

Quick Configure

WSL_Ubuntu_Node-Red_Kafka_CMAK

Required PriorKnowledge:

Installing packages/apps in Ubuntu

SSH

Java Version

Catalog

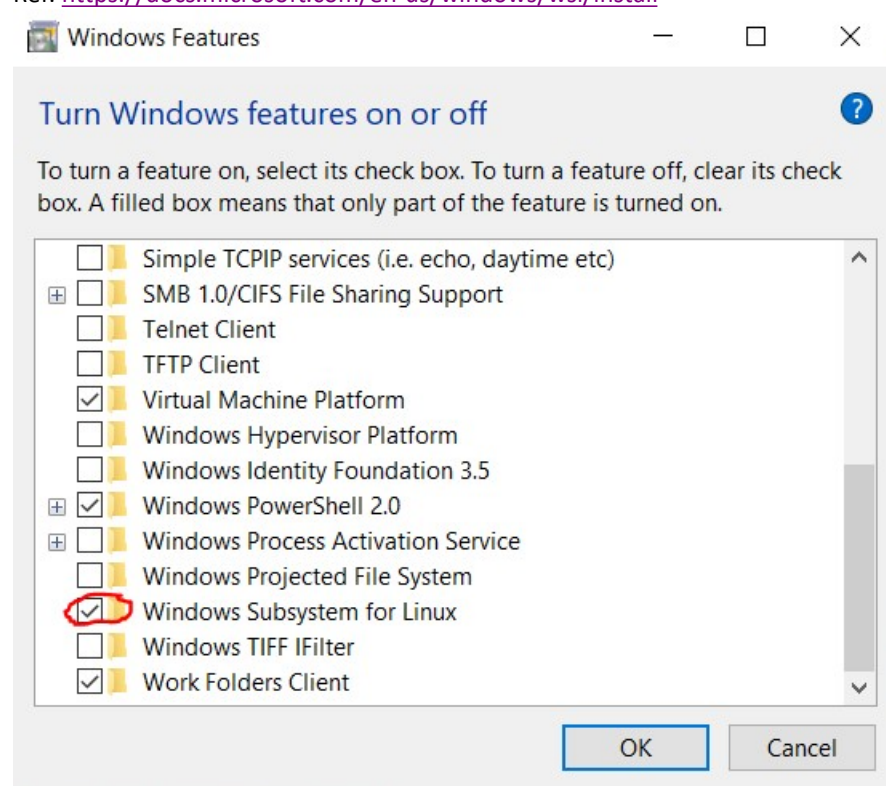
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Prep

WSL2 on Windows

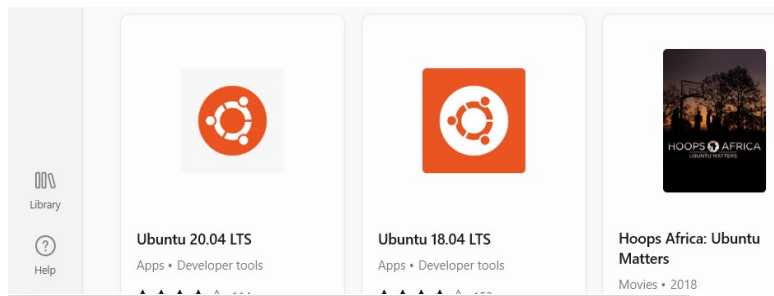
On CMD: `wsl --install`

Ref. <https://docs.microsoft.com/en-us/windows/wsl/install>



Install Ubuntu from MicrosoftStore

Create Linux User



```

C:\> Command Prompt

Microsoft Windows [Version 10.0.19044.1466]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Chidanand>wsl -l -v
    NAME      STATE      VERSION
* Ubuntu-20.04  Running      1

C:\Users\Chidanand>

