How can I control which Python distribution to pip install a package to when I have Python 2, Python 3, and Anaconda on my computer?

I have the following Python distributions installed on my Windows computer:

- Python 2.7 (IDLE)
- Python 3.4 (IDLE)
- Anaconda (Python 3.4)

Obviously, they all store their libraries in different locations.

So, how can I easily make a targeted installation to (a different) one of them each time I need to do so?

For example, right now, I am trying to install `pytz` to Python 3.4 (IDLE), and `pip install` seems to be defaulting to Python 2.7 (IDLE), which is the first distribution of Python I had installed on my computer.

python python-2.7 python-3.x pip anaconda

edited May 21 '15 at 5:32

asked May 21 '15 at 3:00
Tian Jiang
58 2 7

1 You need to run the right `pip` . You should have `pip2` and `pip3` . I'm not sure what Anaconda uses. – Blender May 21 '15 at 3:02

You also might find virtualenv useful – nathancahill May 21 '15 at 3:10

@Blender According to the pip website: "Python 2.7.9 and later (on the python2 series), and Python 3.4 and later include pip by default." But `pip3 install pytz` on the command prompt gave me this error: "DNS server not authoritative for zone". – Tian Jiang May 21 '15 at 3:11

@TianJiang: That doesn't sound like a Python error to me. – Blender May 21 '15 at 3:50

@nathancahill, using virtualenvs in combination with anaconda is a horrible advice. – cel May 21 '15 at 6:03

4 Answers

Anaconda Python

If you have Anaconda python installed, it probably will overwrite python command to point to the Anaconda interpreter as default, so does pip. In that case, all the libraries installed by `pip` command will be installed under the Anaconda python library path:

```
$ which python
/home/datafireball/anaconda/bin/python
$ which pip
/home/datafireball/anaconda/bin/pip
$ cat /home/datafireball/anaconda/bin/pip
#!/home/datafireball/anaconda/bin/python
if __name__ == '__main__':
```

```
    import sys
    from pip import main
sys.exit(main())
```

Default Python2.7

If you try to install libraries under default Python2.7, you can specify the pip path like this:

```
/usr/bin/pip install <libraryname>
```

In that case, it will use the Python2.7 interpreter to compile the library and it will be installed under default Python2.7 library folder.

Python3

In my Ubuntu VM, python3 is installed as default but not the pip3. I have to install by doing `sudo apt-get install python3-pip` . After it is installed, you can use pip3 to install libraries for python3.

More about PIP (ReadTheFullManual):

There are indeed a lot of interesting arguments in pip command itself to let you install package in whatever way you like.

For example,

`pip install --target` will install the library in specified library, which you can actually using Anaconda pip to install the library to be under default python library... (not sure why would anyone do this)

answered May 21 '15 at 3:30

B.Mr.W.
6,631 9 58 104

1 Anaconda would be expected to hijack `pip` , but interestingly mine is defaulting to Python 2.7. I re-installed `pip` from pip.pypa.io/en/stable/installing.html#install-pip, by running the "get-pip.py" file in Python 3.4 (IDLE), and receiving verification that `pip` is installed in my Python 3.4's /lib/site-packages folder. But both `pip install` and `pip3 install` commands in the command prompt are still defaulting to Python 2.7, and telling me that the requirement is already satisfied. So, I'm still unable to install packages to Python 3.4 (IDLE). – Tian Jiang May 21 '15 at 5:08

@TianJiang run the command `which pip3` and open the file path in an editor like VIM, change the `#!` to point to Python3.4 instead of Python2.7. Let me know if that works. – B.Mr.W. May 21 '15 at 5:10

Thanks. `which pip3` is giving me this error: "DNS server not authoritative for zone". (I don't know what that means. Following one suggestion on the internet, I ran `sfc /scannow` on cmd, but it didn't do the job for me.) Is there possibly another way I could find that path for `pip3` ? – Tian Jiang May 21 '15 at 5:20

