Uninstall:

- sudo rm /etc/systemd/system/zookeeper.service
- sudo rm /etc/systemd/system/kafka.servic
- sudo apt remove zookeeperd
- sudo rm -rf /usr/local/kafka

===

Installation of kafka and zookeeper:

* sudo apt install zookeeperd===to install zookeeper


```
File  Edit  View  Search  Terminal  Help
ubuntu@ip-172-31-34-95:~$ sudo apt install zookeeperd
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages were automatically installed and are no longer required:
  apache2-bin apache2-data apache2-utils libapr1 libaprutil1 libaprutil1-dbd-sqlite3 libaprutil1-ldap
Use 'sudo apt autoremove' to remove them.
The following NEW packages will be installed:
  zookeeperd
0 upgraded, 1 newly installed, 0 to remove and 493 not upgraded.
Need to get 8288 B of archives.
After this operation, 42.0 kB of additional disk space will be used.
Get:1 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 zookeeperd all 3.4.13-6ubuntu4 [8288 B]
Fetched 8288 B in 0s (19.8 kB/s)
Selecting previously unselected package zookeeperd.
(Reading database ... 310440 files and directories currently installed.)
Preparing to unpack .../zookeeperd_3.4.13-6ubuntu4_all.deb ...
Unpacking zookeeperd (3.4.13-6ubuntu4) ...
Setting up zookeeperd (3.4.13-6ubuntu4) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.

No services need to be restarted.

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
```

****

2. sudo nano /etc/systemd/system/zookeeper.service

[Unit]

Requires=network.target remote-fs.target

After=network.target remote-fs.target

[Service]

Type=simple

ExecStart=/home/kafka/kafka/bin/zookeeper-server-start.sh /home/kafka/kafka/config/zookeeper.properties

ExecStop=/home/kafka/kafka/bin/zookeeper-server-stop.sh

Restart=on-abnormal

[Install]

WantedBy=multi-user.target

****

sudo systemctl status zookeeper

****

telnet localhost 2181 (ruok)

```
No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-34-95:~$ sudo nano /etc/systemd/system/zookeeper.service
ubuntu@ip-172-31-34-95:~$
```

```
ubuntu@ip-172-31-34-95:~$ sudo systemctl status zookeeper
● zookeeper.service - LSB: centralized coordination service
     Loaded: loaded (/etc/init.d/zookeeper; generated)
     Active: active (running) since Thu 2023-09-28 06:34:56 UTC; 12min ago
       Docs: man:systemd-sysv-generator(8)
    Process: 5464 ExecStart=/etc/init.d/zookeeper start (code=exited, status=0/SUCCESS)
      Tasks: 24 (limit: 9427)
     Memory: 44.9M
        CPU: 2.119s
     CGroup: /system.slice/zookeeper.service
             └─5475 /usr/bin/java -cp /etc/zookeeper/conf:/usr/share/java/jline.jar:/usr/share/java

Sep 28 06:34:56 ip-172-31-34-95 systemd[1]: Starting LSB: centralized coordination service...
Sep 28 06:34:56 ip-172-31-34-95 systemd[1]: Started LSB: centralized coordination service.
ubuntu@ip-172-31-34-95:~$ telnet localhost 2181
Trying 127.0.0.1...
Connected to localhost.
Escape character is '^]'.
ruok
imokConnection closed by foreign host.
```

```
File  Edit  View  Search  Terminal  Help
  GNU nano 6.2                      /etc/systemd/system/zookeeper.service *
[Unit]
Requires=network.target remote-fs.target
After=network.target remote-fs.target
[Service]
Type=simple
ExecStart=/home/kafka/kafka/bin/zookeeper-server-start.sh /home/kafka/kafka/config/zookeeper.properties
ExecStop=/home/kafka/kafka/bin/zookeeper-server-stop.sh
Restart=on-abnormal
[Install]
WantedBy=multi-user.target
```

