# kauffmanes / install_anaconda.md

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Install Anaconda on Windows Subsystem for Linux (WSL)

<> **install_anaconda.md**

Thanks everyone for commenting/contributing! I made this in college for a class and I no longer really use the technology. I encourage you all to help each other, but I probably won't be answering questions anymore.

This article is also on my blog: https://emilykauffman.com/blog/install-anaconda-on-wsl

**Note**: `$` denotes the start of a command. Don't actually type this.

# Steps to Install Anaconda on Windows Ubuntu Terminal

1. Install WSL (Ubuntu for Windows - can be found in Windows Store). I recommend the latest version (I'm using 18.04) because there are some bugs they worked out during 14/16 (microsoft/WSL#785)
2. Go to https://repo.continuum.io/archive to find the list of Anaconda releases
3. Select the release you want. I have a 64-bit computer, so I chose the latest release ending in `x86_64.sh`. If I had a 32-bit computer, I'd select the `x86.sh` version. If you accidentally try to install the wrong one, you'll get a warning in the terminal. I chose `Anaconda3-5.2.0-Linux-x86_64.sh`.
4. From the terminal run `wget https://repo.continuum.io/archive/[YOUR VERSION]`. Example: `$ wget https://repo.continuum.io/archive/Anaconda3-5.2.0-Linux-x86_64.sh`
5. Run the installation script: `$ bash Anaconda[YOUR VERSION].sh` (`$ bash Anaconda3-5.2.0-Linux-x86_64.sh`)
6. Read the license agreement and follow the prompts to accept. When asks you if you'd like the installer to prepend it to the path, say yes.
7. Optionally install VS Code when prompted (some have reported this installation doesn't work - checkout

https://gist.github.com/kauffmanes/5e74916617f9993bc3479f401dfec7da#gistcomment-3665550)

8. Close the terminal and reopen it to reload .bash configs.

9. To test that it worked, run `$ which python`. It should print a path that has anaconda in it. Mine is `/home/kauff/anaconda3/bin/python`. If it doesn't have anaconda in the path, do the next step. Otherwise, move to step 11.

10. Manually add the Anaconda bin folder to your PATH. To do this, I added "export PATH=/home/kauff/anaconda3/bin:$PATH" to the bottom of my ~/.bashrc file.

11. To open jupyter, type `$ jupyter notebook --no-browser`. The no browser flag will still run Jupyter on port 8888, but it won't pop it open automatically. it's necessary since you don't have a browser (probably) in your subsystem. In the terminal, it will give you a link to paste into your browser. If it worked, you should see your notebooks!

Leave a comment on anything you see that doesn't work and I can look into it!

## A few other things that I did out of laziness but aren't necessary

- made a symlink between my C:/Users/kauff/Documents/JupyterNotebooks folder (where I put my downloaded notebooks in Windows) to my Ubuntu notebook directory: In the WSL terminal:

1. `cd ~`

2. `ln -s /mnt/c/Users/kauff/Documents/JupyterNotebooks/ notebooks` Now when you look at Jupyter on :8888, you should see a notebooks folder that has everything your C:/Users/kauff folder has.

3. I made an alias for the juypter command by putting this command in my .bash_aliases: `alias jup='cd /home/kauff/notebooks && jupyter notebook --no-browser`. Restart the terminal for this new command to take effect.

4. To test, simply type `jup` from anywhere in the ubuntu directory and it will take you notebooks folder and run jupyter. When you copy and paste the URL, you'll see everything in your C:/Users/kauff/JupyterNotebooks folder.

## Troubleshooting

Thanks to Alexander for the tip: "A note to be made from my installation -- there was an issue with Jupyter that required `conda update conda` and `conda update conda-build`. I then uninstalled/reinstalled jupyter with conda to avoid a 500 error for dependencies".

# Sources

https://conda.io/docs/glossary.html#anaconda-glossary
https://www.cgranade.com/blog/2016/08/22/qutip-on-wsl.html
https://jupyter.readthedocs.io/en/latest/install.html

**Load earlier comments...**

**dsbowen** commented on Mar 15, 2021

Great tutorial!

