

Bolt Python Library

As you have already learned about Python basics in the previous topics, Now in this section we will learn to build the IoT product with Bolt Python library. The Bolt Python library makes it easy to interact with the Bolt cloud API from your Python application.

You can control or fetch the data from Bolt cloud to your server(In this workshop Ubuntu from DigitalOcean or from VirtualMachine is your server.), as you have learned about control API and controlling LED in Module-1, but in that case every time you had to go to <https://cloud.boltiot.com> (<https://cloud.boltiot.com>) if you wanted to control your Bolt. What if you want to build something of your own on your own server? Then Bolt Python library will help you in building the IoT product.

Before you proceed to this step, first ssh(login) to your Ubuntu server and follow the below steps to use Bolt Python library in your code.

Step 1: Update the packages on Ubuntu

Execute the command below so that the packages on Ubuntu are updated to the latest version. If you skip this step, you may encounter an error while installing the Boltiot package.

```
sudo apt-get -y update
```

Step 2: Install python3 pip3

pip3 is a package manager for python3 used to install and manage packages and python libraries. It is system independent.

Install pip3 using the following command,

```
sudo apt install python3-pip
```

Step 3: Installing boltiot library using pip

Now we will install the boltiot python library on your Ubuntu server.

Type the below command in terminal to install boltiot python library.

```
sudo pip3 install boltiot
```

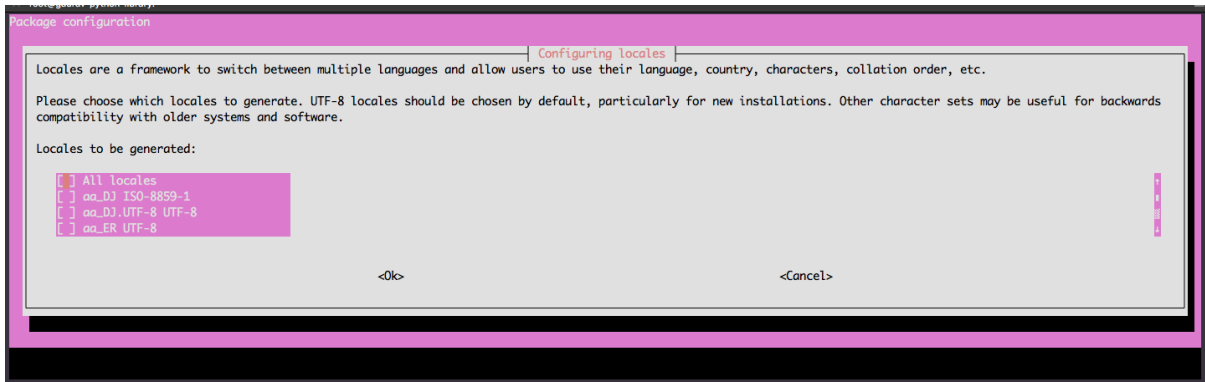
Now we are done with boltiot python library installation. In the next section, we will learn how to use the Bolt python library to check the device status and switch off the device.

