virtualenv error bad interpreter: No such file or directory

Asked 5 years, 8 months ago   Modified 11 months ago   Viewed 64k times

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If I attempt to create a virtual env I get this error message, which I do not understand: **bad interpreter: No such file or directory**. I have reviewed [this stack overflow answer](#) and have tried to apply it in the diagnostic steps below.
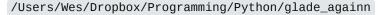
This is my first day running on Mojave but I don't know if that is a factor in this issue or not.

I have created a new empty folder for the project at `/Users/Wes/Dropbox/Programming/Python/glade_againn`

My plan has been to run the project in the virtualenv `/Users/Wes/.virtualenvs/glade_againn`

However, when I attempt to use virtualenv I get this error message.

```
$ virtualenv --version
-bash: /usr/local/bin/virtualenv: /usr/local/opt/python/bin/python2.7: bad
interpreter: No such file or directory
```

If I attempt to install virtualenv with PIP I am told it already exists.

```
$ pip install virtualenv
Requirement already satisfied: virtualenv in /usr/local/lib/python2.7/site-
packages (15.2.0)
$
```

My current PATH is

```
echo $PATH
/Library/Frameworks/Python.framework/Versions/3.6/bin:/opt/local/bin:/opt/local/sb
```

If you search for pyth* across all those directories you get this list, in this order.

```
/Library/Frameworks/Python.framework/Versions/3.6/bin/python3
/Library/Frameworks/Python.framework/Versions/3.6/bin/python3-config
/Library/Frameworks/Python.framework/Versions/3.6/bin/python3.6
/Library/Frameworks/Python.framework/Versions/3.6/bin/python3.6-config
/Library/Frameworks/Python.framework/Versions/3.6/bin/python3.6m
/Library/Frameworks/Python.framework/Versions/3.6/bin/python3.6m-config
/opt/local/bin/python2.7
/opt/local/bin/python2.7-config
/opt/local/bin/python3.4
/opt/local/bin/python3.4-config
/opt/local/bin/python3.4m
/opt/local/bin/python3.4m-config
/opt/local/bin/pythonw2.7
```

```
/usr/local/bin/python-32
/usr/local/bin/python2-32
/usr/local/bin/python2.7-32
/usr/local/bin/python3
/usr/local/bin/python3-config
/usr/local/bin/python3.6
/usr/local/bin/python3.6-config
/usr/local/bin/python3.6m
/usr/local/bin/python3.6m-config
/usr/local/bin/pythoni
/usr/local/bin/pythoni1
/usr/local/bin/pythonw-32
/usr/local/bin/pythonw2-32
/usr/local/bin/pythonw2.7-32
/usr/bin/python
/usr/bin/python-config
/usr/bin/python2.7
/usr/bin/python2.7-config
/usr/bin/pythonw
/usr/bin/pythonw2.7
/sw/bin/python2.7
/sw/bin/python2.7-config
/usr/local/bin/python-32
/usr/local/bin/python2-32
/usr/local/bin/python2.7-32
/usr/local/bin/python3
/usr/local/bin/python3-config
/usr/local/bin/python3.6
/usr/local/bin/python3.6-config
/usr/local/bin/python3.6m
/usr/local/bin/python3.6m-config
/usr/local/bin/pythoni
/usr/local/bin/pythoni1
/usr/local/bin/pythonw-32
/usr/local/bin/pythonw2-32
/usr/local/bin/pythonw2.7-32
```

Does anyone have a suggestion on how to get virtualenv to work again?

python   virtualenv

Share Follow   edited Dec 20, 2018 at 6:33   asked Dec 20, 2018 at 6:28

                                                                          WesR
                                                                          1,462 ●1 ●22 ●36

7 Answers

Sorted by: Highest score (default) ▼

▲ Try to reinstall using this

74   ```
       pip install -U --force-reinstall virtualenv
       ```

if above solution doesn't work for you you should create a new virtualenv again because of mojave update

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answered Dec 20, 2018 at 6:33

nishant
**2,566** ● 1 ● 14 ● 20

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Yeah this might fix it. – waqasgard Dec 20, 2018 at 7:14

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3   In my case, the error came from nowhere and got solved after this reinstall. Not sure what happened here. – Pramesh Bajracharya Jan 6, 2020 at 10:19

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2   I also had to `pip install -U --force-reinstall virtualenvwrapper` – Chad Befus Jan 23, 2021 at 15:13

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1   I had to run with `pip3` – chughts Jun 15, 2022 at 14:02

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**9**

In my case I was renaming project and project's folder where `venv` has been located.

