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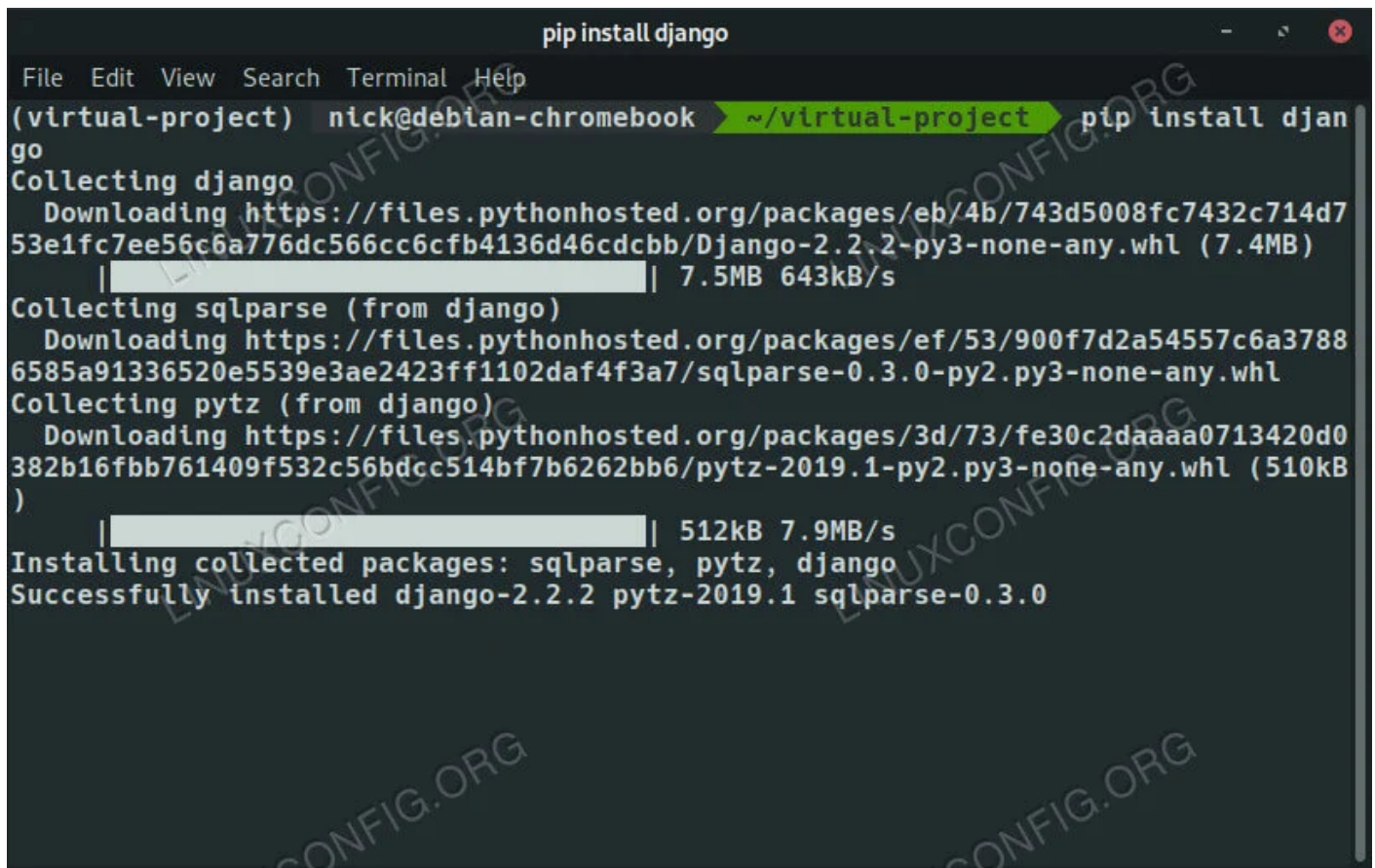YOUR SYSADMIN GUIDE TO GNU/LINUX

How to Set Up a Python Virtual Environment on Debian 10 Buster

8 June 2019 by Nick Congleton

There are two very simple ways to create a Python virtual environment on Debian 10. They're very similar and offer nearly the same benefits. As an added bonus, you won't need to install anything outside of the default Debian repositories to use them.

In this tutorial you will learn:

- How to Install the Dependencies
- How to Use Python 3's Venv
- How to Use Virtualenv

Python Virtual Environment on Debian 10.

