# Getting started with Kafka

## Install the VM

Running the VM requires 2Gb of RAM and approximately 7Gb of free HD space

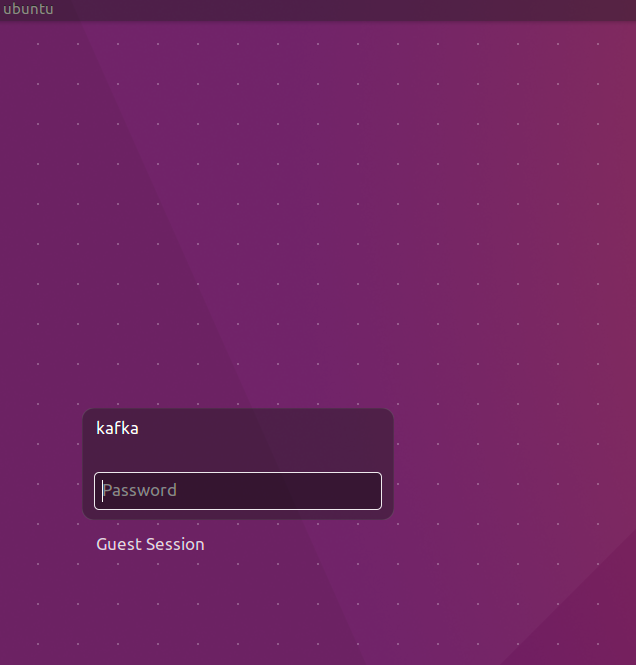
Download VirtualBox from <https://www.virtualbox.org>.

Start VirtualBox

Import the VM image by going to File, Import Virtual Appliance and browse to the image file. The VM requires 2Gb of RAM to run.

Start the VM

The VM will boot to a graphical login screen



The VM has two users: root and kafka. Both have password Welcome01.

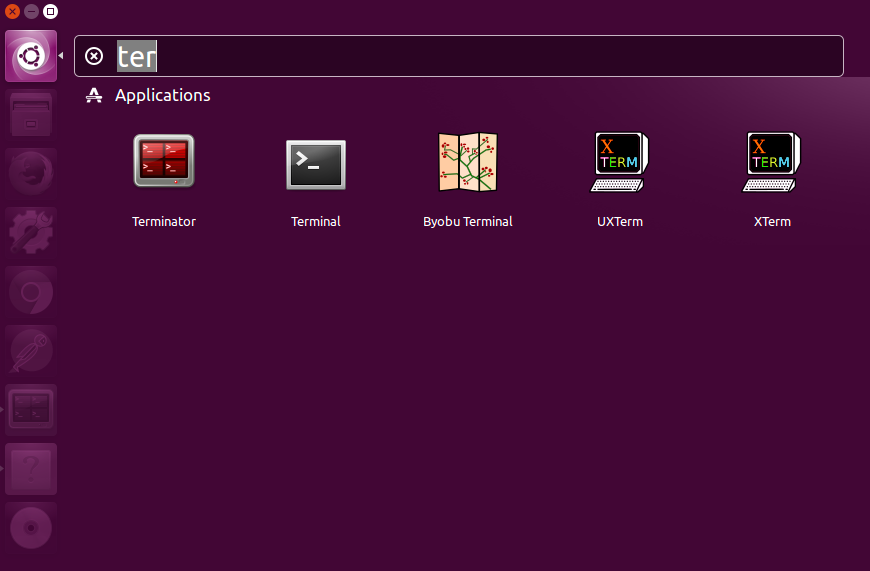
The VM contains:

* Ubuntu 16.04 LTS
* Oracle JDK 8
* Eclipse Neon.2
* Node 7.4
* Zookeeper
* Firefox
* Chrome
* Postman
* confluent-platform-oss-2.11
* kafka-manager 1.3.2.1. When started runs on <http://localhost:9000>
* kafkatool 1.0.1

