FOSSTechNix

a on Ubuntu 20.04

stall Apache Kafka on Ubuntu 20.04 LTS or any Cloud Instance like Amazon EC2, Azure VM, Google Compute Engine,etc. with preinstalled Ubuntu.

Table of Contents

Introduction

Kafka is most popular open source software which provides a framework for storing, reading and analyzing steaming data.To know more about Kafka visit official documentation page.
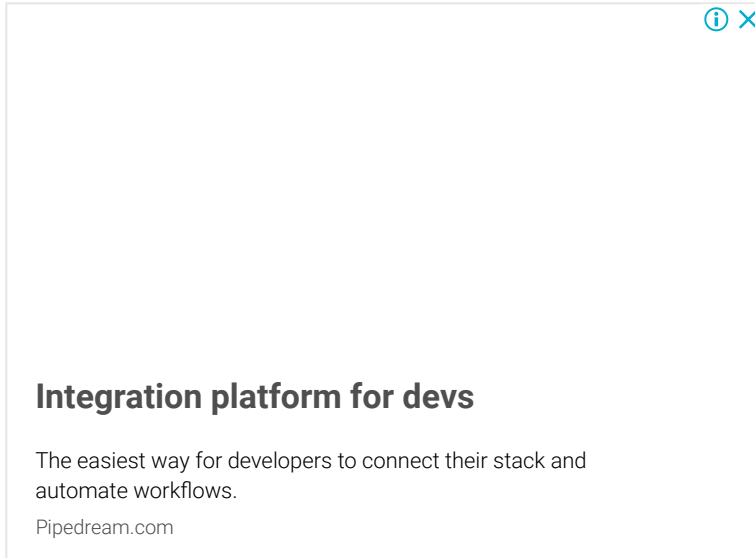
Prerequisites

- Ubuntu 20.04 with Minimal Installation
- SSH Access with Sudo previleges
- Firewall Ports: 2181,9092
- JDK 1.8 or higher version

Install JDK on Ubuntu

ll Oracle JAVA 8 on Ubuntu 20.04

s

```
$ sudo apt install openjdk-8-jdk
```

```
$ sudo apt install openjdk-11-jdk
```

To check the java version, Here i have install installed Oracle Java 8 on my system.

```
$ java -version
```

Output:

```
java version "1.8.0_251"

Java(TM) SE Runtime Environment (build 1.8.0_251-b07)

Java HotSpot(TM) 64-Bit Server VM (build 25.251-b07, mixed mode)
```

Step 1: How to Install Apache Kafka on Ubuntu 20.04 LTS

To download the binary from offical website. Please use this link to download and to prompts to download page.

kafka/2.4.1/kafka_2.13-2.4.1.tgz

Now to un-tar the archive file and move to another location:

```
$ sudo tar xzf kafka_2.13-2.4.1.tgz
```

```
$ sudo mv kafka_2.13-2.4.1 /opt/kafka
```