===

3. kafka

Wget https://archive.apache.org/dist/kafka/3.5.1/kafka_2.13-3.5.1.tgz

```
ubuntu@ip-172-31-34-95:~$ wget https://archive.apache.org/dist/kafka/3.5.1/kafka_2.13-3.5.1.tgz
--2023-09-28 06:40:11--  https://archive.apache.org/dist/kafka/3.5.1/kafka_2.13-3.5.1.tgz
Resolving archive.apache.org (archive.apache.org)... 65.108.204.189, 2a01:4f9:1a:a084::2
Connecting to archive.apache.org (archive.apache.org)|65.108.204.189|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 106748875 (102M) [application/x-gzip]
Saving to: 'kafka_2.13-3.5.1.tgz'

kafka_2.13-3.5.1.tgz          100%[===================================================>] 101.80M  1.24MB/s    in 86s

2023-09-28 06:41:38 (1.18 MB/s) - 'kafka_2.13-3.5.1.tgz' saved [106748875/106748875]

ubuntu@ip-172-31-34-95:~$
```

==

4. prepare kafka folder

tar -xvzf kafka_2.13-3.5.1.tgz

```
tar: Error is not recoverable: exiting now
ubuntu@ip-172-31-34-95:~$ tar -xvzf kafka_2.13-3.5.1.tgz
kafka_2.13-3.5.1/
kafka_2.13-3.5.1/LICENSE
kafka_2.13-3.5.1/NOTICE
kafka_2.13-3.5.1/bin/
```

Move kafka folder to /usr/local

sudo mv kafka_2.13-3.5.1 /usr/local/kafka

```
ubuntu@ip-172-31-34-95:~$ sudo mv kafka_2.13-3.5.1 /usr/local/kafa
ubuntu@ip-172-31-34-95:~$ ls
Day1-linux    Downloads                    Templates    eclipse            javaExamples        thinclient_drives
Day1-test     'Instructions for Applications'  Videos     eclipse-workspace  kafka_2.13-3.5.1.tgz
Day3_part1    Music                        abc.sh       file1              python
Day4.1        Pictures                     app1         file2              sample.txt
Desktop       Public                       aws          hadoop-1.2.1.tar.gz  shell_script
Documents     PycharmProjects              day2-linux   if.sh              snap
ubuntu@ip-172-31-34-95:~$
```

****

Nano .bashrc

****

sudo nano /etc/systemd/system/kafka.service

[Unit]

Requires=zookeeper.service

After=zookeeper.service

[Service]

Type=simple

Type=simple

Environment="JAVA_HOME=/usr/lib/jvm/java-11-openjdk-amd64"

ExecStart=/usr/local/kafka/bin/kafka-server-start.sh /usr/local/kafka/config/server.properties

ExecStop=/usr/local/kafka/bin/kafka-server-stop.sh

Restart=on-abnormal

[Install]

WantedBy=multi-user.target

```
File   Edit   View   Search   Terminal   Help
  GNU nano 6.2                           /etc/systemd/system/kafka.service *
[Unit]
Requires=zookeeper.service
After=zookeeper.service
[Service]
Type=simple
Type=simple
Environment="JAVA_HOME=/usr/lib/jvm/java-11-openjdk-amd64"
ExecStart=/usr/local/kafka/bin/kafka-server-start.sh /usr/local/kafka/config/server.properties
ExecStop=/usr/local/kafka/bin/kafka-server-stop.sh
Restart=on-abnormal
[Install]
```

****

****

then we have to go in /usr/local/kafka/bin

cd /usr/local/kafka/bin

```
ubuntu@ip-172-31-34-95:~$ cd /usr/local/kafka/bin
ubuntu@ip-172-31-34-95:/usr/local/kafka/bin$ cd
```

****

****

-

```
ubuntu@ip-172-31-34-95:~$ sudo nano /etc/systemd/system/kafka.service
ubuntu@ip-172-31-34-95:~$ cd /usr/local/kafka/bin
```