Software Requirements and Conventions Used

Software Requirements and Linux Command Line Conventions

Category	Requirements, Conventions or Software Version Used
System	Debian 10 Buster
Software	Python 3
Other	Privileged access to your Linux system as root or via the **sudo** command.
Conventions	**#** – requires given linux commands to be executed with root privileges either directly as a root user or by use of **sudo** command **$** – requires given linux commands to be executed as a regular non-

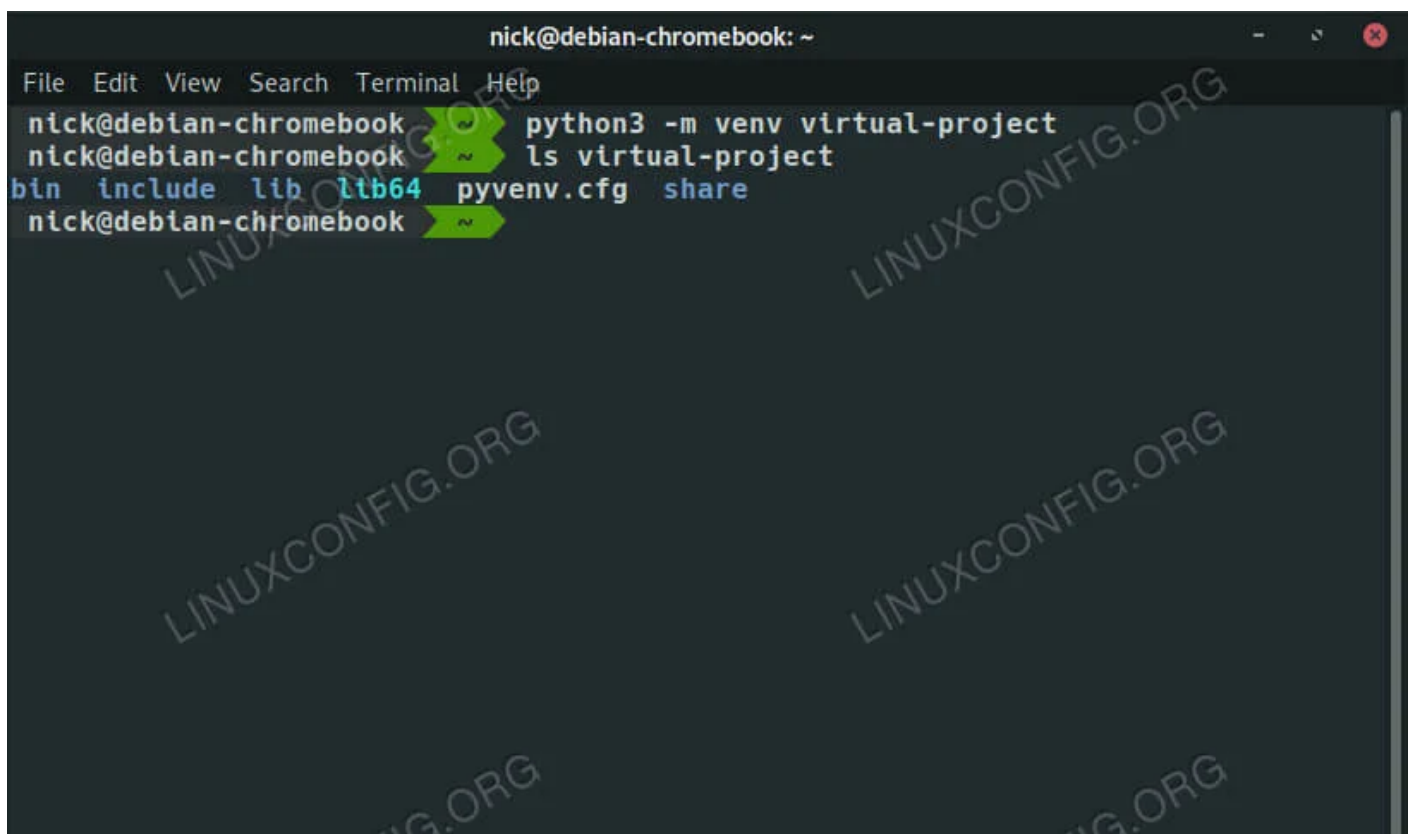| Category	Requirements, Conventions or Software Version Used
	privileged user

