Running delta server example

1. Start VM in ec2se account ‘crowley demo’
2. Connect to VM via ssh

ssh -i wan-gateway-example.pem ubuntu@<publicIp>

Append below commands to the end of .bashrc

export CLASSPATH=$CLASSPATH:/home/ubuntu/gigaspaces-insightedge-enterprise-14.2.0-ga-b20400/lib/required/\*

export CLASSPATH=$CLASSPATH:/home/ubuntu/dump5/insightedge-geo-demo-master/web/lib/\*

export CLASSPATH=$CLASSPATH:/home/ubuntu/dump5/insightedge-geo-demo-master/web/project/lib/\*

export KAFKA\_HOME=/home/ubuntu/kafka

Then run . ./.bashrc

in ~/insightedge-geo-demo-old-master/scripts/start-local.sh

add first line as below

export KAFKA\_HOME=/home/ubuntu/kafka

1. Login as db2inst1 user (password db2inst1)

su – db2inst1

1. Start db2 and mqm using proper commands

db2start

strmqm PUBSRC

db2 connect to PUBSRC

1. Go to directory with the code

cd db2mqrep/myQCap

1. Start the capturing tool

asnqcap capture\_server=PUBSRC

Separate tab

su - hduser

$HADOOP\_HOME/sbin/start-all.sh

$HIVE\_HOME/bin/hive --service hiveserver2 &

Wait for 5 minutes to bring up the hive server

beeline -u jdbc:hive2://127.0.0.1:10000/hivedb - hive terminal

SHOW TABLES;

This will list following table

xetrastockmarkettrade

Now run following SQL query

SELECT \* FROM xetrastockmarkettrade;

Separate Tab

1. Start insightedge in demo mode

sudo gigaspaces-insightedge-enterprise-14.2.0-ga-b20400/bin/insightedge demo

Seperate Tab

1. Make sure space ‘insightedge-space’ is deployed. If it doesn’t, create space via webui.

cd ~/dump3/Crowley/mirror/mirror-space/target

sudo ~/gigaspaces-insightedge-enterprise-14.2.0-ga-b20400/bin/gs.sh deploy insightedge-space.jar

Separate tab

1. Go to directory ~/dump3/Crowley/mirror/mirror-service

Source code is under ~/dump3/Crowley/mirror/mirror-service/. One has to go to this directory then run following commands to build the new jar for mirror-service

mvn clean install

cd target (You are in ~/dump3/Crowley/mirror/mirror-service/target)

sudo ~/gigaspaces-insightedge-enterprise-14.2.0-ga-b20400/bin/gs.sh deploy mirror-service.jar

Separate tab

1. Go to directory with jar and run db2 delta server

Source code is under ~/dump3/Crowley/db2-delta-server/. One has to go to this directory then run following commands to build the new jar for delta server

mvn clean install

sudo cp ~/dump3/Crowley/db2-delta-server/target/db2-delta-server-1.0-jar-with-dependencies.jar /home/db2inst1/db2mqrep/

cd /home/db2inst1/db2mqrep

java -Djava.library.path=/opt/mqm/java/lib64 -jar db2-delta-server-1.0-jar-with-dependencies.jar

It will for incoming operations for 1 minute and after stops. If you don’t make it in time, you can rerun the jar

Separate tab

1. Connect to db2 and run several testing commands

su - db2inst1

db2 connect to PUBSRC

db2 "delete from DB2INST1. XETRA\_STOCK\_TRADE\_DATA where SECURITY\_ID=2505394";

db2 "insert into DB2INST1.XETRA\_STOCK\_TRADE\_DATA(ISIN,MNEMONIC,SECURITY\_DESC,SECURITY\_TYPE,CURRENCY,SECURITY\_ID,TRADE\_DATE\_TIME,START\_PRICE,MAX\_PRICE,MIN\_PRICE,END\_PRICE,TRADED\_VOLUME,NUMBER\_OF\_TRADES) values ('GB00598225242','DLC','DIALOG SEMICOND. LS-,10','Relevant','EUR','2505394','2010-05-20-11.01.00','19.07','19.09','19.06','19.06','382','3')";

Note: SpaceId is SECURITY\_ID and value ‘2505394’

It has to be unique for every insert. General practice is to increment it by 1 on every insert.

Separate tab

1. Create kafka topic if they are missing

sudo ~/insightedge-geo-demo-old-master/scripts/start-local.sh

1. Start the feeder that will read csv

java -cp ~/insightedge-geo-demo-master/feeder/target/feeder-12.3.0-m19-jar-with-dependencies.jar org.insightedge.geodemo.feeder.Feeder

Separate tab

1. Submit spark job to process data, read by feeder

sudo gigaspaces-insightedge-enterprise-14.2.0-ga-b20400/insightedge/bin/insightedge-submit --class org.insightedge.geodemo.processing.DymanicPriceProcessor --master spark://127.0.0.1:7077 /home/ubuntu/insightedge-geo-demo-master/insightedge-processing/target/insightedge-processing-12.3.0-m19.jar spark://127.0.0.1:7077

Running geospatial example

Separate tab

1. Run webapp to see the result

sudo ~/insightedge-geo-demo-old-master/scripts/start-web.sh

Application will be available via port 9000

NOTE: If you run it on another XAP version, change lookupGroup in

mirror-service/src/main/java/com/gigaspaces/MirrorSpaceSynchronizationEndpoint.java : 27 line

db2-delta-server/src/main/java/com/gigaspaces/mq/spacelistener/SpaceReplicator.java : 32 line

insightedge-geo-demo-old-master/web/app/controllers/RestEndpoint.scala : line 19  
insightedge-geo-demo-old-master/insightedge-processing/src/main/scala/org/insightedge/geodemo/processing/DymanicPriceProcessor.scala : line 34

insightedge-geo-demo-old-master/feeder/src/main/scala/org/insightedge/geodemo/feeder/Feeder.scala : line 34

And also db2-delta-server-1.0-jar-with-dependencies.jar must be rebuild after changing group in com.gigaspaces.mq.spacelistener.SpaceReplicator.java

There were issues with other branch doc. This doc in the branch contains working steps to run deltaserver and analyticsxtreme. We have partially tested geospatial demo as it is not required only delta server and analytics-xtreme is required as a part of Bank Of America POC.