```

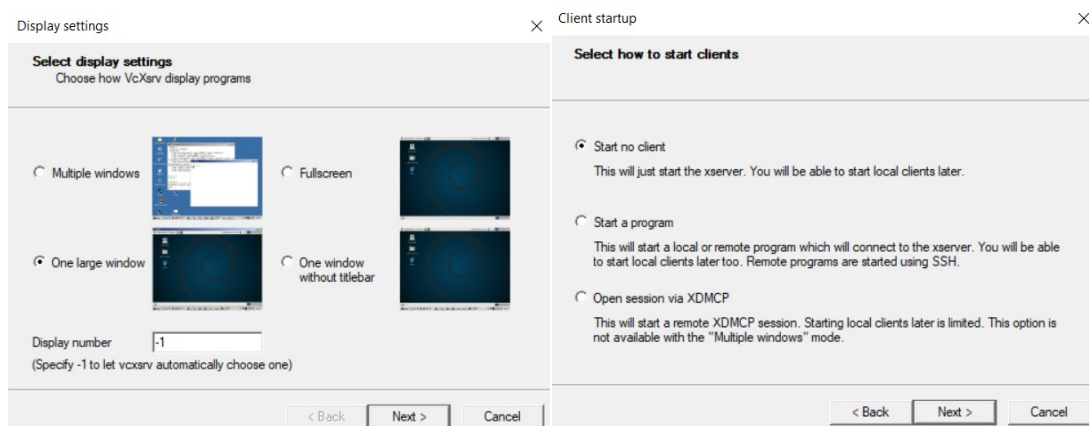
LXDE

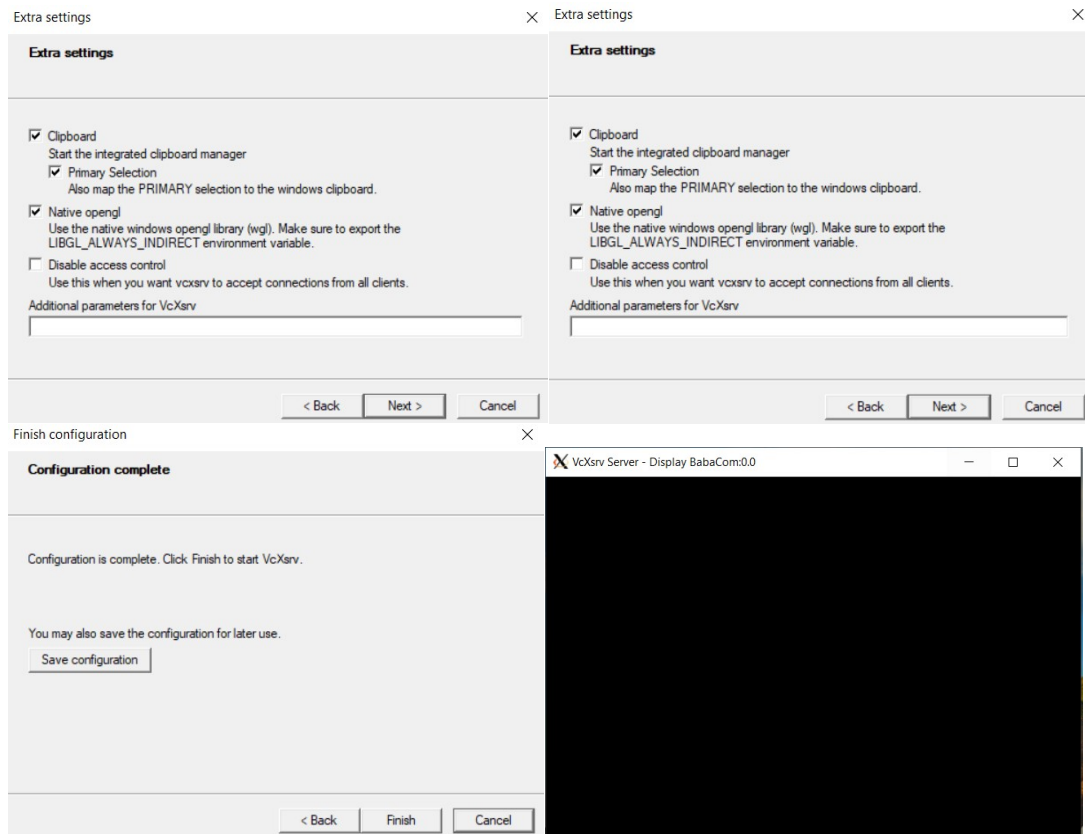
Install On Ubuntu:

