Running MQSMFCSV - Day 2 Lab #1
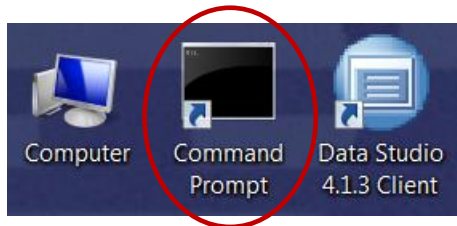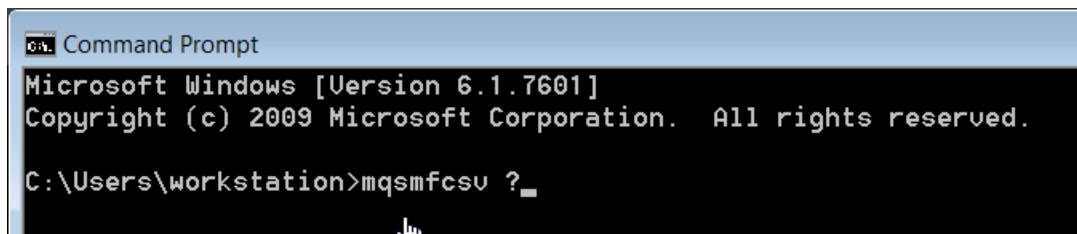
Lab Objective

This lab introduces running MQSMFCSV to post process the MQ SMF data.

Lab Steps

1) Start a command prompt window from the desktop.

2) In the command prompt pane, enter 'mqsmfcsv ?'

3) The results should look like this:

```
Command Prompt

MQ SMF CSV - Build Sep 18 2018 09:58:14
Usage: mqsmfcsv [-o <output dir>] [-a] [ -d <level> ]
         [-h yes|no] [ -i <input file> [-m <max records>]
         [-f RDW | NORDW | JSON | SQL | CSV ]
         [-b Db2 | MySQL ]
         [-p <template DDL file prefix>  ]
         [-e <template DDL file ending>  ]
         [-r] [-c] [-t <ticker>]
  -a              Append to files if they exist. Default is overwrite.
  -b <Database>   Database DDL format can be Db2 or MySQL. Default is Db2.
  -c              Recover after aborted run by using the checkpoint.
  -d <Level>      Debug by dumping binary records (Level = 1 or 2).
  -f              File formats. Default to RDW for input, CSV for output.
  -h yes|no       Print column headers for new output files. Default is yes.
  -i <Input file> Default is to read from stdin.
  -m <Max records> End after formatting M records. Default to process all.
  -o <Directory>  Where to put output files. Default to current directory.
                  Use '-' to send output to stdout.
  -p <file>       Add contents of <file> to start of generated DDL.
                  Set to '-' to bypass default commands.
  -e <file>       Add contents of <file> to end of generated DDL.
  -r              Do not print '=' on numeric-looking strings.
  -s              (Deprecated) SQL mode - generate DDL for tables.
  -t <Ticker>     Print progress message every T records.

C:\Users\workstation>_
```

4) This output gives the current list of options when running MQSMFCSV. The list does not remain constant (smile).
5) From the desktop, open the MQPERF1 folder.
6) Navigate to the Lab_Info\RunningMQSMFCSV sub-folders, and open the SimpleTest1.txt file (use Notepad if you have to make a selection). It should look as shown below.

> NOTE: Check the path of the MQPERF1 directory – if it has been moved under the user1 ID, you should copy the directory straight to the C drive

```
SimpleTest1.txt - Notepad
File  Edit  Format  View  Help
mqsmfcsv -i C:\MQPERF1\Sample_SMF\TESTPUT1_MQSMF.bin -o C:\MQPERF1\TESTPUT1_Output -f RDW -hyes
```

7) This command will take as input downloaded SMF data, process it thru mqsmfcsv and put the output in the directory specified. This will produce CSV output files with column headers. Note the '-f RDW', this file was downloaded using the SITE RDW command, meaning that the record descriptor word is maintained on the file.
8) The download of data is not done as part of this session due to network constraints.

9) Copy the command and paste in the command prompt pane. Note that to paste you will have to right click and hit the paste command, rather than using ctrl-v. Once pasted hit the enter key.