Even though pip and python is pointing to Anaconda installaiton, pip install (of a biggish library) is installing to system python. alex@alex-Lenovo-G400s-Touch:~/Coding/IPythoN$ which pip /home/alex/anaconda3/bin/pip alex@alex-Lenovo-G400s-Touch:~/Coding/IPythoN$ cat /home/alex/anaconda3/bin/pip #!/home/alex/anaconda3/bin/python if **name** == '**main**': import sys import pip – Alex Punnen Mar 14 at 5:15

I'm not sure why you need so many different Pythons, but for Anaconda, you should use conda.

```
conda install pytz
```

will install `pytz` into your Anaconda Python.

If all you are aiming to do is to have both Python 2 and Python 3 you can do this with conda.

```
conda create -n py27 python=2.7 anaconda
```

will create a conda environment (similar to a virtualenv but more powerful) with the Python 2.7 version of Anaconda. You can then activate this with

```
activate py27
```

See http://continuum.io/blog/anaconda-python-3.

You can also use `pip` with Anaconda, but using conda is recommended unless the package you need is not available through conda.

answered May 21 '15 at 15:55

asmeurer
45.4k 15 78 149

(in command prompt)C:\Python34\scripts\pip.exe install pytz

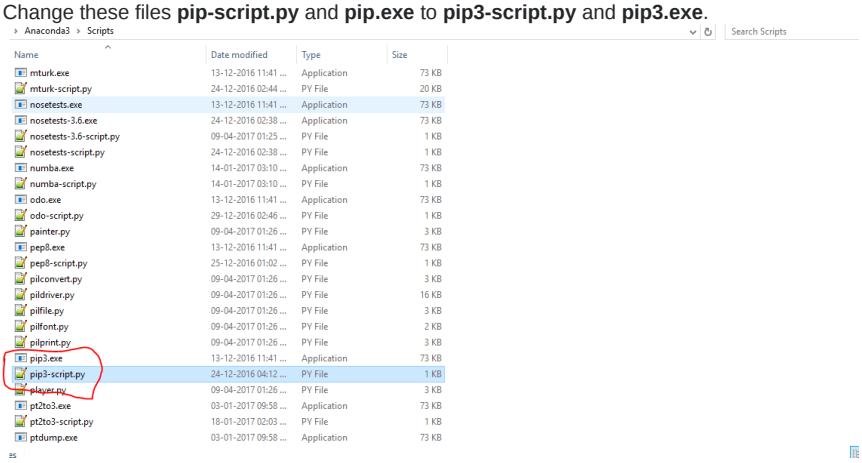
this assumes your path is similar to mine. I used the default install location for all my pythons(2.7,3.4).

answered Feb 24 at 9:18

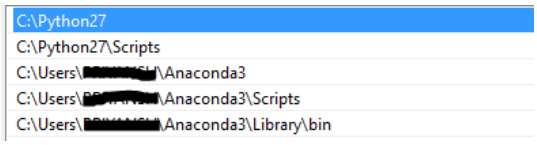
codx22
1

For Anaconda go to C:\Users\USERNAME\Anaconda3\Scripts

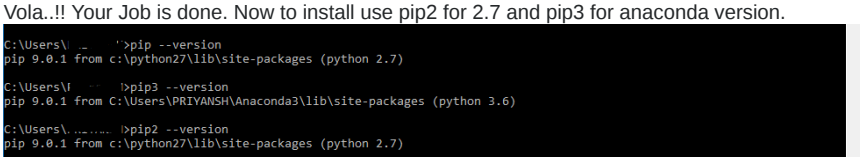
Change these files **pip-script.py** and **pip.exe** to **pip3-script.py** and **pip3.exe**.



add these variables to your system variables.



Vola..!! Your Job is done. Now to install use pip2 for 2.7 and pip3 for anaconda version.



answered Jun 11 at 19:17

Priyansh
568 6 20