Step 2: Creating zookeeper and Kafka Systemd Unit Files

Create the systemd unit file for zookeeper service

```
$ sudo nano  /etc/systemd/system/zookeeper.service
```
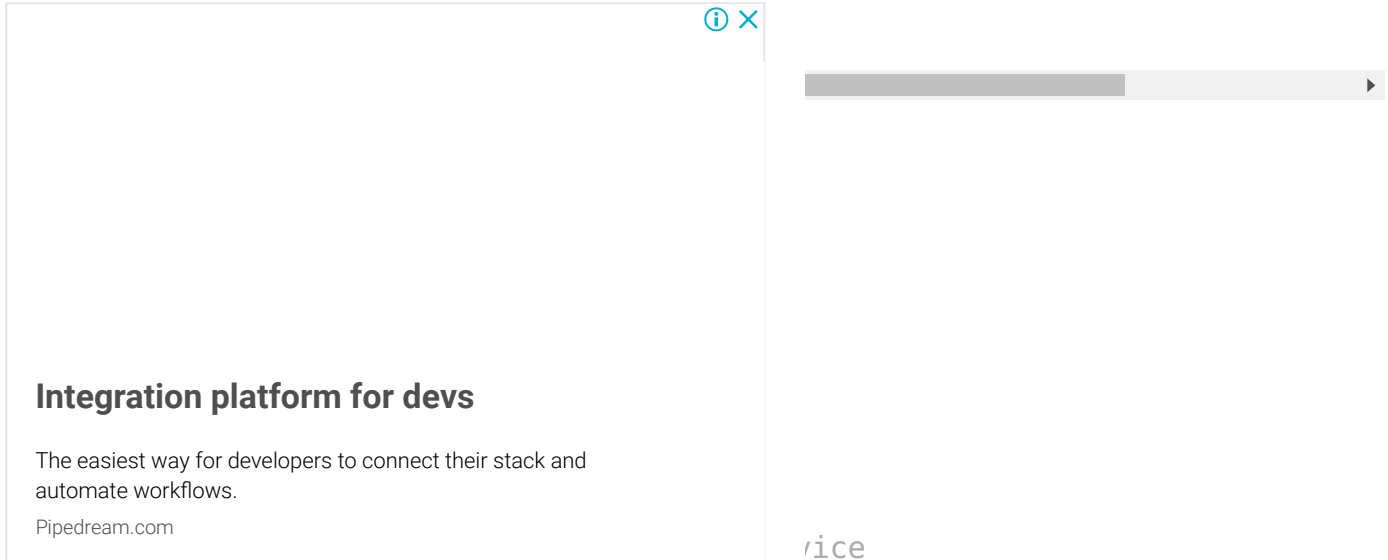
paste the below lines

/etc/systemd/system/zookeeper.service

```
[Unit]
Description=Apache Zookeeper service
Documentation=http://zookeeper.apache.org
Requires=network.target remote-fs.target
After=network.target remote-fs.target

[Service]
Type=simple
ExecStart=/opt/kafka/bin/zookeeper-server-start.sh /opt/kafka/config/zooke
```

```
ExecStop=/opt/kafka/bin/zookeeper-server-stop.sh
Restart=on-abnormal
```

vice

paste the below lines

/etc/systemd/system/kafka.service

```
[Unit]
Description=Apache Kafka Service
Documentation=http://kafka.apache.org/documentation.html
Requires=zookeeper.service

[Service]
Type=simple
Environment="JAVA_HOME=/opt/jdk/jdk1.8.0_251"
ExecStart=/opt/kafka/bin/kafka-server-start.sh /opt/kafka/config/server.pr
ExecStop=/opt/kafka/bin/kafka-server-stop.sh

[Install]
WantedBy=multi-user.target
```
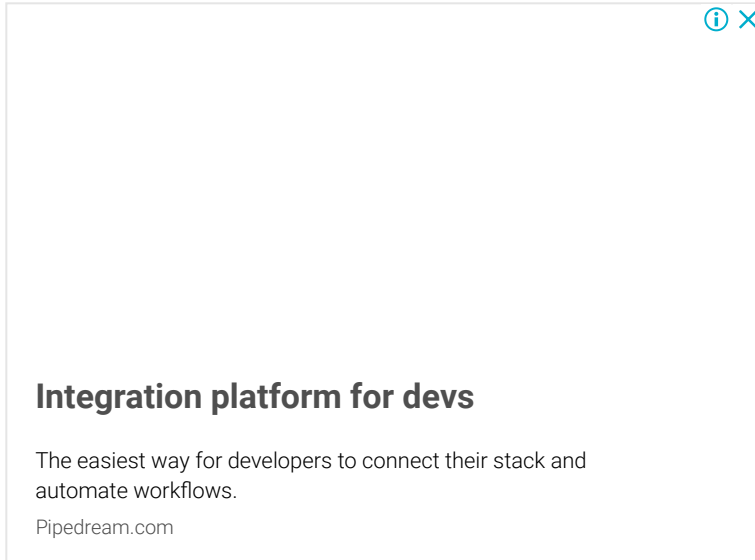
Note: Modify the value of **JAVA_HOME** value,If the path of your Java installation is

different.

