Installing Apache Kafka 0.8.2.1 on Windows 7

**JDK and JRE environment variable Setup**  
  
1. Set the JAVA\_HOME environment variable entry in user variable section   
*JAVA\_HOME = C:\Program Files (x86)\Java\jdk1.7.0\_75*   
(Modify the path and jdk version according to your usage)  
  
2. Append JRE server's bin directory in PATH system variable section   
My Path entry looks like following :   
  
*Path = C:\ProgramData\Oracle\Java\javapath;%SystemRoot%\system32;%SystemRoot%;%SystemRoot%\System32\Wbem;%SYSTEMROOT%\System32\WindowsPowerShell\v1.0\;C:\Program Files (x86)\Java\jdk1.7.0\_75\bin;C:\Program Files (x86)\scala\bin;C:\Program Files (x86)\sbt\\bin;C:\Program Files (x86)\Java\jre7\bin;*  
  
  
**Download and Setup of Kafka**  
  
1. Download Apache Kafka from <http://kafka.apache.org/downloads.html> (I downloaded kafka\_2.10-0.8.2.1.tgz (asc, md5))  
  
2. Unpack kafka\_2.10-0.8.2.1.tgz using 7-Zip   
(You can download 7-zip from <http://www.7-zip.org/download.html>)  
  
3. Copy extracted kafka\_2.10-0.8.2.1 directory to C:\  
 After copying, your directory structure would look like as follows :   
        
C:\  
 kafka\_2.10-0.8.2.1\  
 bin\  
 config\  
 libs\  
 LICENSE (file)  
 NOTISE  (file)  
  
4. Download Kafka080WinBatFiles.zip file from <https://github.com/HCanber/kafka/releases>. Extract the zip and copy the extracted files to C:\kafka\_2.10-0.8.2.1\bin\windows (i.e. overwrite the existing files)  
Note : I have followed this blog (<http://blog.canberger.se/2014/01/kafka-080-on-windows.html>) to get the concern configuration files.  
   
5. Open C:\kafka\_2.10-0.8.2.1\config\server.properties and update existing log.dir entry as mentioned below :   
 *log.dirs=c:/kafka\_2.10-0.8.2.1/kafka-logs*   
  
6. Open C:\kafka\_2.10-0.8.2.1\config\zookeeper.properties and update existing dataDir entry as mentioned below :   
 *dataDir=c:/kafka\_2.10-0.8.2.1/zookeeper-data*  
  
(Note : Make sure you use forward slash as depicted for step-5 and step-6)  
  
We are done with all the necessary configuration, Let's start the zookeeper and kafka server as mentioned below.  
  
7. Starting Zookeeper and Kafka server   
Open a command prompt and start Zookeeper server using following command :   
 *cd c:\kafka\_2.10-0.8.2.1.\bin\windows\zookeeper-server-start.bat .\config\zookeeper.properties*  
  
Note : If you get an error saying "Unrecognized VM option '+UseCompressedOops'  
Could not create the Java virtual machine". Here is the solution.  
  
Open C:\kafka\_2.10-0.8.2.1\bin\windows\kafka-run-class.bat file.   
Find and remove '-XX:+UseCompressedOops' entry  
  
Before removing '-XX:+UseCompressedOops'  
  
IF ["%KAFKA\_JVM\_PERFORMANCE\_OPTS%"] EQU [""] (  
 set KAFKA\_JVM\_PERFORMANCE\_OPTS=-server **-XX:+UseCompressedOops** -XX:+UseParNewGC -XX:+UseConcMarkSweepGC -XX:+CMSClassUnloadingEnabled -XX:+CMSScavengeBeforeRemark -XX:+DisableExplicitGC -Djava.awt.headless=true  
  
)  
  
After removing '-XX:+UseCompressedOops'

IF ["%KAFKA\_JVM\_PERFORMANCE\_OPTS%"] EQU [""] (  
 set KAFKA\_JVM\_PERFORMANCE\_OPTS=-server -XX:+UseParNewGC -XX:+UseConcMarkSweepGC -XX:+CMSClassUnloadingEnabled -XX:+CMSScavengeBeforeRemark -XX:+DisableExplicitGC -Djava.awt.headless=true  
  
)

Now open another command prompt and start Kafka server using following command :   
*.\bin\windows\kafka-server-start.bat .\config\server.properties*  
  
I hope both Zookeeper and Kafka server are executed successfully for you.  
  
  
8. Now let's create Topic using following command  
  
*cd C:\kafka\_2.10-0.8.2.1*  
*.\bin\windows\kafka-topics.bat --create --zookeeper localhost:2181 --replication-factor 1 --partition 1 --topic test*  
  
9. List the topics using following command  
  
*cd C:\kafka\_2.10-0.8.2.1*  
*.\bin\windows\kafka-topics.bat --list  --zookeeper localhost:2181*  
  
10. Send message using Kafka console producer  
  
*cd C:\kafka\_2.10-0.8.2.1*  
*.\bin\windows\kafka-console-producer.bat --broker-list localhost:9092 --topic test*  
  
Note : If you get an error 'Error: Could not find or load main class kafka.producer.ConsoleProducer'. Here is the solution.  
  
Open C:\kafka\_2.10-0.8.2.1\bin\windows\kafka-console-producer.bat  
Change kafka.producer.ConsoleProducer to kafka.tools.ConsoleProducer   
  
Now you should be able to successfully send the message after fixing above issue. Here is my command prompt output for your reference :   
  
*C:\kafka\_2.10-0.8.2.1>.\bin\windows\kafka-console-producer.bat --broker-list localhost:9092 --topic test*  
*[2015-06-01 14:08:20,196] WARN Property topic is not valid (kafka.utils.VerifiableProperties)*  
*1. Hello Kafka from Rashmit*  
*2. Good bye Kafka from Rashmit*  
  
  
  
11. Consume the above message using Kafka console consumer  
  
*cd C:\kafka\_2.10-0.8.2.1*  
*.\bin\windows\kafka-console-consumer.bat --zookeeper localhost:2181 --topic test --from-beginning*  
  
Note : If you get an error 'Error: Could not find or load main class kafka.consumer.ConsoleConsumer'. Here is the solution.  
  
Open C:\kafka\_2.10-0.8.2.1\bin\windows\kafka-console-consumer.bat.   
Change kafka.consumer.ConsoleConsumer to kafka.tools.ConsoleConsumer  
  
My command prompt executes the command successfully after fixing above issue :   
  
*C:\kafka\_2.10-0.8.2.1>.\bin\windows\kafka-console-producer.bat --broker-list localhost:9092 --topic test*  
*[2015-06-01 14:08:20,196] WARN Property topic is not valid (kafka.utils.VerifiableProperties)*  
*1. Hello Kafka from Rashmit*  
*2. Good bye Kafka from Rashmit*  
  
  
I hope you should be able to successfully install Apache Kafka.