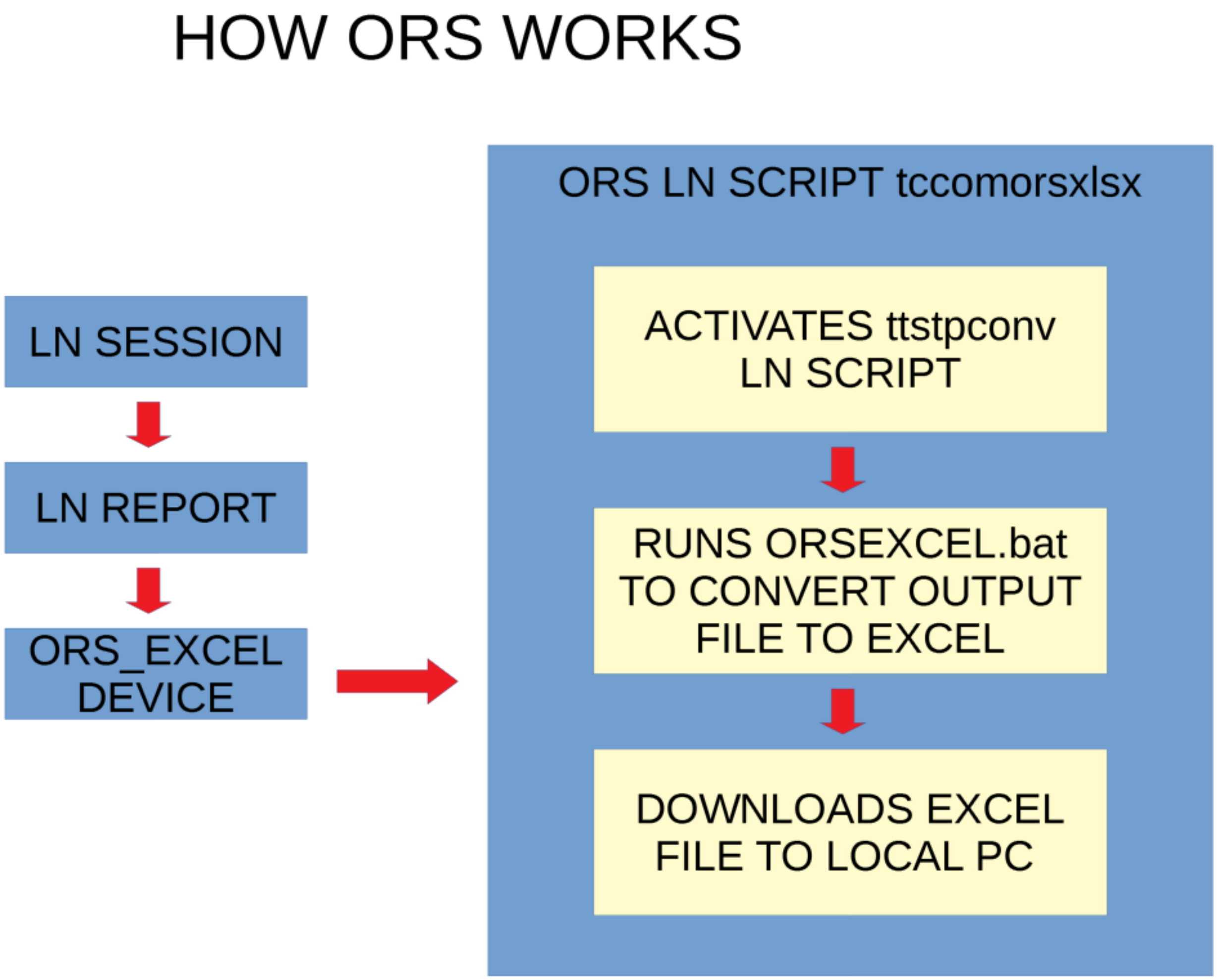
Author: Carlos Kassab, E.Mail: laran.ikal@gmail.com, Date: 2019/June/06

Open Reporting System.

What is it?.

It is an easy way to get your own good looking reports with output comming directly from ERP LN report sessions as file downloads in Excel xlsx or PDF format.



