. The new "Attach to VAF Process..." command should now be visible in the Debug Menu.



Links

- Visual Commander - Visual Studio Extension: <https://marketplace.visualstudio.com/items?itemName=SergeyVlasov.VisualStudioCommander>