sudo apt-get install lxde

Ref: <https://wiki.lxde.org/en/Installation>

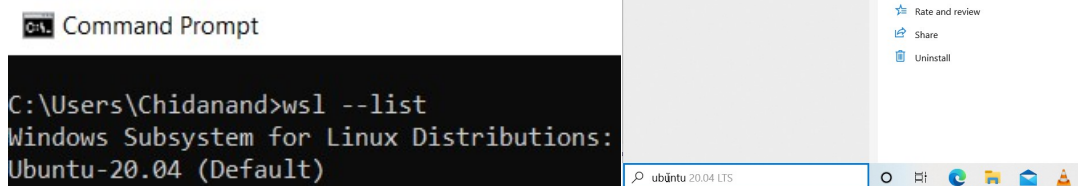
Launch on Windows





Ubuntu 20-04

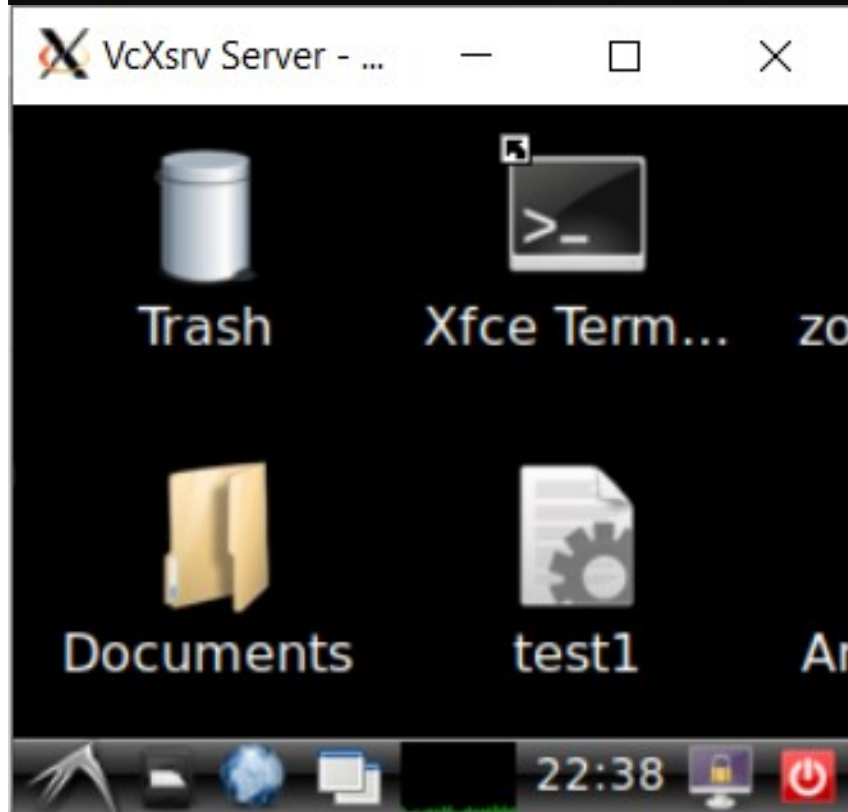
Ref. <https://ubuntu.com/wsl>



Create a file “startlxde” in linux home with the content below:

```
export DISPLAY=:0
export LIBGL_ALWAYS_INDIRECT=1
startlxde &
```

```
wsl4pi@BabaCom:~$ ./startlxde
wsl4pi@BabaCom:~$ ** Message: 18:43:27.602: main.vala:102: Session is LXDE
** Message: 18:43:27.602: main.vala:103: DE is LXDE
** Message: 18:43:28.517: main.vala:134: log directory: /home/wsl4pi/.cache/lxsession/LXDE
** Message: 18:43:28.518: main.vala:135: log path: /home/wsl4pi/.cache/lxsession/LXDE/run.log
```



