

How To Configure JDBC on Message Broker

Configuring JDBC on Message Broker is pretty simple and straight forward task... it almost involves no complicated configuration unless you decide to mess with it... One major draw back is, the debug always shows only one exception, for any reason the Broker Fails to connect to the destined JDBC. So you will be getting same exception for every mistake you make... which even complicates the issue... you will end up with

```
Insert
Type:INTEGER:5
Text:CHARACTER:JavaCompute
Insert
Type:INTEGER:5
Text:CHARACTER:DB2
Insert
Type:INTEGER:5
Text:CHARACTER:java.lang.reflect.InvocationTargetException
Insert
Type:INTEGER:5
Text:CHARACTER:No Details
```

Exception if you don't have the Jars in place or there's no network connectivity between the Broker and Database or the connection URL format itself is wrong... so... keeping this in mind, lets start configuring the JDBC. For configuring the JDBC, all we have to do is to create a new configurable service...

```
mqsicreateconfigurableservice WBRK61_DEFAULT_BROKER -c JDBCProviders -o
DB2_LA
```

Here DB2_LA is the name which developer will use to make a JDBC connection to the database...

```
Connection DB2_Connection =
getJDBCType4Connection("DB2_LA",JDBC_TransactionType.MB_TRANSACTION_AU
TO);
```

Now lets see how to configure DB2 with the Broker, if you run the command
`mqsireportproperties WBRK61_DEFAULT_BROKER -c JDBCProviders -o DB2 -r`

you will be able to see that the console returns some configuration data in which
you will identify the Connection URL Format ...

```
connectionUrlFormat='jdbc:db2://[serverName]:[portNumber]/[databaseName]:u  
ser=[user];password=[password];'
```

We will have to add this parameters to our JDBC connection too...so.. lets get
started with the commands...

we will have to create the security profile so that the broker uses it to authenticate
with the database...

```
mqsisetdbparms WBRK61_DEFAULT_BROKER -n jdbc::DB2SEC -u merlin -p merlin
```

once the security profile is created we will have to attach this to our JDBC by
running

```
mqsichangeproperties WBRK61_DEFAULT_BROKER -c JDBCProviders -o DB2_LA -n  
securityIdentity -v DB2SEC
```

now we just need to set the database name post number host number...etc...

adding the connection url

```
mqsichangeproperties WBRK61_DEFAULT_BROKER -c JDBCProviders -o MYSQL -n  
connectionUrlFormat -v
```

```
jdbc:db2://[serverName]:[portNumber]/[databaseName]:user=[user];password=  
[password];
```

adding the database name host name port number

```
mqsichangeproperties WBRK61_DEFAULT_BROKER -c JDBCProviders -o DB2 -n  
portNumber -v 5000
```

```
mqsichangeproperties WBRK61_DEFAULT_BROKER -c JDBCProviders -o DB2 -n  
serverName -v 172.17.3.113
```

```
mqsichangeproperties WBRK61_DEFAULT_BROKER -c JDBCProviders -o DB2 -n
```

databaseType -v DB2

by this time you should be able to identify that the -n is the name of the property and -v is the value of the property...

in the end your configuration parameters should look like...

```
C:\Program Files\IBM\MQSI\6.1>mqsireportproperties
```

```
WBRK61_DEFAULT_BROKER -c JDBCProviders -o DB2_LA -r
```

```
JDBCProviders
```

```
DB2_LA
```

```
connectionUrlFormat='jdbc:db2://[serverName]:[portNumber]/[databaseName]:user=[user];password=[password];'
```

```
connectionUrlFormatAttr1=""
```

```
connectionUrlFormatAttr2=""
```

```
connectionUrlFormatAttr3=""
```

```
connectionUrlFormatAttr4=""
```

```
connectionUrlFormatAttr5=""
```

```
databaseName='SAMPLE'
```

```
databaseType='DB2 Universal Database'
```

```
databaseVersion='8.2.0'
```

```
description='default_Description'
```

```
environmentParms='default_none'
```

```
jarsURL='C:\Program Files\IBM\SQLLIB\java'
```

```
portNumber='50000'
```

```
securityIdentity='DB2SEC'
```

```
serverName='172.17.3.113'
```

```
type4DatasourceClassName='com.ibm.db2.jcc.DB2XADataSource'
```

```
type4DriverClassName='com.ibm.db2.jcc.DB2Driver'
```

BIP8071I: Successful command completion.

```
C:\Program Files\IBM\MQSI\6.1>
```

after setting up all the parameters in place all that we have to do is to just run the flow if it throws the above mentioned exception the primary things you have to check are

1. Jar Folder Contains Common.jar ,db2jcc.jar ,db2jcc_license.jar
2. The security Profile credentials are actually valid and configured correctly
3. You are able to make a JDBC connection to the database via a Java Program
4. you didn't screw up the connection url format

Screwing up the connection URL format: DO NOT REPLACE THE [USER] OR [DATABASE NAME] OR ANY OTHER THINGS PLACED IN THE [] BRACKETS... THE BROKER WILL DO THIS FOR YOU.

If you still have a problem take a startup trace as explained in my previous post and try to debug it by searching for DB2_LA and reading the adjacent text... if you still have a problem comment hear I will help...

```
com.ibm.broker.plugin.MbNode.evaluate(MbNode.java:1434)
Database Error ----->>[BIPmsgs:6233]BIP6233E: An error occurred in node:
JavaCompute There was a problem establishing a connection to the given database URL:
DB2_LA      Exception      details:      java.lang.reflect.InvocationTargetException
```

The node was unable to establish a connection to the given database URL.

Contact your WebSphere Message Broker administrator. : Failed to obtain JDBC Connection

the connection URL format might have changed for V7...
missed setting following parameter. Now it is working fine. Thanks for your effort and instant response.

```
mqsichangeproperties WBRK61_DEFAULT_BROKER -c JDBCProviders -o MYSQL -n
connectionUrlFormat -v
jdbc:db2://[serverName]:[portNumber]/[databaseName]:user=[user];password=[pass
word];
```