**Bluemix with Apache Spark:**

* **Jupyter Notebooks** for interactive and reproducible data analysis and visualization.
* **SWIFT Object Storage** for storage and management of data files.
* **Apache Spark** for data processing at scale.

Source: <https://www.ng.bluemix.net/docs/services/AnalyticsforApacheSpark/index.html>

Cloud foundry

Create application -> web app -> java

Tone Analyzer Credentials

{

"credentials": {

"url": "https://gateway.watsonplatform.net/tone-analyzer-experimental/api",

"username": "9f95d854-4019-4fc2-9343-2a82bf692f44",

"password": "wI6in78cFmVm"

}

}

**How to save Tweet streams to dash DB?**

<https://www.youtube.com/watch?v=sYykO10uhR8>

**How to access dashDB tables in Spark using scala code?**

<https://developer.ibm.com/clouddataservices/docs/spark/get-started/load-and-analyze-dashdb-data-with-spark/>

**How to access Cloudant data in Spark using scala code?**

<https://developer.ibm.com/clouddataservices/docs/spark/get-started/load-and-filter-cloudant-data-with-spark/>

Adding jar for cloudant db queries in above notebook

%AddJar https://github.com/cloudant-labs/spark-cloudant/releases/download/v1.4.1.4/cloudant-spark-1.4.1.jar -f

**How to analyze twitter data using scala code?**

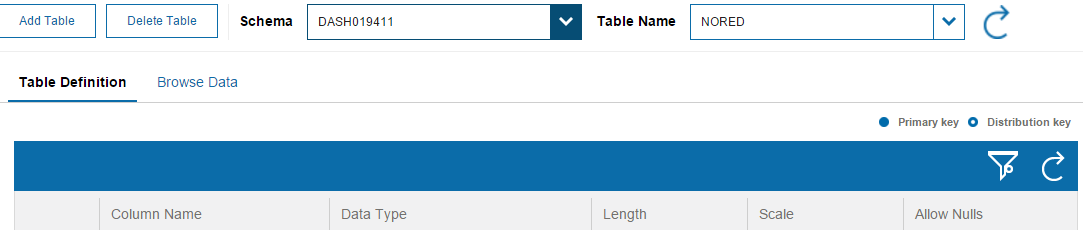
<https://developer.ibm.com/clouddataservices/sentiment-analysis-of-twitter-hashtags/>

**How to import jars into Bluemix Apache Spark service notebooks?**

<https://www.ng.bluemix.net/docs/services/AnalyticsforApacheSpark/index.html>

Node Red Boilerplate

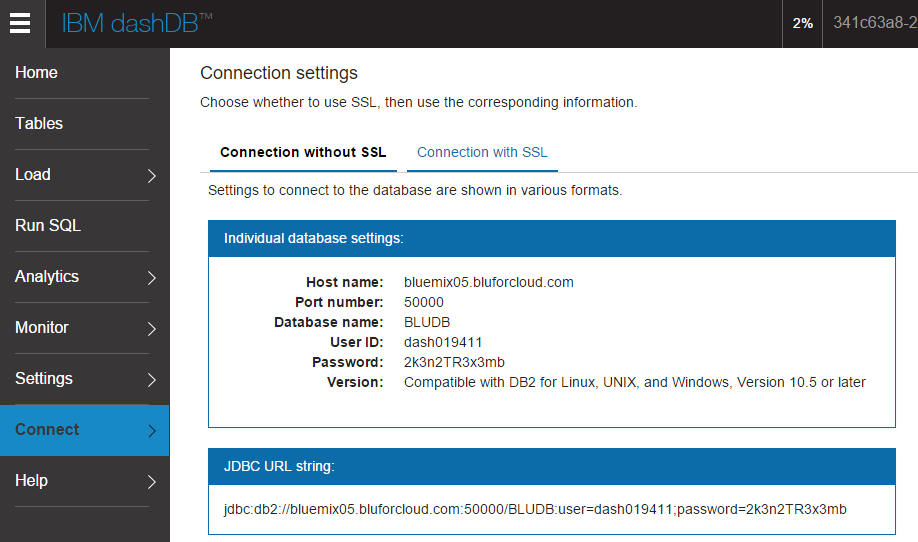
TweetsNRBP



Dash DB Schema: DASH019411

Table Name: NORED

**Dash DB Credentials for Spark connectivity:**



**Queries to read the dash DB data in Scala based Spark analytic notebook:**

val sqlcontext = new org.apache.spark.sql.SQLContext(sc)

val dashdataDF = sqlcontext.load("jdbc", Map(

"url" -> "jdbc:db2://bluemix05.bluforcloud.com:50000/BLUDB:user=dash019411;password=2k3n2TR3x3mb;",

"dbtable" -> "DASH019411.NORED"))

dashdataDF.registerTempTable("tweetdata")

dashdataDF.printSchema

dashdataDF.collect

val results = sqlcontext.sql("SELECT TWEET\_PLACE\_NAME from tweetdata")

results.collect