However, I couldn't install VS code via the anaconda installer. The anaconda installer attempted to install the Linux version of VS code, whereas I needed the Windows version of VS code with the Remote WSL extension.

Here are the instructions that got VS code working for me in WSL:
https://code.visualstudio.com/docs/remote/wsl-tutorial

You may want to caution users not to install VS code via anaconda and instead follow these instructions.

**McNickSisto** commented on Apr 14, 2021

Hey ! Thank you for the great tutorial. However, I have been struggling to switch my PATH even after joining the below line:
export PATH=/home/sisto/anaconda3/bin:$PATH
to my .bashrc file.

I keep on getting this path : /home/sisto/.pyenv/shims/python

If you have any recommendations, I would gladly take it :)

**husseinkorly** commented on Apr 23, 2021

I was able to install it thru running:

- `wget https://repo.anaconda.com/archive/Anaconda3-2020.11-Linux-x86_64.sh` to download anaconda and you can always get latest by copying the link from here [https://www.anaconda.com/products/individual#linux](Anaconda Installers)
- run the installer but don't press too many "Enter" because you don't want to miss this part 😊

```
zipp                    pkgs/main/noarch::zipp-3.4.0-pyhd3eb1b0_0
zlib                    pkgs/main/linux-64::zlib-1.2.11-h7b6447c_3
zope                    pkgs/main/linux-64::zope-1.0-py38_1
zope.event              pkgs/main/linux-64::zope.event-4.5.0-py38_0
zope.interface          pkgs/main/linux-64::zope.interface-5.1.2-py38h7b6447c_0
zstd                    pkgs/main/linux-64::zstd-1.4.5-h9ceee32_0


Preparing transaction: done
Executing transaction: done
installation finished.
Do you wish the installer to initialize Anaconda3 ──
by running conda init? [yes|no] ──
[no] >>> yes   ──
```

- restart the terminal
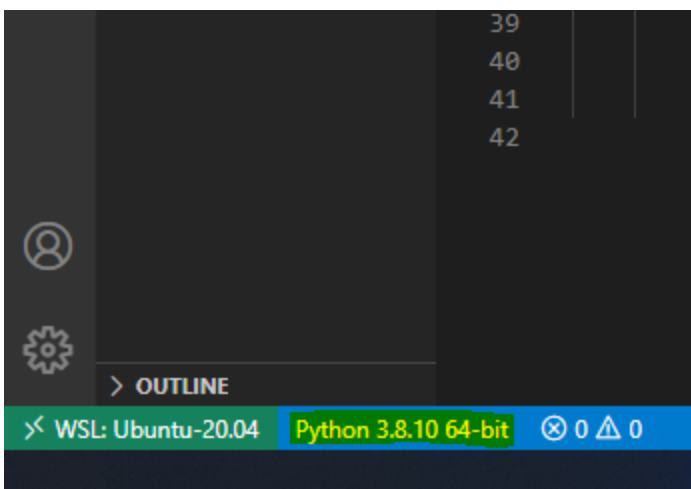
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**Mohamad-Jaallouk** commented on May 7, 2021

Don't install Miniconda with `sudo` , otherwise it will be installed in `/root` directory.

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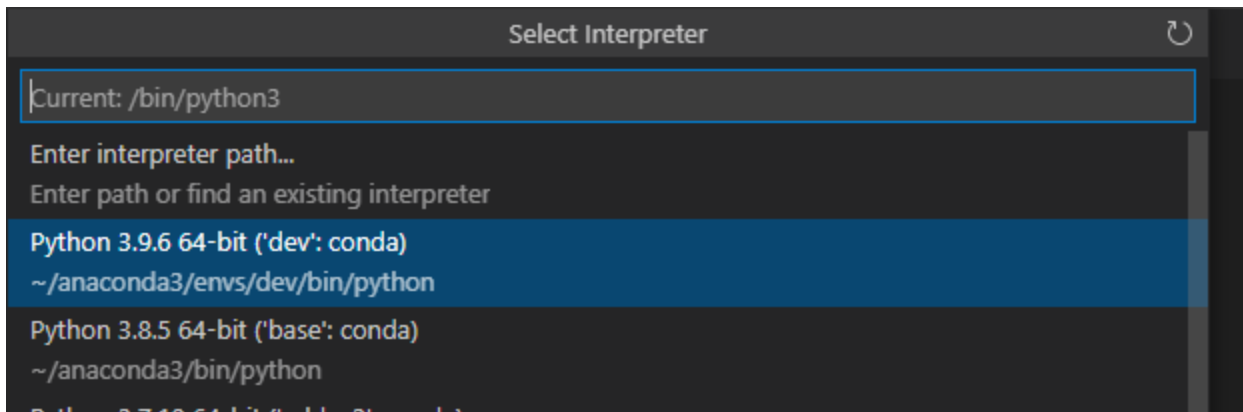**subramanyakrishna** commented on Aug 1, 2021 • edited ▾