Node-Red V2.2.0

Install

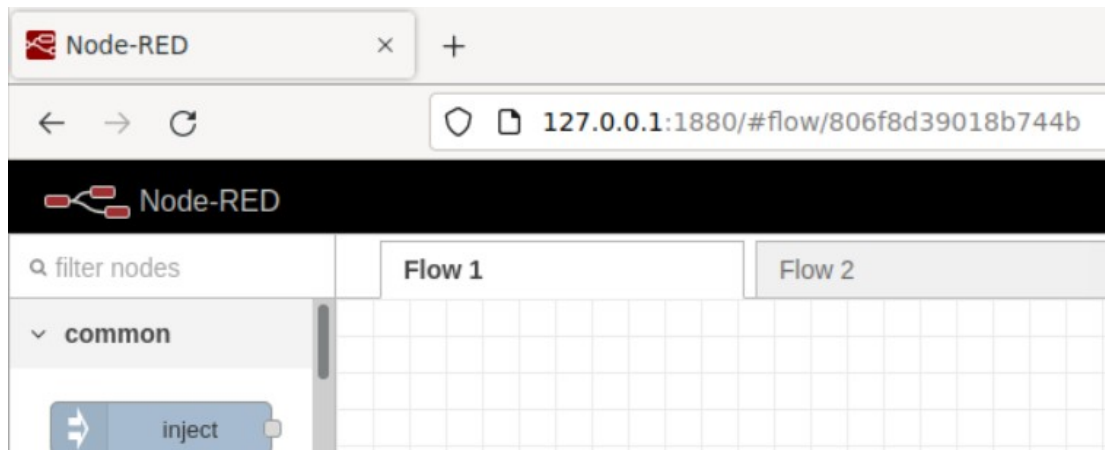
Ref.:> <https://nodered.org/>

Npm:> “sudo npm install -g --unsafe-perm node-red”

Node-Red:> “sudo snap install node-red”

```
hadoop@BabaCom:~/kafka/bin$ node-red&
[1] 3729
hadoop@BabaCom:~/kafka/bin$ 2 Feb 20:33:59 - [info]
```

```
2 Feb 20:34:50 - [info] Server now running at http://127.0.0.1:1880/
```



Kafka_2.13-3.0.0

Install

Ref:-> <https://kafka.apache.org/downloads>

Java

```
hadoop@BabaCom:~$ java --version
openjdk 11.0.13 2021-10-19
OpenJDK Runtime Environment (build 11.0.13+8-Ubuntu-0ubuntu1.20.04)
OpenJDK 64-Bit Server VM (build 11.0.13+8-Ubuntu-0ubuntu1.20.04, mixed mode)
```

CMAK-3.0.0.5

Install

```
git clone https://github.com/yahoo/CMAK.git
nano CMAK/conf/application.conf
cmak.zkhosts="localhost:2181"
cd CMAK
./sbt clean dist
cd target/universal
unzip cmak-3.0.0.5.zip
cd cmak-3.0.0.5
bin/cmak
```

Working

Services

zookeeper-server-start.sh ~/config/zookeeper.properties

kafka-server-start.sh ~/config/server.properties

The image displays five terminal windows stacked vertically, each showing the startup of a different service. Each window has a title bar and a menu bar (File, Edit, View, Terminal, Tabs, Help). The first window, titled 'ZookeeperServ', shows the command `./zookeeper-server-start.sh /home/hadoop/kafka/config/zookeeper.properties` being executed, with log output indicating successful startup. The second window, titled 'KafkaServ', shows the command `./kafka-server-start.sh /home/hadoop/kafka/config/server.properties` being executed, with a log message indicating a failure in the `kafka.log.LogManager`. The third window, titled 'KafkaTopic', shows the command `./kafka-topics.sh --create --topic WhatAtopic --bootstrap-server 192.168.56.1:9092` being executed, with log output indicating successful topic creation. The fourth window, titled 'Node-Red', shows the command `node-red&` being executed, with log output indicating successful startup. The fifth window, titled 'CMAK', shows the command `./cmak` being executed, with log output indicating successful startup.

```
^Chadoop@BabaCom:~/kafka/bin$ ./zookeeper-server-start.sh /home/hadoop/kafka/config/zookeeper.properties
[2022-02-02 20:15:50,886] INFO Reading configuration from: /home/hadoop/kafka/config/zookeeper.properties (org.apache.zookeeper.server.quorum.QuorumPeerConfig)
[2022-02-02 20:15:50,909] INFO clientPortAddress is 0.0.0.0:2181 (org.apache.zookeeper.server.quorum.QuorumPeerConfig)
[2022-02-02 20:15:50,909] INFO secureClientPort is not set (org.apache.zookeeper.server.quorum.QuorumPeerConfig)

KafkaServ
e failed (kafka.log.LogManager)
hadoop@BabaCom:~/kafka/bin$ ./kafka-server-start.sh /home/hadoop/kafka/config/server.properties

KafkaTopic
hadoop@BabaCom:~/kafka/bin$ ./kafka-topics.sh --create --topic WhatAtopic --bootstrap-server 192.168.56.1:9092
Created topic WhatAtopic.

Node-Red
hadoop@BabaCom:~/kafka/bin$ node-red&
[1] 3729

CMAK
hadoop@BabaCom:~/kafka/CMAK/target/universal/cmak-3.0.0.5/bin$ ./cmak
23:06:28,592 |-INFO in ch.qos.logback.classic.LoggerContext[default] - Could NOT find resource [logback-test.xml]
23:06:28,593 |-INFO in ch.qos.logback.classic.LoggerContext[default] - Could NOT find resource [logback.groovy]
23:06:28,593 |-INFO in ch.qos.logback.classic.LoggerContext[default] - Found resource [logback.groovy]
```

