

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`

```
=====
File Edit View Search Terminal Help
Welcome to your py workstation
9240
you have gotta run as fast as you can Alice!
ubuntu@ip-172-31-34-95:~$ sudo rm /etc/systemd/system/zookeeper.service
ubuntu@ip-172-31-34-95:~$ sudo rm /etc/systemd/system/kafka.service
ubuntu@ip-172-31-34-95:~$ sudo apt remove 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 libjline-java libxerces2-java
  libxml-commons-external-java libxml-commons-resolver1.1-java
  libzookeeper-java zookeeper
Use 'sudo apt autoremove' to remove them.
The following packages will be REMOVED:
  zookeeperd
0 upgraded, 0 newly installed, 1 to remove and 493 not upgraded.
After this operation, 42.0 kB disk space will be freed.
Do you want to continue? [Y/n] y
(Reading database ... 310442 files and directories currently installed.)
Removing zookeeperd (3.4.13-6ubuntu4) ...
ubuntu@ip-172-31-34-95:~$ cd /usr/local
bash: cd: /usr/local: No such file or directory
ubuntu@ip-172-31-34-95:~$ cd /usr/local
ubuntu@ip-172-31-34-95:/usr/local$ sudo rm /etc/systemd/system/zookeeper.service
rm: cannot remove '/etc/systemd/system/zookeeper.service': No such file or directory
ubuntu@ip-172-31-34-95:/usr/local$ sudo rm /etc/systemd/system/kafka.service
rm: cannot remove '/etc/systemd/system/kafka.service': No such file or directory

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

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

Installation of kafka and zookeeper:

* **sudo apt install zookeeperd===to install zookeeper**

```
File Edit View Search Terminal Help
ubuntu@lp-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
InokConnection 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: ts 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

```
ibuntu@ip-172-31-34-95:~$ sudo mv kafka_2.13-3.5.1 /usr/local/kafka
ibuntu@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
```

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]
```

12:33

```
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:~$ find /usr/local/kafka -type f -name *.log
*****
*****
```

```
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:

```

```
*****
*****
sep 28 07:20:10 tp-172-31-34-95 kafka-server-start.sh[9555]: [2023-09-28 07:20:10.071] INFO [org.apache.kafka.manager.broker.idemp] PktsNeoe
ubuntu@tp-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@tp-172-31-34-95:/usr/local/kafka/bin$ cd ..
ubuntu@tp-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@tp-172-31-34-95:/usr/local/kafka$ bin/kafka-topics.sh --list --bootstrap-server localhost:9092
    _consumer_offsets
krunalnw
natwest
nishantnw
ubuntu@tp-172-31-34-95:/usr/local/kafka$ bin/kafka-console-producer.sh --broker-list localhost:9092 --topic nishantnw
>
```

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 opening 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**