Install the Dependencies

Before you get started, make sure that you have Python 3.

```
$ sudo apt install python3 python3-venv
```

Then, if you plan to use Virtualenv, install that too.

```
$ sudo apt install virtualenv python3-virtualenv
```
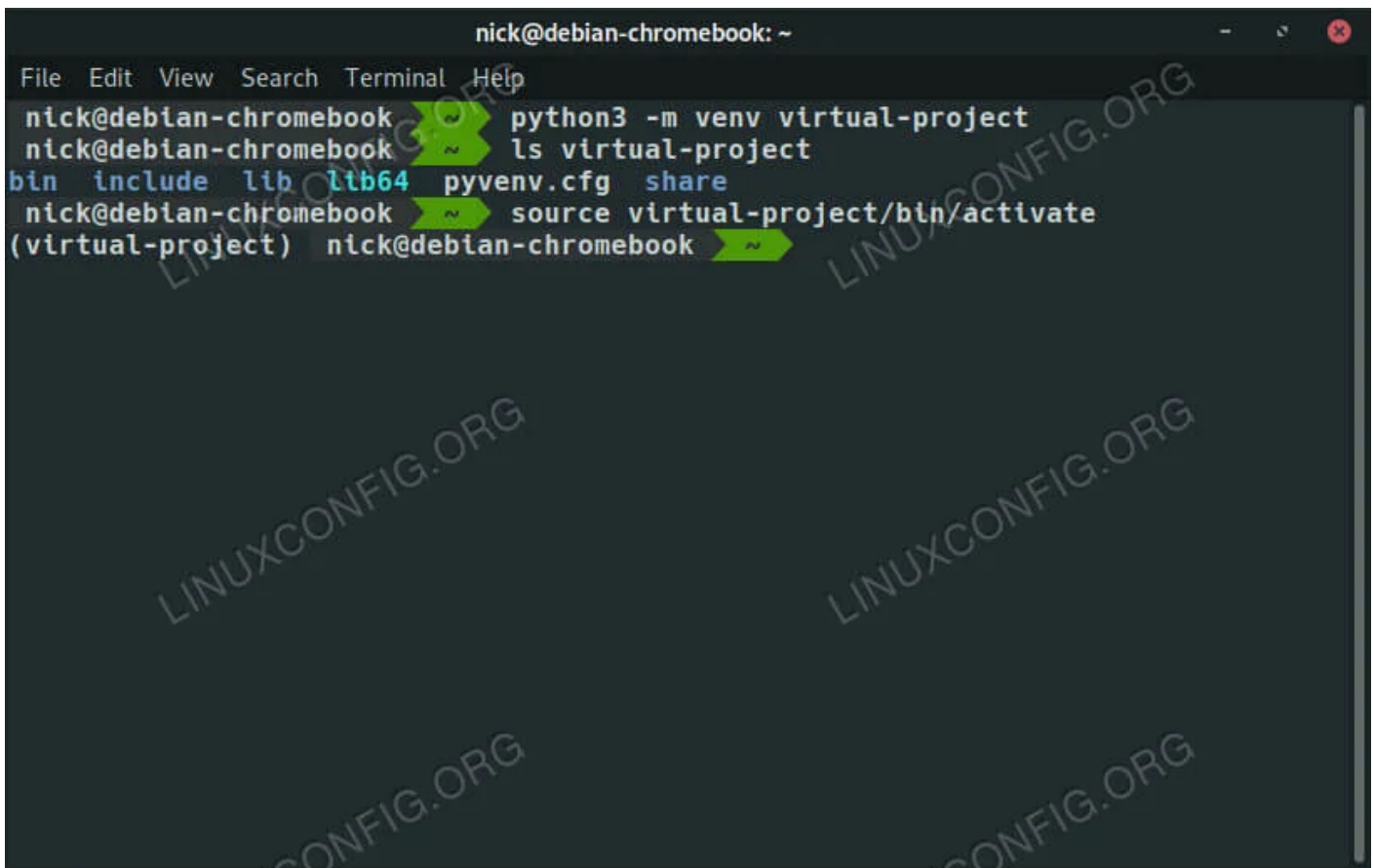
Use Python 3's Venv

Set Up Python Venv on Debian 10.

