**Speed layer**

1. *Create kafka topics*

* First note [zookeeper connections w the metdata:](https://us-east-2.console.aws.amazon.com/msk/home?region=us-east-2#/cluster/arn%3Aaws%3Akafka%3Aus-east-2%3A787308793288%3Acluster%2FMPCS53014-Kafka%2F32ee1dc6-4f65-4010-8c6b-d63cecea6de4-4/view?tabId=details) z-2.mpcs53014-kafka.fwx2ly.c4.kafka.us-east-2.amazonaws.com:2181,z-3.mpcs53014-kafka.fwx2ly.c4.kafka.us-east-2.amazonaws.com:2181,z-1.mpcs53014-kafka.fwx2ly.c4.kafka.us-east-2.amazonaws.com:2181

$ cd kafka\_2.12-2.2.1/bin

$ ./kafka-topics.sh --create --zookeeper <zookeeper connections> --replication-factor 2 --partition 1 –topic <insert your topic>

* Actual commands:

$./kafka-topics.sh --create --zookeeper z-2.mpcs53014-kafka.fwx2ly.c4.kafka.us-east-2.amazonaws.com:2181,z-3.mpcs53014-kafka.fwx2ly.c4.kafka.us-east-2.amazonaws.com:2181,z-1.mpcs53014-kafka.fwx2ly.c4.kafka.us-east-2.amazonaws.com:2181 --replication-factor 2 --partitions 1 --topic reid7\_f\_w

$./kafka-topics.sh --create --zookeeper z-2.mpcs53014-kafka.fwx2ly.c4.kafka.us-east-2.amazonaws.com:2181,z-3.mpcs53014-kafka.fwx2ly.c4.kafka.us-east-2.amazonaws.com:2181,z-1.mpcs53014-kafka.fwx2ly.c4.kafka.us-east-2.amazonaws.com:2181 --replication-factor 2 --partitions 1 --topic reid7\_transport\_weather

1. Update serving layer
   1. Create hbase table, then run hive commands. Saved as write\_to\_hbase.hql
   2. Table name: ‘reid7\_weather\_delays\_by\_route\_v2’
2. Speed layer
   1. Deploy this web\_app\_v2
      1. Fix all ports to 3011
      2. Replace mspertus to your cnet id
   2. Kafka topic made. reid7\_f\_w
   3. After deploy, connect terminal to consumer (the listener on topic reid7\_f\_2):
      1. $cd kafka\_2.12-2.2.1/bin
      2. $./kafka-console-consumer.sh --bootstrap-server b-2.mpcs53014-kafka.fwx2ly.c4.kafka.us-east-2.amazonaws.com:9092,b-1.mpcs53014-kafka.fwx2ly.c4.kafka.us-east-2.amazonaws.com:9092 --topic reid7\_transport\_weather
   4. demoSLWA, deployed to reid7/src/…
   5. get a consumer at:
      1. spark-submit --master local[2] --class StreamWeather uber-demoSLWA-1.0-SNAPSHOT.jar bootstrap-servers-for-our-cluster (actual command below)
      2. cd reid7/src/target/… (whatever your deployment is)
         1. the below could have problems cause of word formatting. It worked in notepad
      3. spark-submit --master local[2] --driver-java-options "-Dlog4j.configuration=file:///home/hadoop/ss.log4j.properties" --class StreamWeather uber-demoSLWA-1.0-SNAPSHOT.jar b-1.mpcs53014-kafka.fwx2ly.c4.kafka.useast-2.amazonaws.com:9092,b-2.mpcs53014-kafka.fwx2ly.c4.kafka.us-east-2.amazonaws.com:9092
   6. 3. Ec2 connect to instance <https://us-east-2.console.aws.amazon.com/ec2/v2/home?region=us-east-2#ConnectToInstance:instanceId=i-03d05e035625d9d80>
   7. Run app
      1. node app.js 3707 ip-172-31-11-144.us-east2.compute.internal 8070 b-1.mpcs53014-kafka.fwx2ly.c4.kafka.useast-2.amazonaws.com:9092,b-2.mpcs53014-kafka.fwx2ly.c4.kafka.us-east-2.amazonaws.com:9092

Wednesday:

Bootsrap servers: b-1.mpcs53014-kafka.fwx2ly.c4.kafka.us-east-2.amazonaws.com:9092,b-2.mpcs53014-kafka.fwx2ly.c4.kafka.us-east-2.amazonaws.com:9092

Prepend node and youre good:

app.js 3707 ip-172-31-11-144.us-east-2.compute.internal 8070 b-2.mpcs53014-kafka.fwx2ly.c4.kafka.us-east-2.amazonaws.com:9092,b-1.mpcs53014-kafka.fwx2ly.c4.kafka.us-east-2.amazonaws.com:9092

Remote debugging slides in your repo

[Try this link for the remote terminal](https://us-east-2.console.aws.amazon.com/ec2/v2/connect/ec2-user/i-03d05e035625d9d80)

Start learning/playing with speed-layer-flights archetype (it’s the last step)

Remember to be patient w remote terminal. It crashes or doesn’t connect to hbase a lot, and Im certain its not your code.