Hello, Can I please know how to integrate vscode to this? I have installed vscode and installed remote wsl and python extension but it is not detecting conda environment in the interpreter list .

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**husseinkorly** commented on Aug 1, 2021

Not sure if you tried to click on select interpreter



and then see something like this

**IanThomasICT** commented on Aug 3, 2021

Similar to **@McNickSisto**, I was struggling to manually add the directory to my PATH using the command you provided.

I was able to get the issue fixed by using this notation in ~/.bashrc `export`
`PATH=$PATH:/home/{username}/anaconda3/bin`

**raghu330** commented on Oct 28, 2021

Thanks Kaufmanes. I have been using WSL2 for the past 1 year and it gives me the best of both worlds. I have my envs setup and everything setup in WSL. But I have one small issue or more like a wishlist.. I prefer using PyCharm as my IDE in windows as it's a decent IDE and gives me clarity.. However, I would like window's version of PyCharm to make use of WSL's python! I tried several ways, but unable to get each of them talk to!! Any ideas!

**sharadlaad** commented on Oct 31, 2021

Getting error ERR_CONNECTION_REFUSED "This site can't be reachedlocalhost refused to connect." while opening jupyter notebook URL from windows chrome browser. Do we need to map any port from WL2 to local host?

**natuan310** commented on Nov 24, 2021

Thank you for sharing. I installed successfully but I don't know how to get conda recognized after start a new wsl instance. Need to run "source ~/.bashrc" everytime. Could you tell me what to keep conda auto recognized by wsl?