Python 3's **venv** functionality is built-in, and you can use it to get set up without anything else.
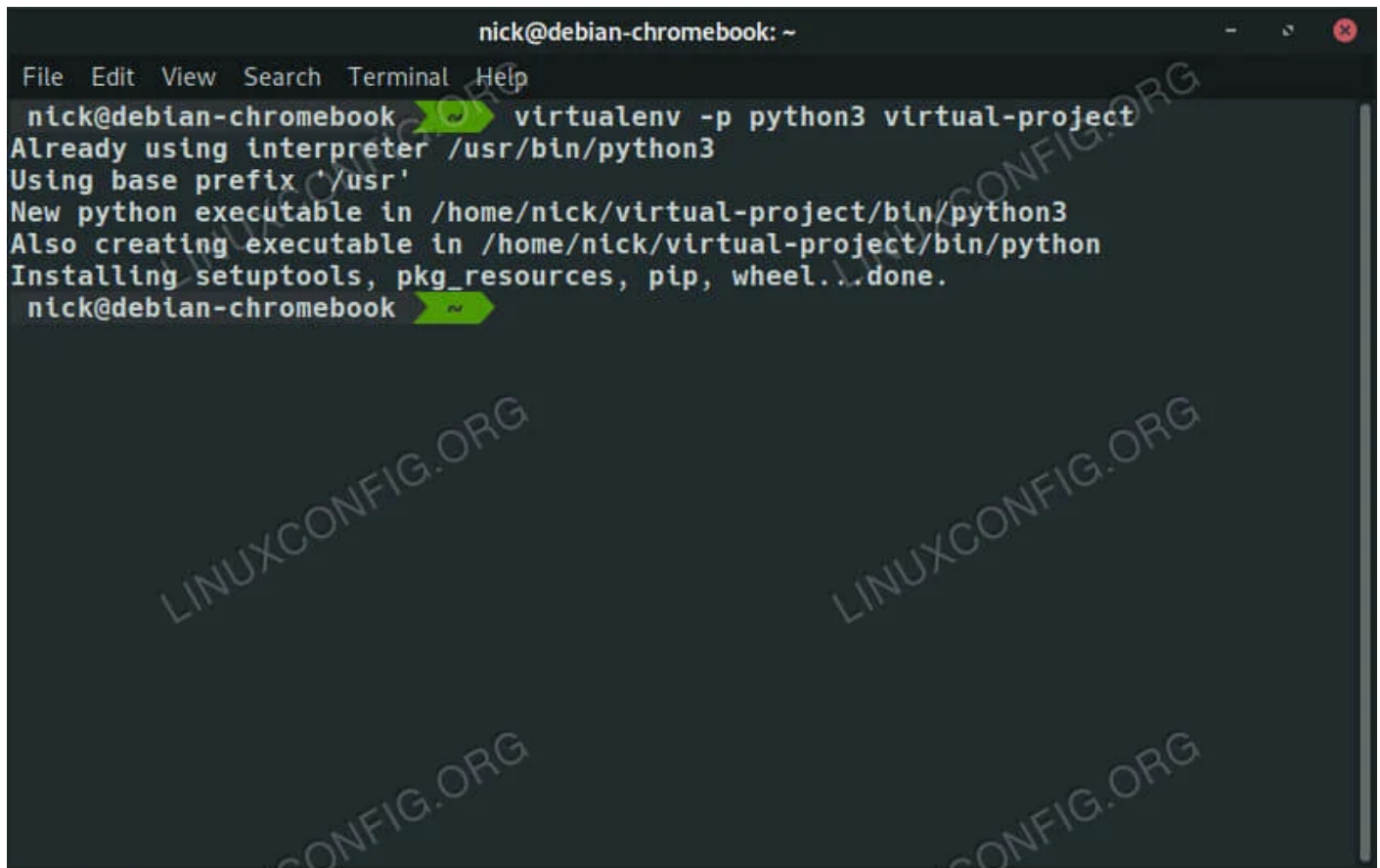
```
$ python3 -m venv /path/to/virtual/environment
```


Activate Python Venv on Debian 10.

It will only take a few seconds to get set up. Once it's done, you can activate the virtual environment with:

```
$ source your-broject/bin/activate
```

Now, you're working with the Python install from your virtual environment, instead of the system wide one. Anything you do now, should reside in your project folder. When you're done, just run `deactivate` to exit the virtual Python.