Configure Nodes

DeleteCancelDone

Properties

Name

TooMany

msg. payload

=

TryOnWindows

+ add

inject now

☐ Inject once after

0.1

seconds, then

Repeat

none

☐ Enabled

DeleteCancelDone

Properties

Name

Producer

Type

Producer

Broker

d566ad3519f5f103

Topic

TooMany

Require Ack

1

Ack Timeout (Ms)

100

Partitioner

default

Key

key

Partition

0

Attributes

No compression

☐ Enabled

DeleteCancelDone

Properties

Name

Consumer

Type

Base

Broker

d566ad3519f5f103

Topics

Options

Fetch

Encoding

wildcard

☐ (regex)

Topic

+ Add

Delete Name	Offset	Partition
TooMany	0	0

☐ Enabled

DeleteCancelDone

Properties

Output

msg. payload

To

☒ debug window

☐ system console

☐ node status (32 characters)

Name

Name

☐ Enabled

Node-RED — Mozilla Firefox

Node-RED x Topic List x +

127.0.0.1:1880/#

Node-RED Deploy

filter nodes

common

- inject
- debug
- complete
- catch
- status
- link in
- link call
- link out
- comment

function

- function
- switch

Flow 1 Flow 2 Flow 3 Flow 4

NiceTopic → Producer

TooMany → Producer

Demo → Producer

Consumer → msg.payload

debug

all nodes all

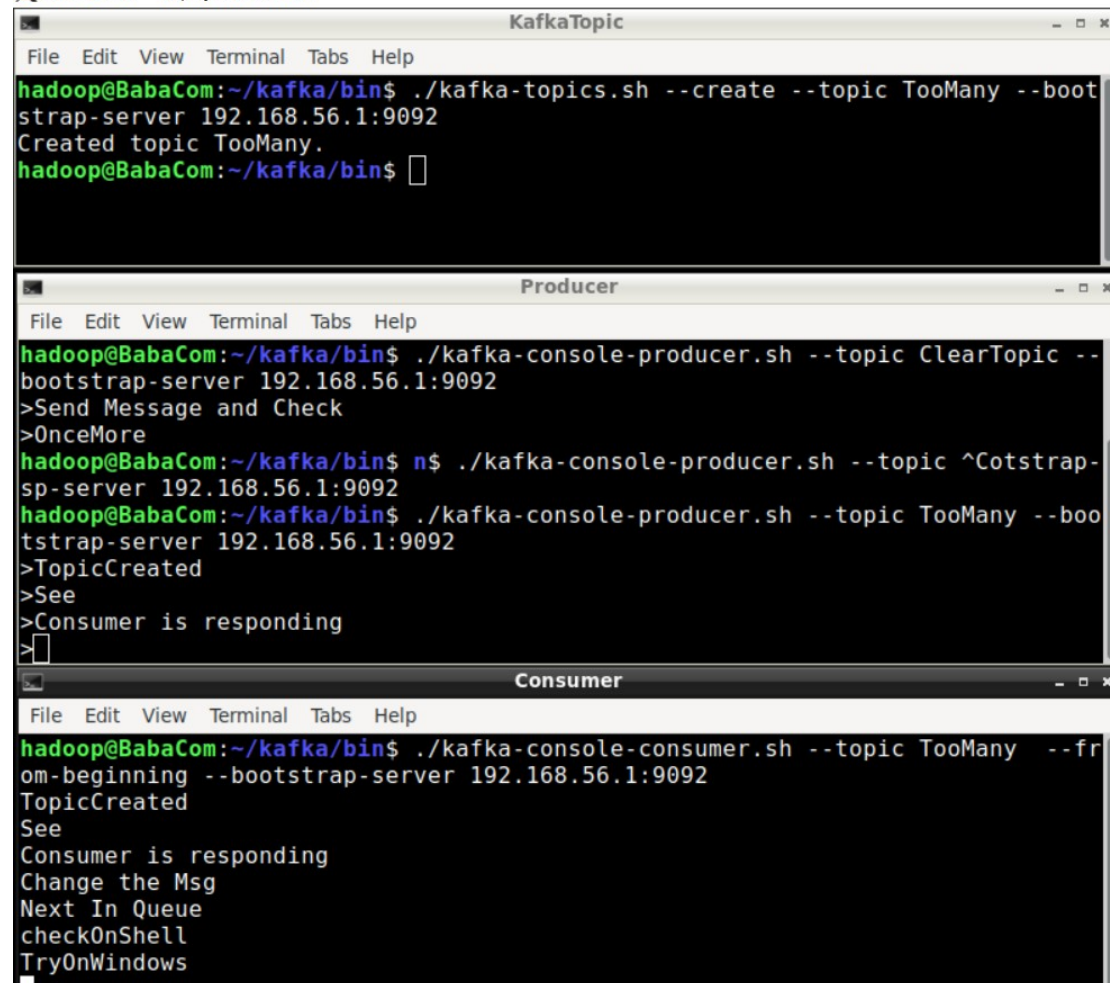
2/3/2022, 5:33:11 AM node: fa1b5ed64c271d52
NiceTopic : msg.payload : string[12]
"NiceMessage"