**AlexanderLavelle** commented on Mar 11, 2022

A note to be made from my installation -- there was an issue with Jupyter that was giving me a 500 error when I attempted to open any notebooks. To fix:

```
conda update conda
conda update conda-build
conda uninstall jupyter
conda install jupyter
```
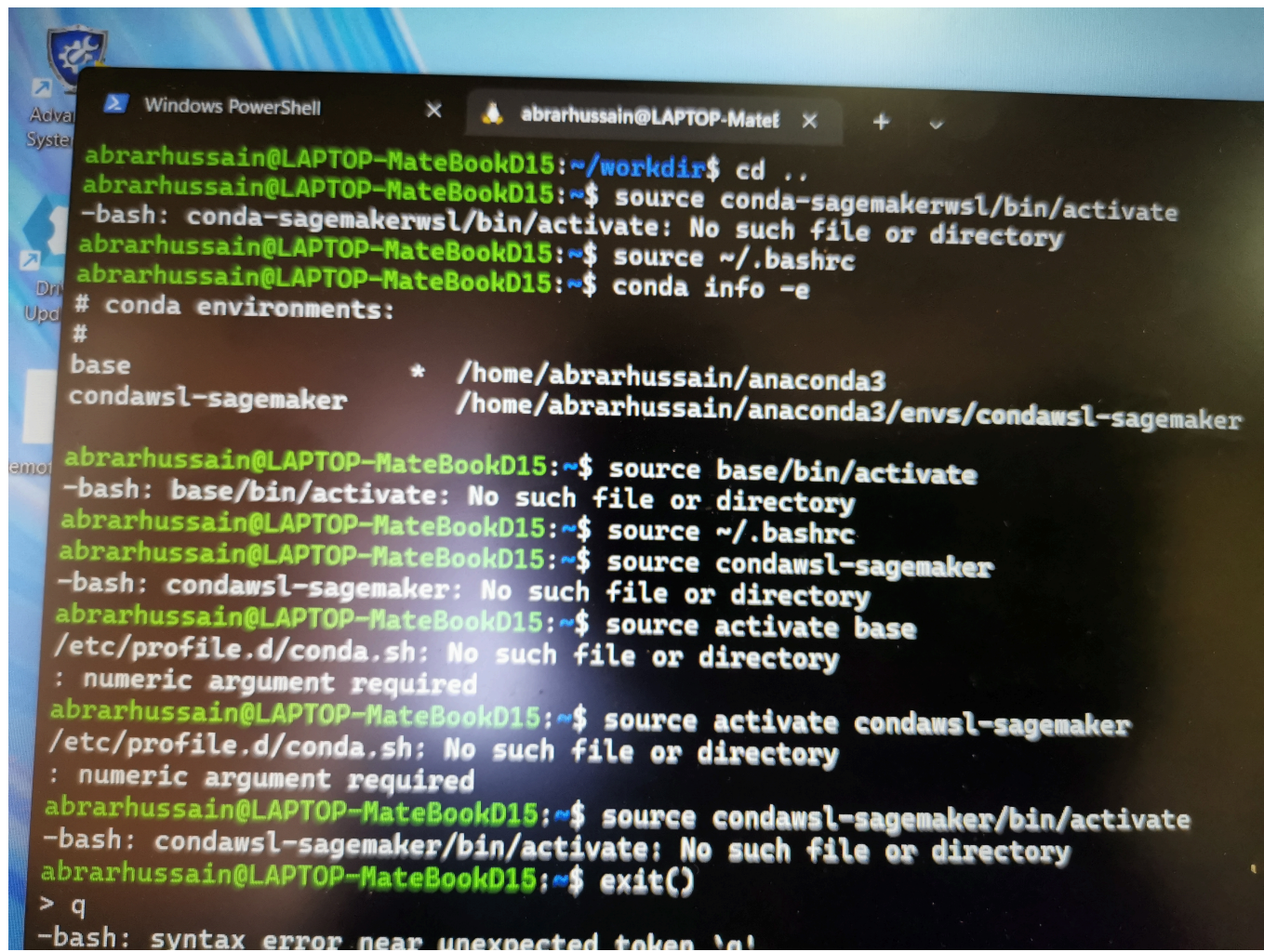
This worked. Based on a set of solutions on Stack Overflow. Best of luck!

**Ibrarhussainmughal** commented on Apr 1, 2022

I have a issue with during open the environment of anaconda in wsl2
How i can activate environment i have environment but when i try with source environment name
/bin/activate
The answer is



**tzdanows** commented on Apr 27, 2022

I managed to get this working with numerous issues along the way but upon opening WSL I need to run source `/installrepo/bin/activate` , (after the install succeeds) but I now need to run that every time I open WSL, anyone have advice for how to fix this? Might post details on how I managed to get mine working if I can get this resolved.

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**CMWolfe922** commented on May 17, 2022

I am trying to use python environments that I already had installed and I keep getting errors saying:
`ImportError: Couldn't import Django. Are you sure it's installed and available on your PYTHONPATH environment variable? Did you forget to activate a virtual environment?` Is there a way to fix this? So that I can use both conda environments and my previous python environments I already have built for other projects?

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**LuposX** commented on Jul 1, 2022

Nice tutorial, thanks.

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**MarinEstrada** commented on Sep 9, 2022

So I'm wondering, If I ever choose to uninstall anaconda would I just delete the anaconda3 file recursively?

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**milieere** commented on Oct 3, 2022

Hi there, thanks for the nice tutorial.

I would add one more step after step 10:

11. Run `source ~/.bashrc`  and  `conda init`

This will source changes to your PATH and initialize the shell for conda use.

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**prashdash112** commented on Oct 12, 2022

Hi all,

I already have conda installed on windows. I am trying to access the preinstalled conda & conda envs that I created but so far unable to run it from wsl2. Any workaround is highly appreciated. I don't want the Linux anaconda to mess with my windows anaconda.

Thanks.