Use Virtualenv

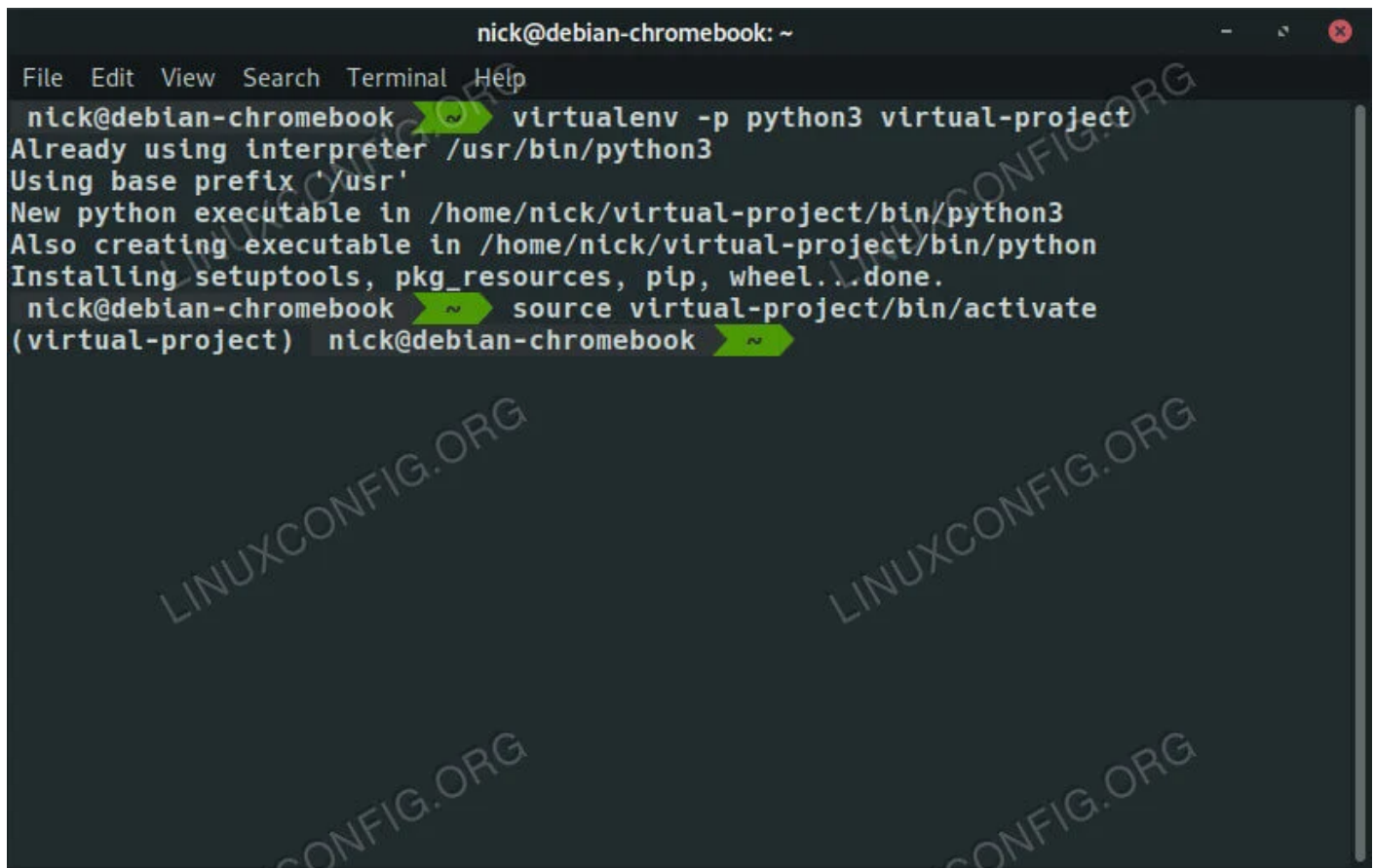

Create Python Virtualenv on Debian 10.

To start, create your environment with the `virtualenv` command. You'll also need to tell it to use Python 3 with the `-p` flag.

```
$ virtualenv -p python3 /path/to/virtual/environment
```

Activate Python Virtualenv on Debian 10.

This will take a few seconds to get itself setup with Pip and the other Python packages it includes. When it's finished, activate the environment.

```
$ source your-project/bin/activate
```

Do your work inside the project directories. When you're done, use `deactivate` to exit the virtual environment.

Conclusion

It's super easy to get set up with Python virtual environments, and the benefits are pretty clear. You'll be able to compartmentalize your projects, and keep things from

conflicting. It's also easier to manage Python package versions as you work.

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