10) The results should look as follows:

```
C:\Users\workstation>mqsmfcsv -i C:\MQPERF1\Sample_SMF\TESTPUT1_MQSMF.bin -o C:\
MQPERF1\TESTPUT1_Output -f RDW -hyes
MQ SMF CSV - Build Sep 18 2018 09:58:14
Swapping bytes in input records
Input file: TESTPUT1_MQSMF.bin. Format: RDW.
Processed 8293 records total at 11 MB/sec
  Ignored                    record count: 2
  Formatted 115 subtype   1 record count: 516
  Formatted 115 subtype   2 record count: 516
  Formatted 115 subtype   5 record count: 516
  Formatted 115 subtype   6 record count: 516
  Formatted 115 subtype   7 record count: 516
  Formatted 115 subtype 201 record count: 517
  Formatted 115 subtype 215 record count: 517
  Formatted 115 subtype 231 record count: 516
  Formatted 116 subtype   0 record count: 40
  Formatted 116 subtype   1 record count: 4104
  Formatted 116 subtype  10 record count: 17

C:\Users\workstation>
```

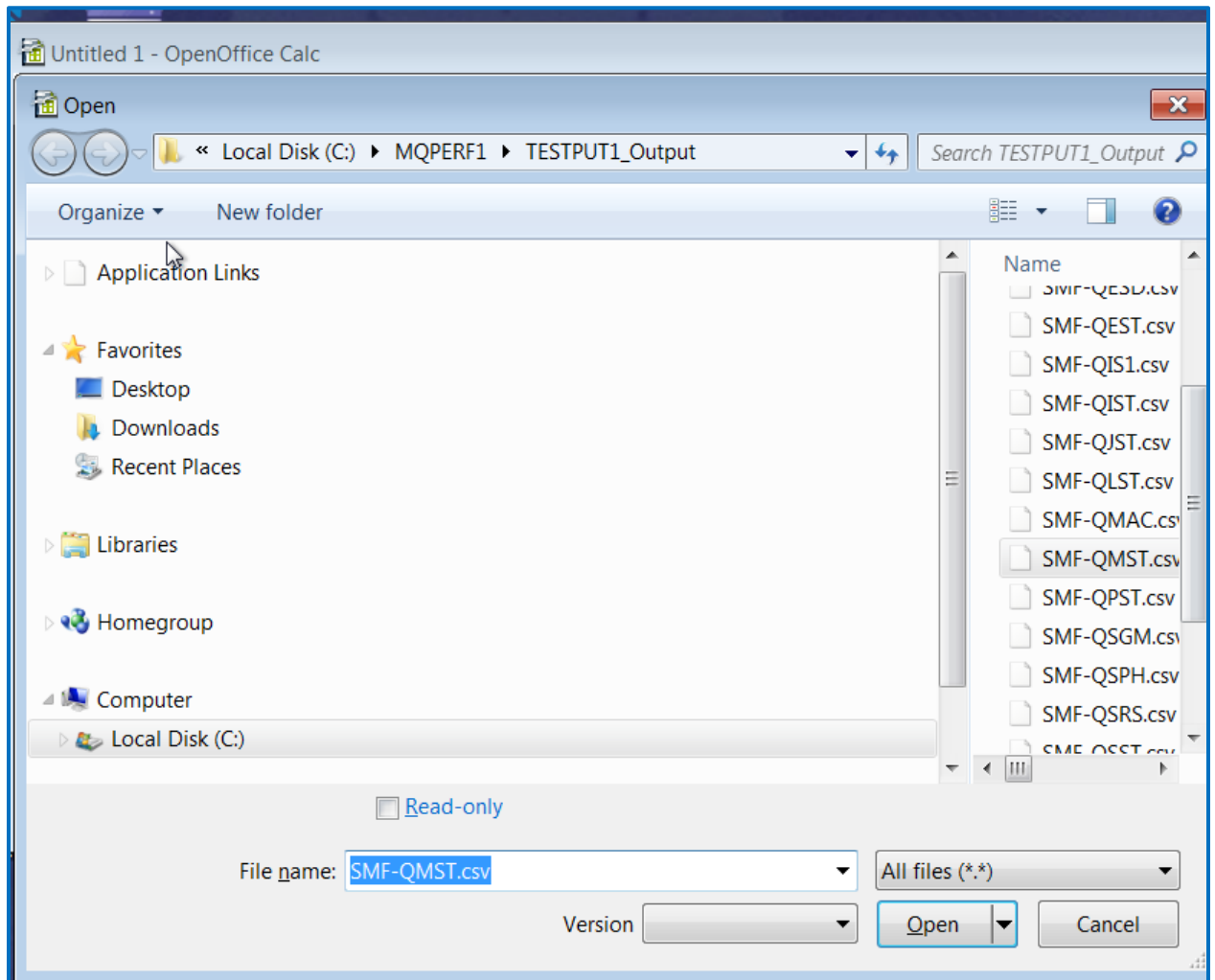11) On the desktop, double click on the Open Office icon

12) Select Spreadsheet from the menu by clicking on it.