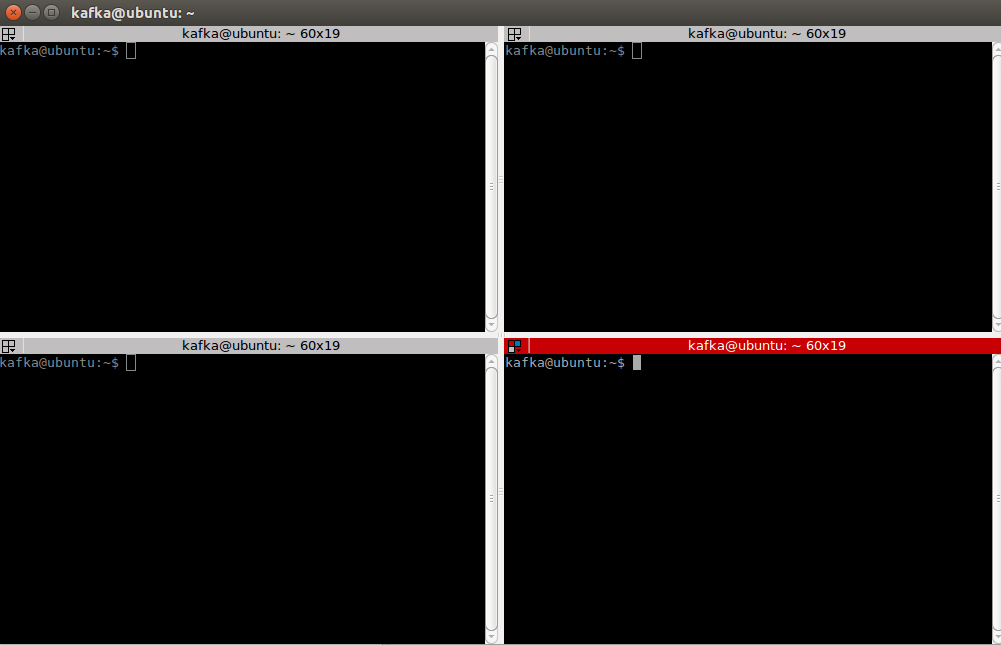
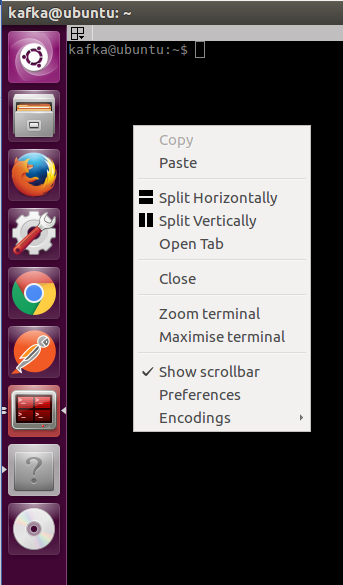
## Getting to know the VM

Login to the VM: kafka/Welcome01

Start Terminator from the Unity menu



Split the screen horizontally and every screen vertically by right clicking in the window



# Getting started with Kafka

In the first terminal window start a Kafka broker:

kafka-server-start /etc/kafka/server.properties

Start in the second terminal window the kafka manager:

kafka-manager

Start in the third terminal window kafkatool:

kafkatool

Minimize the tool. You will use it at a later time.

Continue in the fourth terminal window

Create a topic:

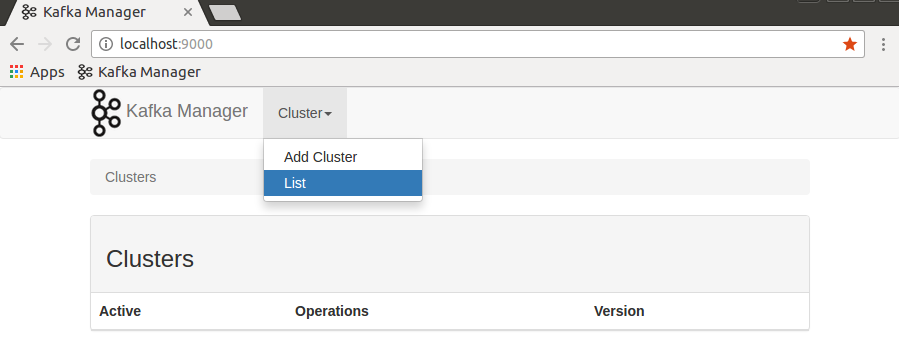
kafka-topics --create --zookeeper localhost:2181 --replication-factor 1 --partitions 1 --topic test

Confirm the topic is created:

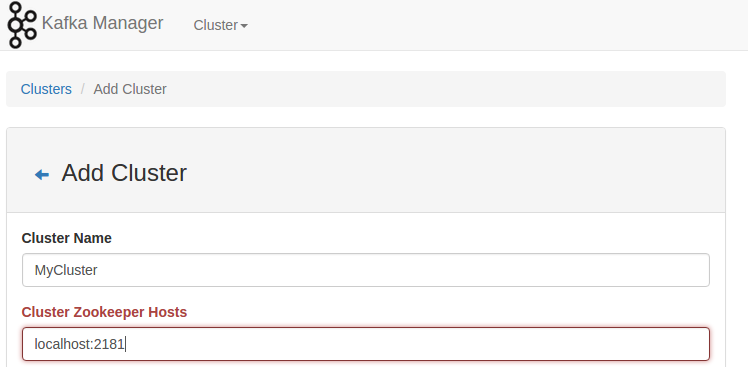
kafka-topics --list --zookeeper localhost:2181

Open a browser and go to <http://localhost:9000> and confirm the topic is created using a webinterface.

