

# Automatically activate conda environment in Powershell for VSCode

Sep 17, 2020 • krishan

VSCode automatically links conda environments in the integrated terminal through the python extension.

This is done through the following command which automatically triggers for any new environment

```
conda activate myenv
```

The integrated terminal also calls this command every time a new terminal is created

```
>C:/Users/<username>/AppData/Local/Continuum/miniconda3/Scripts/activate
```

This shell to conda integration is done by the vscode python integration. [Github source](#)

## The problem

But there is one problem. I don't like windows cmd. Most of the heavy scripting is done using powershell. The python extension officially does not support powershell for activating conda environments

*"Note: conda environments cannot be automatically activated in the integrated terminal if PowerShell is set as the integrated shell. See [Integrated terminal - Configuration](#) for how to change the shell." - [Using python environments in VSCode](#)*

The reason can be found from their source code (probably) which is written in typescript. But considering my zero experience in type script I won't go much detail into that. For now we will see the workaround to activate conda environments automatically using powershell instead of cmd.

Conda will not be recognized if powershell is the integrated terminal. That's why I have been using cmd since a long time.

```

TERMINAL  PROBLEMS 4  OUTPUT  DEBUG CONSOLE
6: powershell

Windows PowerShell
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PS C:\Users\<username>\repos\flaskWebApp> conda activate webapp
conda : The term 'conda' is not recognized as the name of a cmdlet, function, script file, or operable program. Check the spelling of
the name, or if a path was included, verify that the path is correct and try again.
At line:1 char:1
+ ~~~~~
+ CategoryInfo          : ObjectNotFound: (conda:String) [], CommandNotFoundException
+ FullyQualifiedErrorId : CommandNotFoundException

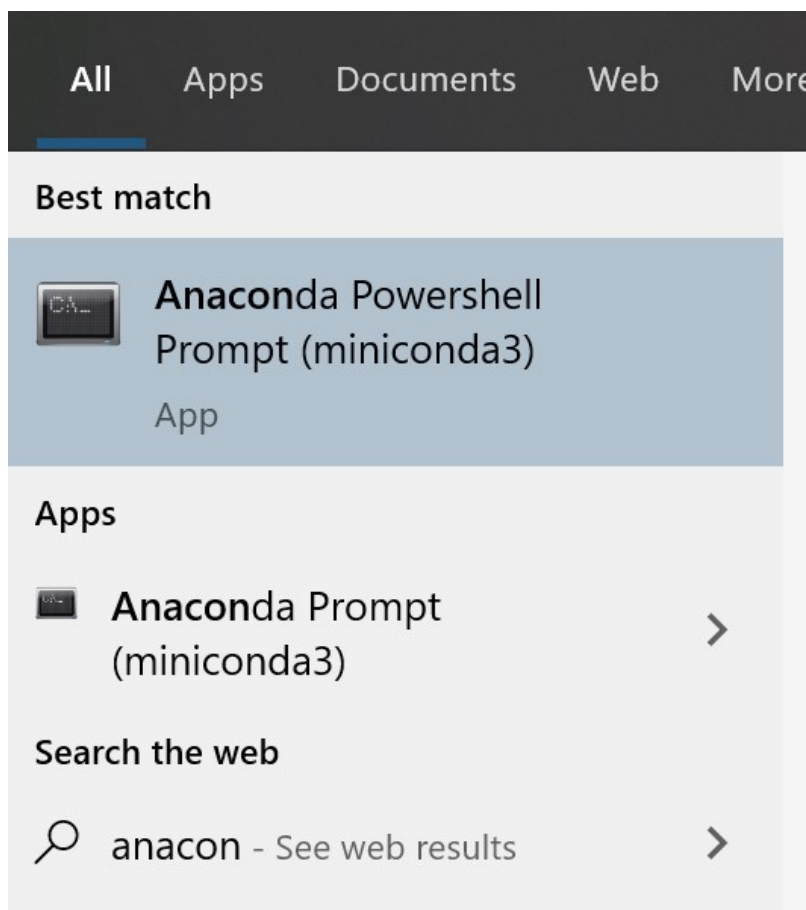
```

## The solution

Out of the two commands mentioned at the very beginning,

```
C:/Users/<User name>/AppData/Local/Continuum/miniconda3/Scripts/activate
```

this command activates conda and adds it to system path. For powershell, the command can be found in the powershell shortcut for anaconda which can be searched from windows start menu.



Properties of the shortcut contain the initial commands to set up anaconda in powershell.

Mine says this

```
%windir%\System32\WindowsPowerShell\v1.0\powershell.exe -ExecutionPolicy ByPass -
```

Now, in vscode , change default shell to powershell

```
ctrl+shift+P -> Terminal: Select Default Shell -> powershell
```

Open settings

```
ctrl+shift+P -> Preferences: Open Settings(JSON)
```

Add this line at the bottom before }

```
"terminal.integrated.shellArgs.windows": [
  "-ExecutionPolicy",
  "ByPass",
  "-NoExit",
  "-Command",
  "& C:\\Users\\WW\\AppData\\Local\\Continuum\\miniconda3\\shell\\conda
";conda activate 'C:\\Users\\WW\\AppData\\Local\\Continuum\\miniconda
]"
```

Update:

VScode has deprecated shellArgs. Hence Use this instead.

```
"terminal.integrated.defaultProfile.windows": "PowerShell",
"terminal.integrated.profiles.windows": {
  "PowerShell": {
    "source": "PowerShell",
    "args": [
      "-ExecutionPolicy",
      "ByPass",
      "-NoExit",
      "-Command",
      "& C:\\Users\\WW\\miniconda3\\shell\\conda\\bin\\conda-hook.ps1"
    ]
  }
},
```

Make modifications based on your anaconda path and activation command in the powershell shortcut.



The command `conda activate myenv` will be automatically called by the python extension.

# Debug console

The terminal arguments are not called in debug console though. Hence python might be called without initializing the conda environment which will result in multiple library errors.

[More on this](#)

The solution is to let it fail for first time. Then activate conda in the debug console. Another solution will be to revert back to cmd and run debugger.

```
C:\Users\<user name>\AppData\Local\Continuum\miniconda3\shell\condabin\conda.bat
```

## References:

<https://stackoverflow.com/a/61402982/1513792>

## What do you think?

5 Responses



2 Comments

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