13) It will open up a blank spreadsheet
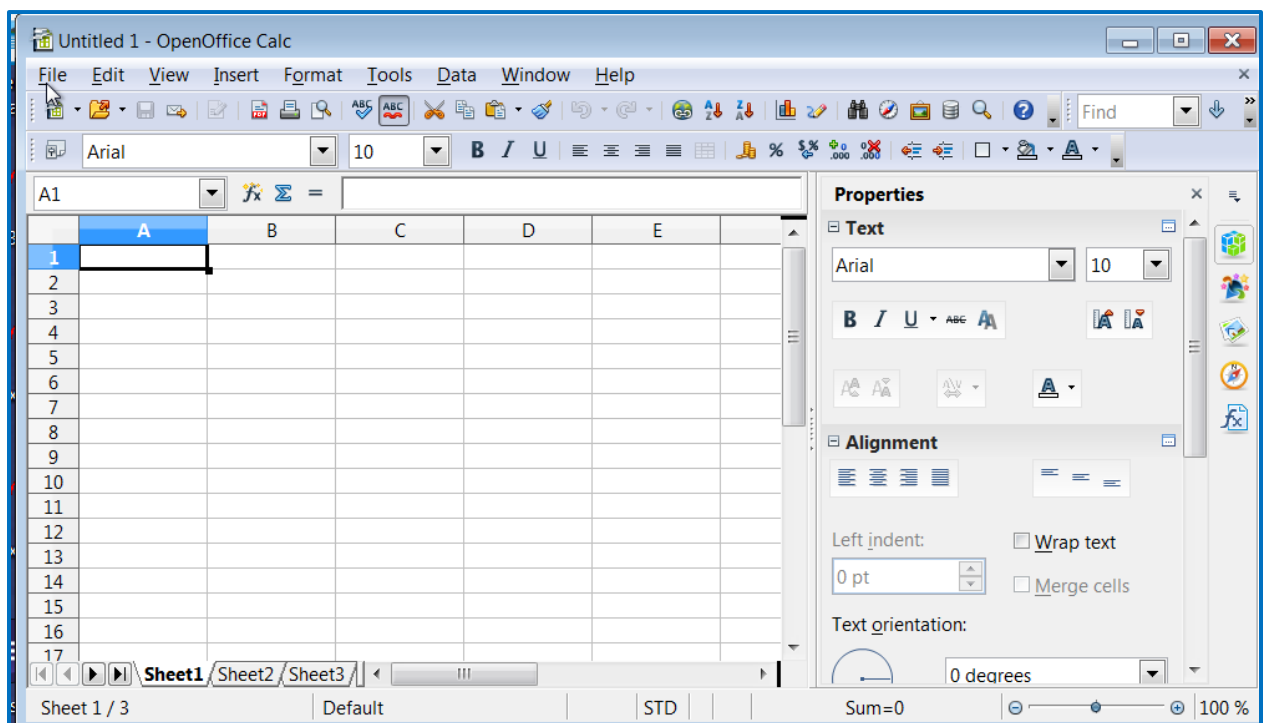
14) Click on File, then Open and navigate to the C:\MQPERF1 \TESTPUT1_Output Directory.

15) Select the SMF-QMST.csv file (Message Manager output), as shown above, and click on Open.

16) The Text Import panel will be displayed. Please make sure that only the comma is selected as the delimiter.   If any others are checked, please uncheck them. Space can cause misalignment because some column headers may have spaces.

> TECH- TIP - Please make sure the Character Set is Windows-1252 or Unicode UTF-8. Other character sets will cause unpredictable results!!!

17) Click on OK, and it will format the spreadsheet.

18) You can scroll thru the data available and open up additional csv files using the same methods. As you can see, the data in this spreadsheet looks much like that in the CSV files generated by the MP1B MQSMF program, with some added data. For example the duration is the time between intervals in seconds.

19) In some cases the output from MQSMF does not have CSV files for some of the data (the data manager data for example). There are no CSV files generated for task ID (WTID), overall task accounting (WTAS) and queue records (WQ). In other cases, the CSV files from MQSMF do not contain all the information from the SMF data – and the data from MQSMFCSV has all that data.

20) Note that some files may not open or may not allow to review all the data. For example, when using MicroSoft Excel, there is a limit to the number of rows that can be held within a spreadsheet. Attempting to open these large files may result in errors or in truncated data In some others there are limits to the number of columns, and SMF formats with a lot of data, like the WQ records cannot be easily displayed.