****

****

```
ubuntu@ip-172-31-34-95:/usr/local/kafka/bin$ nano kafka-server-start.sh
ubuntu@ip-172-31-34-95:/usr/local/kafka/bin$ exec bash
Welcome to your py workstation
9240
you have gotta run as fast as you can Alice!
```

****

****

```
ubuntu@ip-172-31-34-95:/usr/local/kafka/bin$ sudo systemctl status zookeeper
● zookeeper.service - LSB: centralized coordination service
     Loaded: loaded (/etc/init.d/zookeeper; generated)
     Active: active (running) since Thu 2023-09-28 06:34:56 UTC; 44min ago
       Docs: man:systemd-sysv-generator(8)
    Process: 5464 ExecStart=/etc/init.d/zookeeper start (code=exited, status=0/SUCCESS)
      Tasks: 24 (limit: 9427)
     Memory: 45.2M
        CPU: 3.205s
     CGroup: /system.slice/zookeeper.service
             └─5475 /usr/bin/java -cp /etc/zookeeper/conf:/usr/share/java/jline.jar:/usr/share/java/log4j-1.

Sep 28 06:34:56 ip-172-31-34-95 systemd[1]: Starting LSB: centralized coordination service...
Sep 28 06:34:56 ip-172-31-34-95 systemd[1]: Started LSB: centralized coordination service.
ubuntu@ip-172-31-34-95:/usr/local/kafka/bin$ sudo systemctl start kafka
ubuntu@ip-172-31-34-95:/usr/local/kafka/bin$ sudo systemctl status kafka
● kafka.service
     Loaded: loaded (/etc/systemd/system/kafka.service; disabled; vendor preset: enabled)
     Active: active (running) since Thu 2023-09-28 07:20:09 UTC; 9s ago
   Main PID: 9535 (java)
      Tasks: 70 (limit: 9427)
     Memory: 276.1M
        CPU: 9.113s
     CGroup: /system.slice/kafka.service
             └─9535 /usr/lib/jvm/java-11-openjdk-amd64/bin/java -Xmx256M -Xms128M -server -XX:+UseG1GC -XX:M
```

****

****

```
Sep 28 07:20:10 ip-172-31-34-95 kafka-server-start.sh[9535]: [2023-09-28 07:20:10,071] INFO [GroupMetadataManager brokerId=0] Finished
ubuntu@ip-172-31-34-95:/usr/local/kafka/bin$ bin/kafka-topics.sh --create --bootstrap-server localhost:9092 --replication-factor 1 --pa
rtitions 1 --topic nishantnw
bash: bin/kafka-topics.sh: No such file or directory
ubuntu@ip-172-31-34-95:/usr/local/kafka/bin$ cd ..
ubuntu@ip-172-31-34-95:/usr/local/kafka$ bin/kafka-topics.sh --create --bootstrap-server localhost:9092 --replication-factor 1 --partit
ions 1 --topic nishantnw
Created topic nishantnw.
ubuntu@ip-172-31-34-95:/usr/local/kafka$ bin/kafka-topics.sh --list --bootstrap-server localhost:9092
__consumer_offsets
krunalnw
natwest
nishantnw
ubuntu@ip-172-31-34-95:/usr/local/kafka$ bin/kafka-console-producer.sh --broker-list localhost:9092 --topic nishantnw
>
```

after these commands we have to fire up commands for topic:
Create a topic
- bin/kafka-topics.sh --create --bootstrap-server localhost:9092 --replication-factor 1 --partitions 1 --topic ktf
- List available topics
  bin/kafka-topics.sh --list --bootstrap-server localhost:9092

- Start production of messages
   bin/kafka-console-producer.sh --broker-list localhost:9092 --topic ktf

After opeining new terminal:

Start consumer for collection   (This has to be done in separate terminal)

* **bin/kafka-console-consumer.sh --bootstrap-server localhost:9092 --topic ktf --from-beginning**