**timuroeztuerk** commented on Dec 9, 2022

Thank you, worked perfectly for me!

**Philipwur** commented on Dec 16, 2022

Great help, thanks!

**DavidGomez00** commented on Dec 23, 2022

> I have Anaconda installed on my main Windows 10 System using the *.exe (latest version). I am
> doing a lot of work on a remote linux station and want to use the WSL to run Anaconda, Jupyter
> Notebooks, etc. If I install Anaconda on the WSL via these steps, it shouldn't mess up the Anaconda
> installation on the Windows side should it? Any insight in this regard is appreciated.
>
> Would love some insight on this. Many users already have Anaconda installed on Windows, so using it
> through WSL 2 instead of 'double install', would be great.

Has anyone figured this out yet? I agree it's a great concern.

**d-davy** commented on Jan 9, 2023

> I have Anaconda installed on my main Windows 10 System using the *.exe (latest version). I
> am doing a lot of work on a remote linux station and want to use the WSL to run Anaconda,
> Jupyter Notebooks, etc. If I install Anaconda on the WSL via these steps, it shouldn't mess up
> the Anaconda installation on the Windows side should it? Any insight in this regard is
> appreciated.
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> using it through WSL 2 instead of 'double install', would be great.

> Has anyone figured this out yet? I agree it's a great concern.

Regarding the original comment---no, it shouldn't mess up the Anaconda on the Windows side; they are
indeed separate, so you will end up with two installations and different environments.

As for the follow-up on using the Anaconda installed on Windows from the WSL side, I haven't really tried
this one myself, so right now I'm mostly speculating, but it should be possible since you have access to the
Windows file system via `/mnt` .
For that, I'd think that the way to go is to create symbolic links to the Anaconda installation, in a similar
fashion to OP's shortcut to the notebooks.
I used ChatGPT to come up with something along these lines:

```
sudo ln -s /mnt/c/ProgramData/Anaconda3/ /usr/local/anaconda3
sudo ln -s /mnt/c/ProgramData/Anaconda3/envs/myenv/ /usr/local/anaconda3/envs/myenv
```

Of course, you'd replace the paths with whatever you have on your system.

Then, you can use these symlinks to add the bins to the path by adding the following lines to the the `.bashrc` file:

```
export PATH="/usr/local/anaconda3/bin:$PATH"
export PATH="/usr/local/anaconda3/envs/myenv/bin:$PATH"
```

Note that, in any case, WSL does not have native GUI support, as previously stated.

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**junsukha** commented on Feb 13, 2023

Thank you so much!

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**Gitgidy** commented on Aug 6, 2023

ty 👍

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**EliseoMolina** commented on Sep 10, 2023

Thanks for the excelent tutorial

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**we85** commented on Sep 22, 2023

Thank you!!

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**widiarsa1605** commented on Dec 7, 2023

hi i can't do $ bash Anaconda3-5.2.0-Linux-x86_64.sh
the license already show up, and i already agreed. Unpacking load already happen. but it only reach 30%, suddenly the linux terminal close and comeback to powershell. How to resolve it?

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**Reza-Andalibi** commented on Jan 11, 2024

Worked perfectly for me thanks :)

**tvy14** commented on Mar 27, 2024

> > I have Anaconda installed on my main Windows 10 System using the *.exe (latest
> > version). I am doing a lot of work on a remote linux station and want to use the WSL to
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> ```
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> export PATH="/usr/local/anaconda3/envs/myenv/bin:$PATH"
> ```
>
> Note that, in any case, WSL does not have native GUI support, as previously stated.

Hello Davy, thanks for the insights. I have a little bit concern since I am trying to get used to WSL recently
from Ubuntu,

exporting the path of Anaconda from the Windows side still makes me unable to execute conda command
on my WSL, but giving me double anaconda3/ folder instead. any of you encounter this kind of issues?

I resolved my issue by installing conda to my wsl and removing my conda from windows instead, sounds like
a noob from me but that's the quick fix for me with my limited understanding regarding Windows env.
setups Please let me know your thoughts guys, Thanks a lot

**gianni171** commented on Jul 17, 2024

I'm having issues in the bashing process, can someone help?