

Installing Grafana

1. Open Terminal
2. Install Grafana using the Following Code

```
sudo apt-get install -y apt-transport-https
sudo apt-get install -y software-properties-common wget
wget -q -O - https://packages.grafana.com/gpg.key | sudo apt-key add -

# Alternatively you can add the beta repository, see in the table
above
sudo add-apt-repository "deb https://packages.grafana.com/oss/deb
stable main"

sudo apt-get update
sudo apt-get install grafana
```

3. Start the Grafana service

Start the server with systemd

To start the service and verify that the service has started:

```
sudo systemctl daemon-reload
sudo systemctl start grafana-server
sudo systemctl status grafana-server
```

4. Getting Started with Grafana
Go to <http://localhost:3000> user and password are admin
5. Follow Guide
https://grafana.com/docs/grafana/latest/guides/getting_started/

Installing InfluxDB

1. Open Terminal
2. Install InfluxDB
 - a. If not Ubuntu 15.04+ or Debian 8+

```
wget -q0- https://repos.influxdata.com/influxdb.key | sudo apt-key add -  
source /etc/lsb-release  
echo "deb https://repos.influxdata.com/${DISTRIB_ID,,} ${DISTRIB_CODENAME} stable" | sudo tee /etc/apt/sources.list.d/influxdb.list
```

```
sudo apt-get update && sudo apt-get install influxdb  
sudo service influxdb start
```

- b. If Ubuntu 15.04+ or Debian 8+

```
sudo apt-get update && sudo apt-get install influxdb  
sudo systemctl unmask influxdb.service  
sudo systemctl start influxdb
```

3. Config InfluxDB

```
influxd -config /etc/influxdb/influxdb.conf
```

4. Install InfluxDB-Client (optional)

This allows you to use command influx to access InfluxDB Shell and look at the databases and measurements in Terminal.

```
sudo apt-get install influxdb-client
```

Python Scripts

1. PIP Install influxdb
Command: `python3 -m pip install influxdb`
2. Write Scripts
3. Examples
<https://influxdb-python.readthedocs.io/en/latest/include-readme.html>
<https://influxdb-python.readthedocs.io/en/latest/examples.html>

Grafana and InfluxDB

1. Open Grafana using <http://localhost:3000> and login
2. Add a data source (InfluxDB)
 - a. Database is the database you want to use
 - b. User and password is admin
3. Add Dashboard
 - a. Add 1s refresh in the Dashboard settings
4. Create Panel
 - a. Change time range to last 10 min
 - b. Change refresh rate as 1s
5. Set Query
<https://grafana.com/docs/grafana/latest/features/datasources/influxdb/>