Reload the daemon to take effect

```
$ sudo systemctl daemon-reload
```

Step 3: Start ZooKeeper and Kafka Service

```
$ sudo systemctl status zookeeper
```

Output:

```
● zookeeper.service - Apache Zookeeper service
Loaded: loaded (/etc/systemd/system/zookeeper.service; disabled; vendor pr
Active: active (running) since Sat 2020-06-11 09:52:40 UTC; 22min ago
Docs: http://zookeeper.apache.org
Main PID: 25638 (java)
Tasks: 30 (limit: 9513)
CGroup: /system.slice/zookeeper.service
└─25638 java -Xmx512M -Xms512M -server -XX:+UseG1GC -XX:MaxGCPauseMillis=2
```

Check the status of kafka service if it started

```
$ sudo systemctl status kafka
```

Output:

```
● kafka.service - Apache Kafka Service
Loaded: loaded (/etc/systemd/system/kafka.service; disabled; vendor preset
Active: active (running) since Sat 2020-06-11 09:52:48 UTC; 24min ago
Docs: http://kafka.apache.org/documentation.html
Main PID: 26027 (java)
Tasks: 66 (limit: 9513)
CGroup: /system.slice/kafka.service
```

```
CGroup: /system.slice/kafka.service
└─26027 /opt/jdk/jdk1.8.0_241/bin/java -Xmx1G -Xms1G -server -XX:+UseG1GC
```

...erver in the
...temd unit file)

We have shell script to run the kafka and zookeeper server in backend:

Create a file named kafkastart.sh and copy the below script:

```
#!/bin/bash
sudo nohup /opt/kafka/bin/zookeeper-server-start.sh -daemon /opt/kafka/con
sleep 5
sudo nohup /opt/kafka/bin/kafka-server-start.sh -daemon /opt/kafka/config/
```

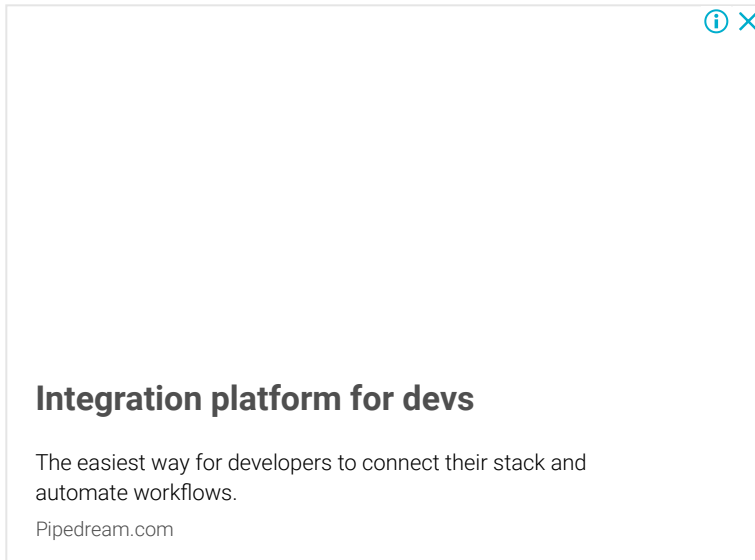After give the executable permissions to the file:

```
sudo chmod +x kafkastart.sh
```

Successfully We have covered how to install apache kafka on ubuntu 20.04 LTS.