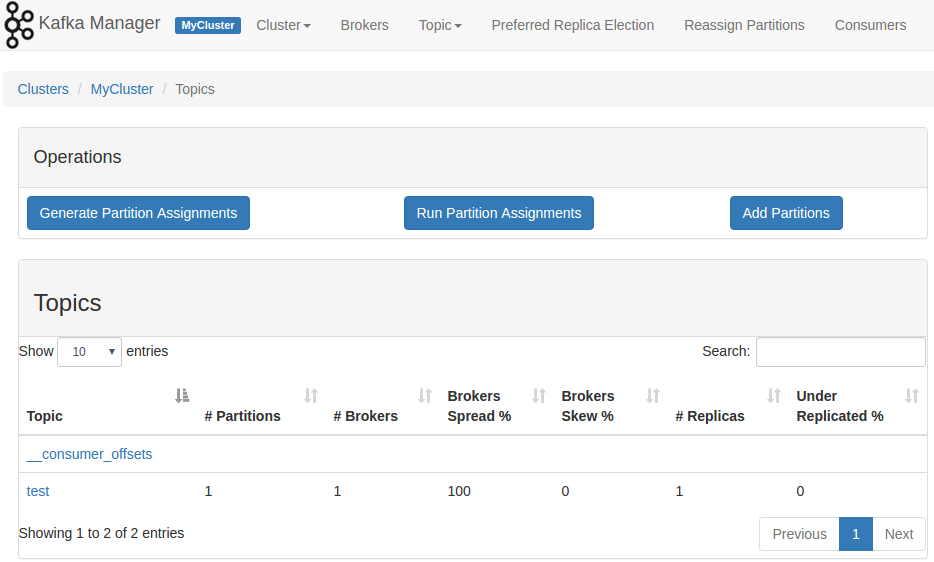
First create a cluster



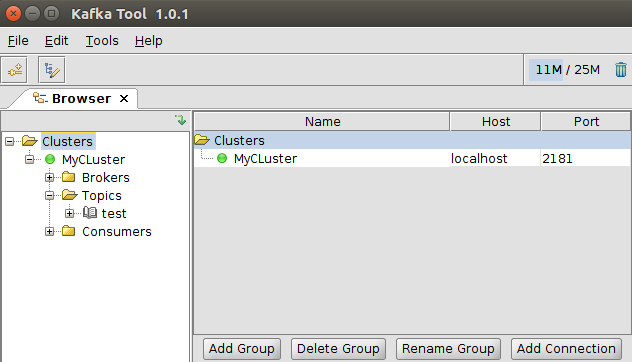
Name the cluster MyCluster and enter localhost:2181 as Zookeeper cluster. Scroll down and click save



Go to the cluster view and determine the topic has been created



Open kafkatool and confirm the topic is created



Produce a message:

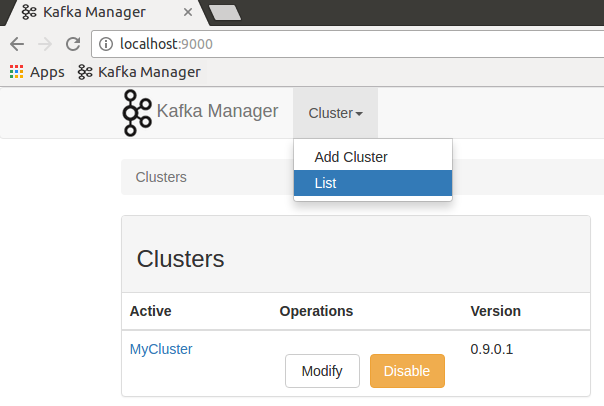
kafka-console-producer --broker-list localhost:9092 --topic test

Type a message and press enter:

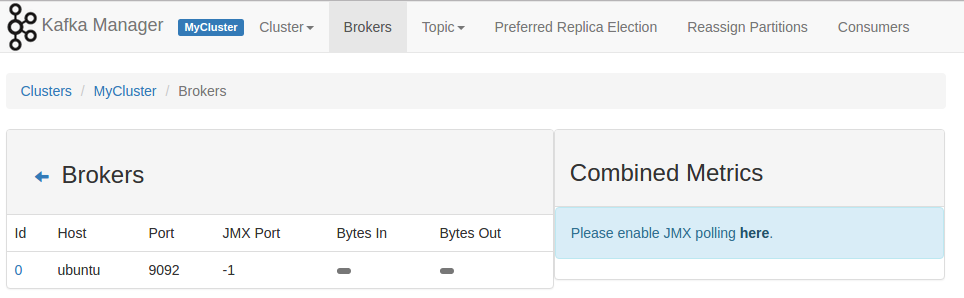
Hello World!

Check the message is created using kafka-manager and kafkatool.