Troubleshooting

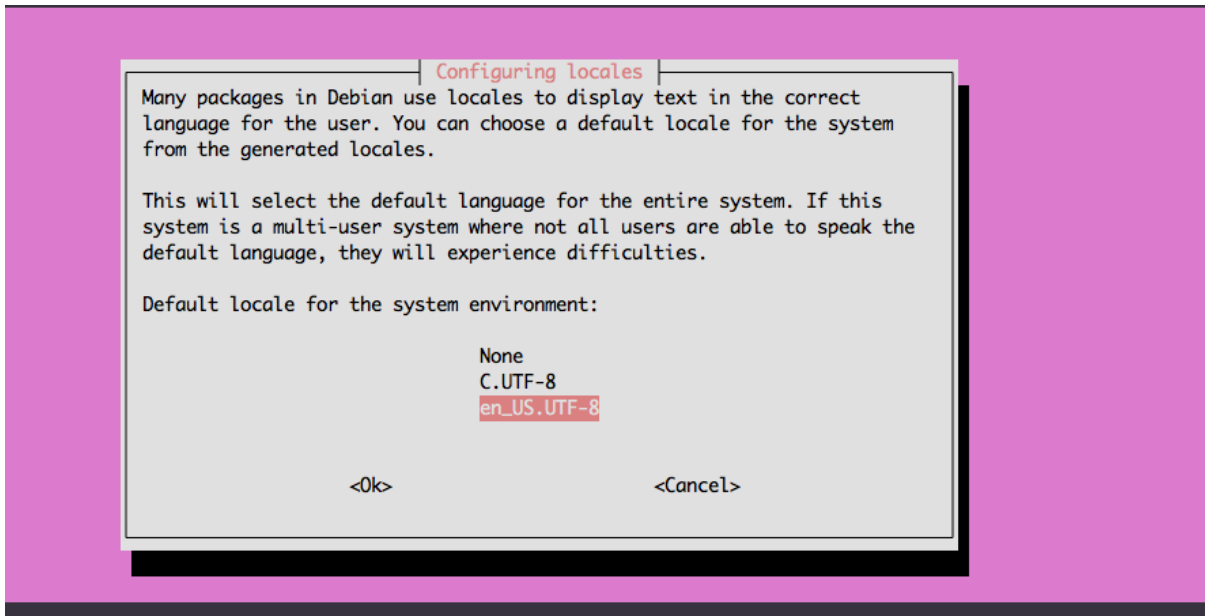
Note - If you are getting **Python locale error: unsupported locale setting** then run the following commands

```
export LC_ALL="en_US.UTF-8"  
export LC_CTYPE="en_US.UTF-8"  
sudo dpkg-reconfigure locales
```

After typing the above command, a pop up will open. Select **All locales** and click enter.



And then another pop will open. Select en_US.UTF-8 and then press enter.



Note: The above settings will stop working after closing the current session.

[PREV](#)[NEXT](#)[Forum](#)[SEARCH](#)

Q. While executing `sudo python3 filename.py` command, it is showing that `python3` can't find the `filename.py` and there is no such file

Well, it could mean any of the following:

1. You never created the file.
2. You tried to create but did not save the file.
3. You created a file with a different file name than the one you are trying to open right now.

For all these cases, I suggest you perform the steps starting from creating the file again. Do not skip any step.

Note: You have to replace the word `filename` with the name of the file you have created

[see more \(\)](#)

Q. How check if the boltiot python library is installed in my ubuntu?

To check whether the boltiot python library is installed in ubuntu type the following command:

```
sudo pip freeze
```

This command will output the list of all python libraries installed. Check if the name `boltiot` is present in the list. If it is
[see more \(\)](#)

Q. Why don't we need the IP address for Ubuntu on VirtualBox but need the IP address to access DigitalOcean server?

Every time we need to connect to any server on the Internet we need to put the IP address of the server. The IP address uniquely identifies the server on the Internet. However, in the case of VirtualBox, the virtual machine is created on your computer. Hence when you start the virtual machine, the VirtualBox assigns the IP address to that virtual machine and hence knows the IP address already. Hence it doesn't request you to enter the IP address but tells you to enter the login username and password.

Q. sudo python -m pip install boltiot
on writing this its telling me:
/usr/bin/python: No module named pip

please help me ..i have already ran this command also: sudo apt-get install python3-pip

I think aliases setup is not done properly.
If you type below command

```
sudo python3 -m pip install boltiot
```

[see more \(\)](#)

Q. I am getting an ImportError (No module named 'boltiot') when i run the device status code, how can i solve it?

Please try the commands in the following order:

1. Run the command for setting Pytho3 as your default

```
sudo echo "alias python=python3" >> ~/.bashrc
```

[see more \(\)](#)

[View more](#)

Ask your doubts to the instructor personally if they are not already answered on forum.

Type what you want to ask the instructor



ASK THE INSTRUCTOR

© Copyright 2018 Internshala
(<http://internshala.com>)