Step 4: Creating Topic in Kafka

Now we will create a topic named as "DevOps" with a single replicaton-factor and

partition:

keeper localhost:2181 --replicati

To check the list of topics created.

```
$ sudo bin/kafka-topics.sh --list --zookeeper localhost:2181
```

Output:

```
DevOps
```

Step 5: To send some messages
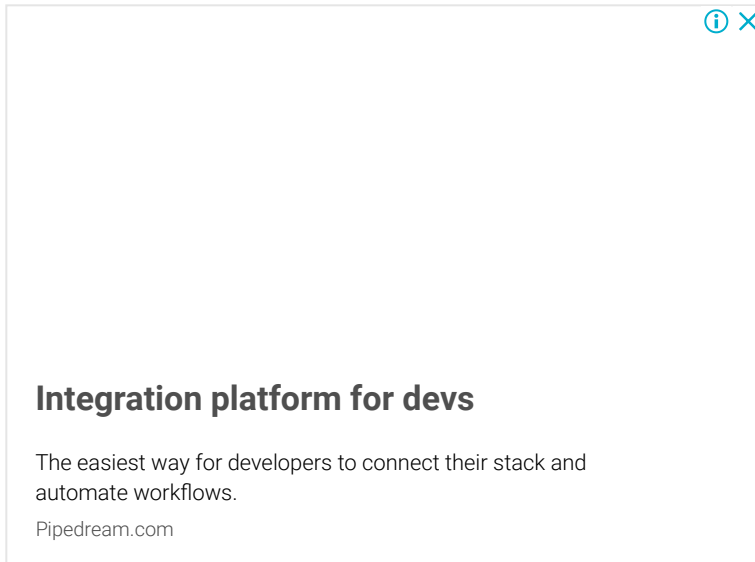
To send some messages for created Topic.

```
$ sudo bin/kafka-console-producer.sh --broker-list localhost:9092 --topic
```

its prompt for messages to type:

```
> Hi
> How are you?
```

Step 6: To Start consumer

Using below command we can see the list of messages:

otstrap-server localhost:9092 --t

▶

mote machine

n remote server. Please follow

```
cd /opt/kafka/config
```

Now look for server.properties and make some configuration changes:

```
sudo vi server.properties
```

In this properties file uncomment as mentioned below:

```
listeners=PLAINTEXT://:9092
```

```
advertised.listeners=PLAINTEXT://<HOST IP>:9092
```

Step 8: To Delete any Topic

If you want to delete any created topic use below command:

```
$ sudo bin/kafka-topics.sh --delete localhost:9092 --topic <anytopic>
```

Conclusion:

In this article, We have performed ,How to Install Apache Kafka on Ubuntu 20.04 LTS

and also covered creating systemd unit file for zookeeper and kafka service, start

c, start kafka and zookeeper

.04 LTS

ΓS

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I am working as DevOps Engineer and having 5 years of Experience.

Likes to share knowledge.

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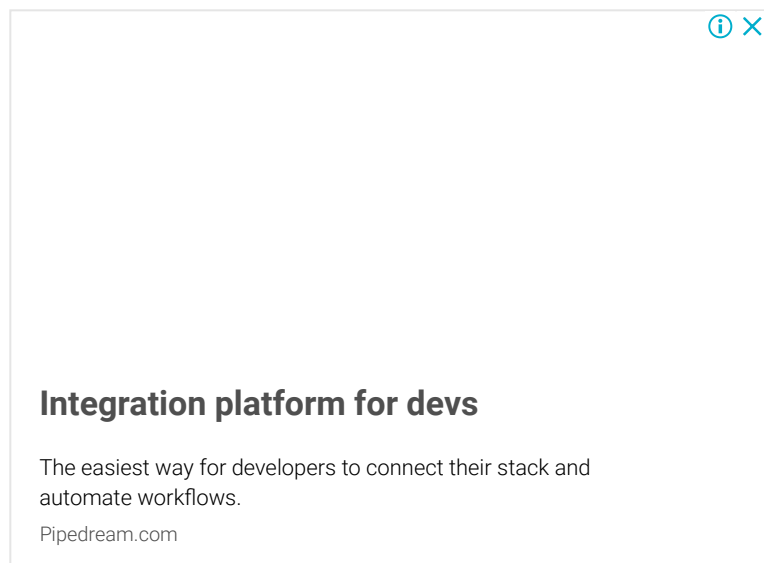
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