2/3/2022, 5:33:13 AM node: fa1b5ed64c271d52
TooMany : msg.payload : string[12]
"TryOnWindows"

2/3/2022, 5:33:15 AM node: fa1b5ed64c271d52
Demo : msg.payload : string[12]
"Demo Message"

Create Kafka Topic

VcXsrv Server - Display BabaCom:0.0

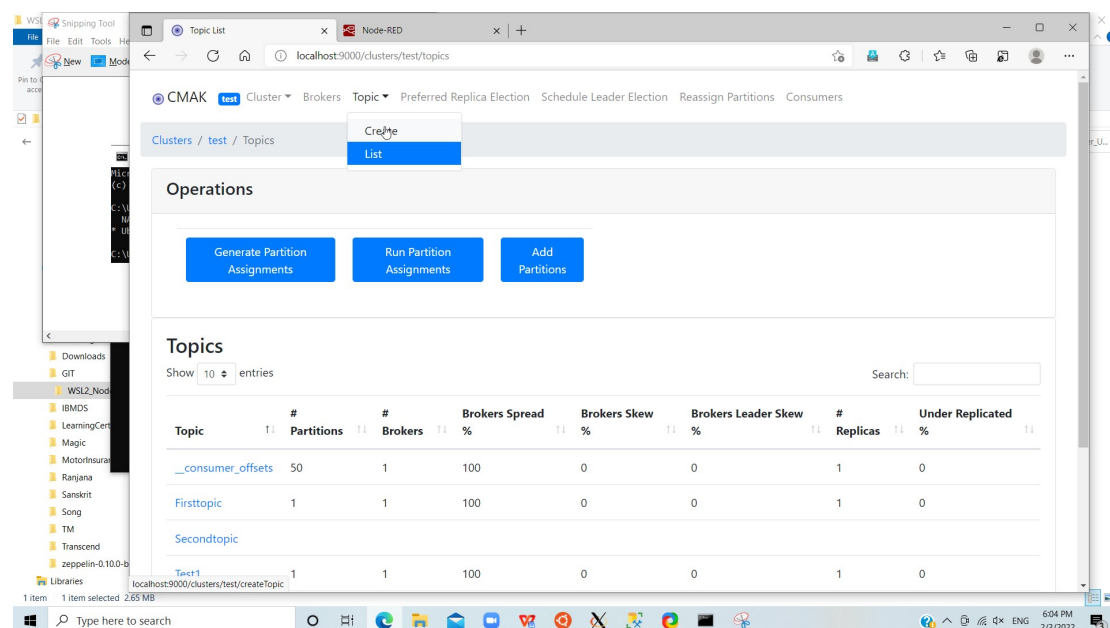


```
KafkaTopic
File Edit View Terminal Tabs Help
hadoop@BabaCom:~/kafka/bin$ ./kafka-topics.sh --create --topic TooMany --bootstrap-server 192.168.56.1:9092
Created topic TooMany.
hadoop@BabaCom:~/kafka/bin$

Producer
File Edit View Terminal Tabs Help
hadoop@BabaCom:~/kafka/bin$ ./kafka-console-producer.sh --topic ClearTopic --bootstrap-server 192.168.56.1:9092
>Send Message and Check
>OnceMore
hadoop@BabaCom:~/kafka/bin$ n$ ./kafka-console-producer.sh --topic ^Cotstrap-sp-server 192.168.56.1:9092
hadoop@BabaCom:~/kafka/bin$ ./kafka-console-producer.sh --topic TooMany --bootstrap-server 192.168.56.1:9092
>TopicCreated
>See
>Consumer is responding
>

Consumer
File Edit View Terminal Tabs Help
hadoop@BabaCom:~/kafka/bin$ ./kafka-console-consumer.sh --topic TooMany --from-beginning --bootstrap-server 192.168.56.1:9092
TopicCreated
See
Consumer is responding
Change the Msg
Next In Queue
checkOnShell
TryOnWindows
```