So in my case I was changing paths to python interpreter in the following files:

```
~/PycharmProjects/myproject/venv/bin/activate*
```

And modified `~/PycharmProjects/myproject/venv/bin/pip*` files to:

```python
#!/home/myuser/PycharmProjects/myproject/venv/bin/python
# -*- coding: utf-8 -*-
import re
import sys
from pip._internal.cli.main import main
if __name__ == '__main__':
    sys.argv[0] = re.sub(r'(-script\.pyw|\.exe)?$', '', sys.argv[0])
    sys.exit(main())
```

To modify it I was required to login with root permissions: `sudo su` . The `sudo vim.tiny venv/bin/pip` just not allowed me to edit the files.

I've changed only the first line starting with `#!/home...`

Share Follow   edited Feb 12, 2021 at 12:56   answered Feb 12, 2021 at 12:51

Gryu
2,171 ● 2 ● 18 ● 29

In my case, I was on **MacOS** and I had python3.9 installed, but virtualenv was installed using python3.7 and at some point I uninstalled python3.7.

6

```
$ /usr/local/bin/virtualenv --version
-bash: /usr/local/bin/virtualenv: /usr/local/opt/python/bin/python3.7: bad
interpreter: No such file or directory
```

However, my python version:

```
$ which python3.9
/usr/local/bin/python3.9
```

No amount of pip or pip3 install/uninstall/install virtualenv worked for me. Finally I did the following:

```
$ python3.9 -m pip install --user virtualenv
Collecting virtualenv
  Using cached virtualenv-20.4.6-py2.py3-none-any.whl (7.2 MB)
<snip>
Successfully installed appdirs-1.4.4 distlib-0.3.1 filelock-3.0.12 virtualenv-
20.4.6
```

And then

```
$ /usr/local/bin/virtualenv --version
virtualenv 20.4.6 from <mypath>
```

Yay!!

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answered May 21, 2021 at 4:31

sin.ak
61 ● 1 ● 2

yes - thank you - but also to switch the default python path from 3.7 -> 3.9. You put me on the right track though. (all after High Sierra -> Big Sur upgrade) Thanks! – jtlz2 Aug 12, 2021 at 8:30 ✎

That solved the problem in my case: (my env file is called `.venv`)

3

```
mv .venv .venv_old
python3.7 -m venv .venv
source .venv/bin/activate
pip install wheel
pip install --upgrade pip wheel setuptools
pip install -r requirements.txt
```

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For those having similar issues with built-in venv and arriving to the post:

- the problem could appear when creating a project and .venv folder, and later moving the project to another folder.

- the simplest solution is to delete and create a new venv.

- otherwise, go to .venv/bin/activate file to change the $VIRTUAL_ENV to the new path and do the same in the .venv/bin/pip first line (the shebang) and the same with pip3 and pip3.X files in the same folder.

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In my case, the error shows in Github action and the root cause is the broken python symbolic link. As a workaround, I just simply re-create it during the process.

```
Error:
home/runner/work/_temp/810926a2-36c5-4488-ac84-6f3f57713147.sh:
/home/runner/work/dataops/dataops/.venv/bin/pytest:
/home/runner/work/dataops/dataops/.venv/bin/python: bad interpreter: No such
file or directory

Root Cause:
/home/runner/work/dataops/dataops/.venv/bin/python: broken symbolic link to
/opt/hostedtoolcache/Python/3.9.15/x64/bin/python3.9

Solution:
Add below scripts into wherever has broken link:
        PYTHON_PATH=$(which python3)
        source .venv/bin/activate
        PYTHON_BROKEN_PATH=$(dirname $(which pip))
        rm $PYTHON_BROKEN_PATH/python
        ln -s $PYTHON_PATH $PYTHON_BROKEN_PATH/python
        export PATH=$PATH:$(dirname $PYTHON_BROKEN_PATH)
```

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Similar problem after switching package managers on a Mac. No reinstallation required for my use case, just updates to 2 files.

0   **1st update config file**

I updated `pyvenv.cfg` in the virtual environment directory (`cd /to/your/venv/dir`)

I had to update the `home` and the `version` settings.

```
home = /usr/local/bin
include-system-site-packages = false
version = 3.10.8
```

2nd fix symlinks

Lastly I updated the symlink to the python executable. It's in the virtual environment's `bin` directory.

```
cd /to/your/venv/dir/bin
ln -s /usr/local/bin/python3.10 python
```

Note, in my case there were 2 other symlinks to python executables in the `venv/bin` directory, `python3` and `python3.10` . I didn't need to touch these as they were both pointers to the `python` symlink that was just updated.

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answered Jan 19, 2023 at 18:40

El Jfe
1 ● 3