

# Working With MSSQL2005

## Handling large data sets from the database

Different databases handle loading data differently (using the JDBC drivers). Some drivers will cache the entire dataset information on the client, which is not needed.

if you encounter an **OutOfMemory** error when building indexes for MSSQL2005:

```
2009-06-03 11:16:57,796,957929250@qtp-357218532-1,ERROR, adhoc.cube.CubeEngine -
doPost error: com.microsoft.sqlserver.jdbc.SQLServerException: The system is out of memory.
Use server side cursors for large result sets:Java heap space. Result set size:-1,418,126,297.
JVM total memory size:3,145,203,712.
```

This indicates that the JDBC driver that you are using attempts to load all the dataset back to the client and fails causing this OutOfMemory error.

To minimize the memory used & prevent the loading of the entire dataset back to the client, we can make use of a MSSQL2005's Adaptive Response Buffering feature.

This is only available using:

- JDBC Driver – MSSQL2005 Version 1.2 Driver & above that supports adaptive response buffering
- Connection URL - \*append\* ";responseBuffering=adaptive" to the URL (Eg. `jdbc:sqlserver://<host>:1433;DatabaseName=Sample;responseBuffering=adaptive`)
- Driver Class - `com.microsoft.sqlserver.jdbc.SQLServerDriver`

More information can be found here - <http://blogs.msdn.com/jdbcteam/archive/2007/05/02/what-is-adaptive-response-buffering-and-why-should-i-use-it.aspx>

Alternatively, you can also explore using other supported MSSQL2005 drivers such as JNetDirect, jTDS etc that can possibly improve performance & stability.