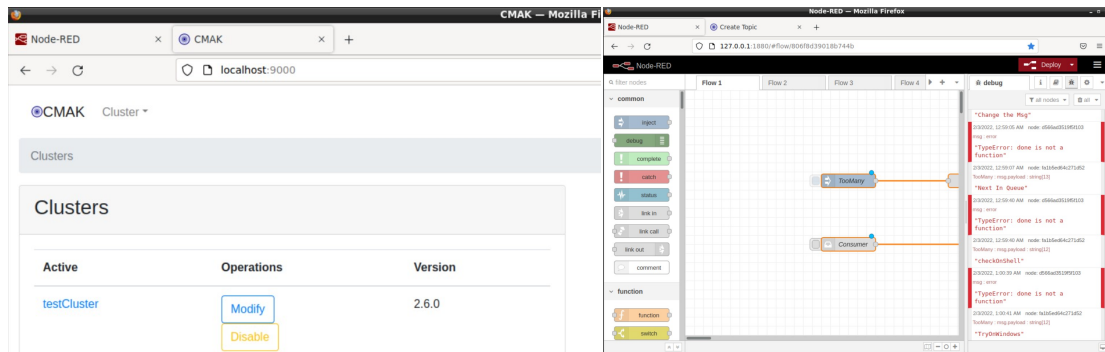
Create Topic on CMAK



The screenshot shows the CMAK web interface with the 'Topics' tab selected. The 'Operations' section contains buttons for 'Generate Partition Assignments', 'Run Partition Assignments', and 'Add Partitions'. The 'Topics' section displays a table of existing topics.

Topic	# Partitions	# Brokers	Brokers Spread %	Brokers Skew %	Brokers Leader Skew %	# Replicas	Under Replicated %
__consumer_offsets	50	1	100	0	0	1	0
Firsttopic	1	1	100	0	0	1	0
Secondtopic	1	1	100	0	0	1	0
Test1	1	1	100	0	0	1	0

Once the topic is created, Messages can be sent either from the CLI or Node



Troubleshoot & Tips:

Port conflict: netstat

cmak- zkhost in application.conf

```
# Settings prefixed with 'kafka-manager.' will be deprecated, use 'cmak.' instead.
# https://github.com/yahoo/CMAK/issues/713
#kafka-manager.zkhosts="kafka-manager-zookeeper:2181"
kafka-manager.zkhosts="192.168.56.1:2181"
kafka-manager.zkhosts=${?ZK_HOSTS}
#cmak.zkhosts="kafka-manager-zookeeper:2181"
cmak.zkhosts="localhost:2181"
cmak.zkhosts=${?ZK_HOSTS}
```

clear temp by `rm -rf /tmp/kafka-logs /tmp/zookeeper`