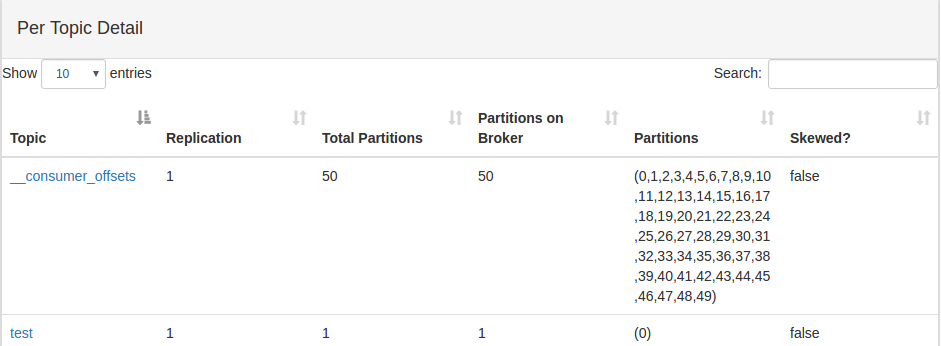
In the kafka-manager, go to Cluster, List and click the cluster you previously created



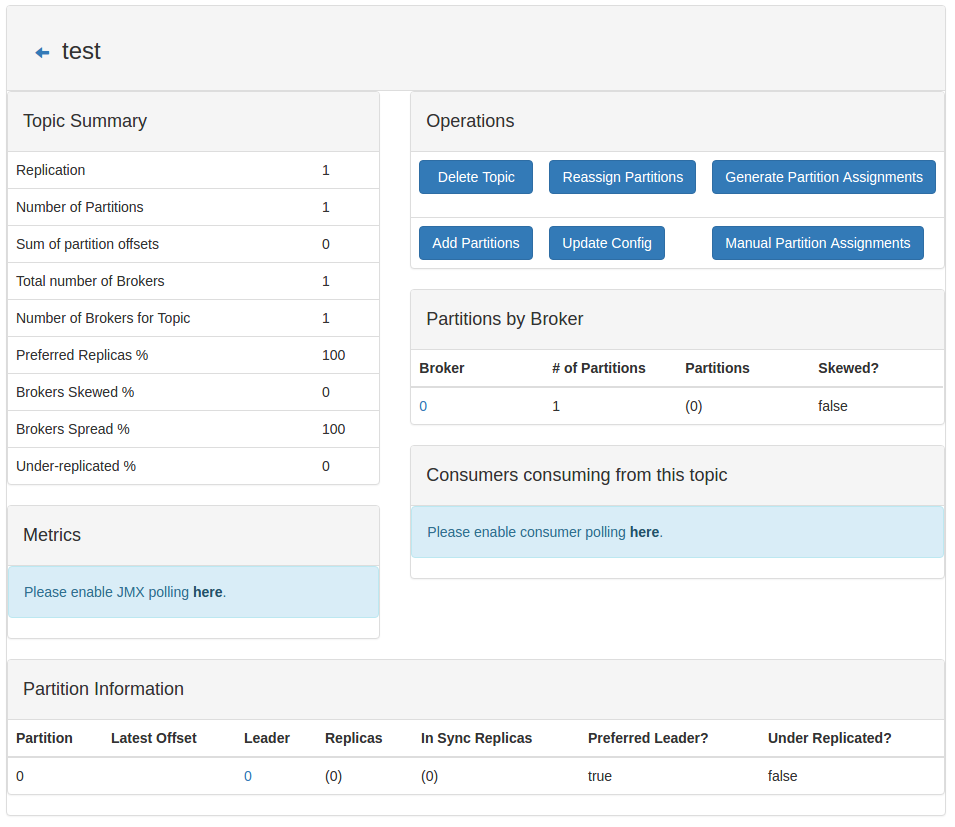
Click brokers, click 0



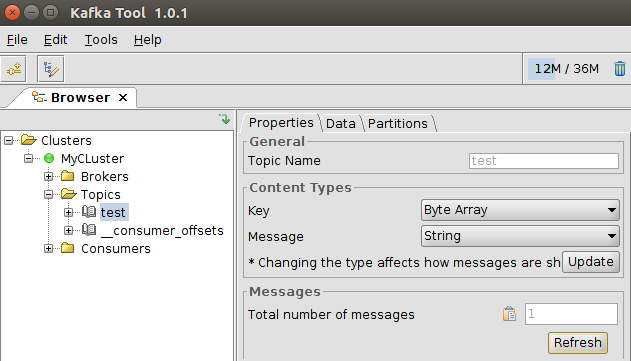
Scroll down and click the test topic



Scroll down again and confirm the latest offset is empty. No consumer has picked up messages yet.



Open kafkatool. Indicate the messages on the topic are string. Click the update button. Click the refresh button to view how many messages are present on the topic. Confirm the number is 1.



Open the partition under the test topic. Click the green play button. Confirm the Hello World! Message has arrived.