HOW ORS WORKS

LN SESSION

LN REPORT

ORS_EXCEL DEVICE

ORS LN SCRIPT tccomorsxlsx

ACTIVATES ttstpconv LN SCRIPT

RUNS ORSEXCEL.bat TO CONVERT OUTPUT FILE TO EXCEL

DOWNLOADS EXCEL FILE TO LOCAL PC

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ORS INSTALL

Prerequisites:

- PowerShell(https://docs.microsoft.com/en-us/powershell/)
- ERP LN Windows Server
- VisualStudio Code IDE (https://code.visualstudio.com), For development machine.
- wkhtmltopdf (https://wkhtmltopdf.org/index.html)

Notes:
- Powershell must be at least version 5.
- Check PowerShell on the server and the development machine are the same versions.
To check Powershell version open a PowerShell console and run: $PSVersionTable.PSVersion

Reports with Excel Output:

Install PowerShell ImportExcel Module:

- Open PowerShell Console as administrator
- Run this command: Find-Module ImportExcel | Install-Module

If when running this command, PowerShell asks to install nuget provider, answer yes → Y
It also may say that you are installing from untrusted repositories, answer yes to install the module.

Download OpenReportingSystem as a zip file from github:
https://github.com/LaranIkal/OpenReportingSystem

Whe opening the zip file, there is a main folder: OpenReportingSystem-master

Open OpenReportingSystem-master folder and copy folder OpenReportingSystem to your root c:\

Now you have installed Open Reporting System. Follow the next steps.

For any help, you can reach me at my email in the header of this document or in baan board:

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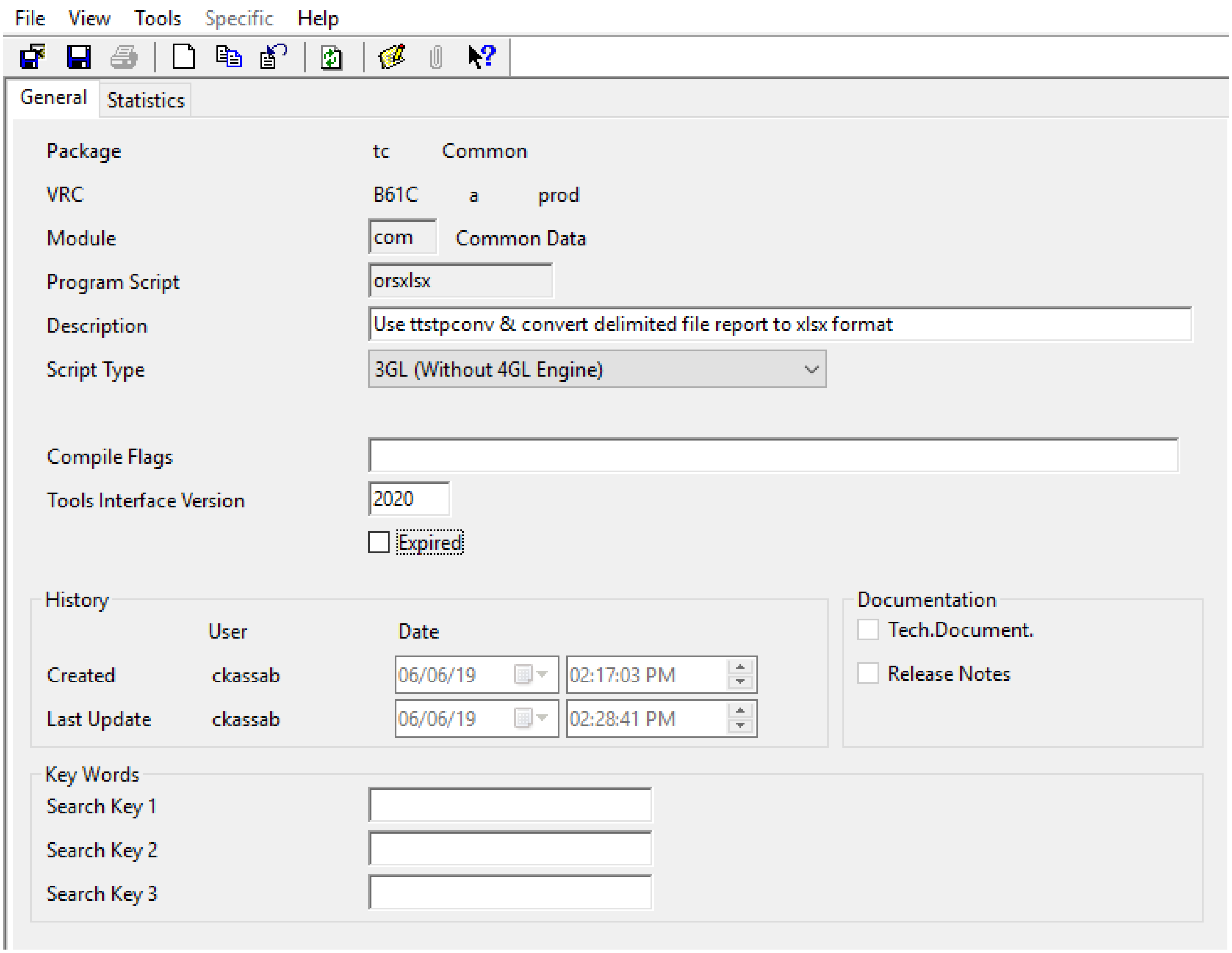
Login to LN, navigate to Tools→Application Development → Program Scripts / Libraries, start session Program Scripts / Libraries and create the next library:



Package	tc	Common
VRC	B61C a prod	
Module	com	Common Data
Program Script	orsxlsx	
Description	Use ttstpconv & convert delimited file report to xlsx format	
Script Type	3GL (Without 4GL Engine)	
Compile Flags		
Tools Interface Version	2020	
	□ Expired	

History

	User	Date	
Created	ckassab	06/06/19	02:17:03 PM
Last Update	ckassab	06/06/19	02:28:41 PM

Documentation

□ Tech.Document.

□ Release Notes

Key Words

Search Key 1	
Search Key 2	
Search Key 3	

Tools interface version depends on your tools version.

Copy the below the script source code, save and compile your library:

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```
|*****************************************************************************
|* Title   : tccomorsxlsx - ttstpconv report output delimited file to xlsx Excel format
|* Author          : Carlos Kassab
|* Date            : June,06,2019
|*****************************************************************************
|* Script Type     : 3GL
|****************************** DECLARATION SECTION ***************************

extern  domain  tcmcs.str132    program_name
extern  domain  tcmcs.str132    prog_arguments
                string          tmp.file1(1024), tmp.xlsx.file1(1024)   | Temporary file names.
                string          tmp.file_r(1024)
                string          local.path(1024)        | Client Location for report.
                string          file_to_email(1024)
                string          start(1024)             | Start command
                string          application(132)        | Application to start.
                long            app_id                  | Application id.
                string          device.parameters(50)

extern  domain  tcmcs.long      retval
extern  domain  tcmcs.long      fileid1
extern  domain  tcmcs.long      err
extern  string                  monthnum(2),daynum(2)           |Actual date
extern  long                    utc.func.ret, ret
extern  long                    _yearno, _monthno, _month_dayno, _hours, _minutes, _seconds

#pragma used dll ottdllbw
#pragma used dll ottdllhtml
#include <bic_desktop>

function main()
{
  |For development and testing, use temporary file tmp.file1 on development machine.
  tmp.file1 = creat.tmp.file$( bse.tmp.dir$() )
  tmp.xlsx.file1 = tmp.file1 & ".xlsx" | This will be the final converted file name.

  | Arguments description
  |message("argument1:" & argv$(1)) | tmp file created from report output
  |message("argument2:" & argv$(2)) | path to file in device setup
  |message("argument3:" & argv$(3)) | arguments parameter in device setup
  |message("argument4:" & argv$(4)) | This is wt value, still waiting to know description.
  |message("argument5:" & argv$(5)) | at this time this value is comming empty

  wait.and.activate( "ttstpconv", argv$(1), tmp.file1, argv$(3), argv$(4) )

  | Running script to convert delimited file to xlsx format, file name in variable tmp.xlsx.file1
  program_name = "/OpenReportingSystem/ExcelOutput/ORSEXCEL.bat"
  prog_arguments = tmp.file1 & " " & tmp.xlsx.file1 & " " & spool.report
  retval = run.prog( program_name, prog_arguments, RP_WAIT )

  if job.process then
    utc.func.ret = utc.to.date(utc.num(), _yearno, _monthno, _month_dayno, _hours, _minutes, _seconds)
    monthnum = str$(_monthno)
    if _monthno < 10 then
      monthnum = "0" & str$(_monthno)
  endif

  daynum = str$(_month_dayno)

  if _month_dayno < 10 then
   daynum = "0" & str$(_month_dayno)
  endif

  file_to_email = bse.tmp.dir$() & "/"       & spool.report & "_" & monthnum & daynum & str$(_yearno) & ".xlsx"
  file.cp( tmp.xlsx.file1, file_to_email )

 else

  if tc.is.html.ui() then

   client.download.file( tmp.xlsx.file1 )

  else

   local.path = "${BSE_TMP}/" & str$(utc.num()) & ".xlsx"

   err = server2client( tmp.xlsx.file1, local.path, false, false,false )

   if (err) then
    message("Could not copy file to client")
   else
    application = "excel.exe"
    start = application & " " & get.local.filename()
    app_id = start.application.local(start,0,err)
   endif

  endif

 endif

 retval = seq.unlink(tmp.file1) |For development and testing, comment this line to avoid file deletion.
}
```

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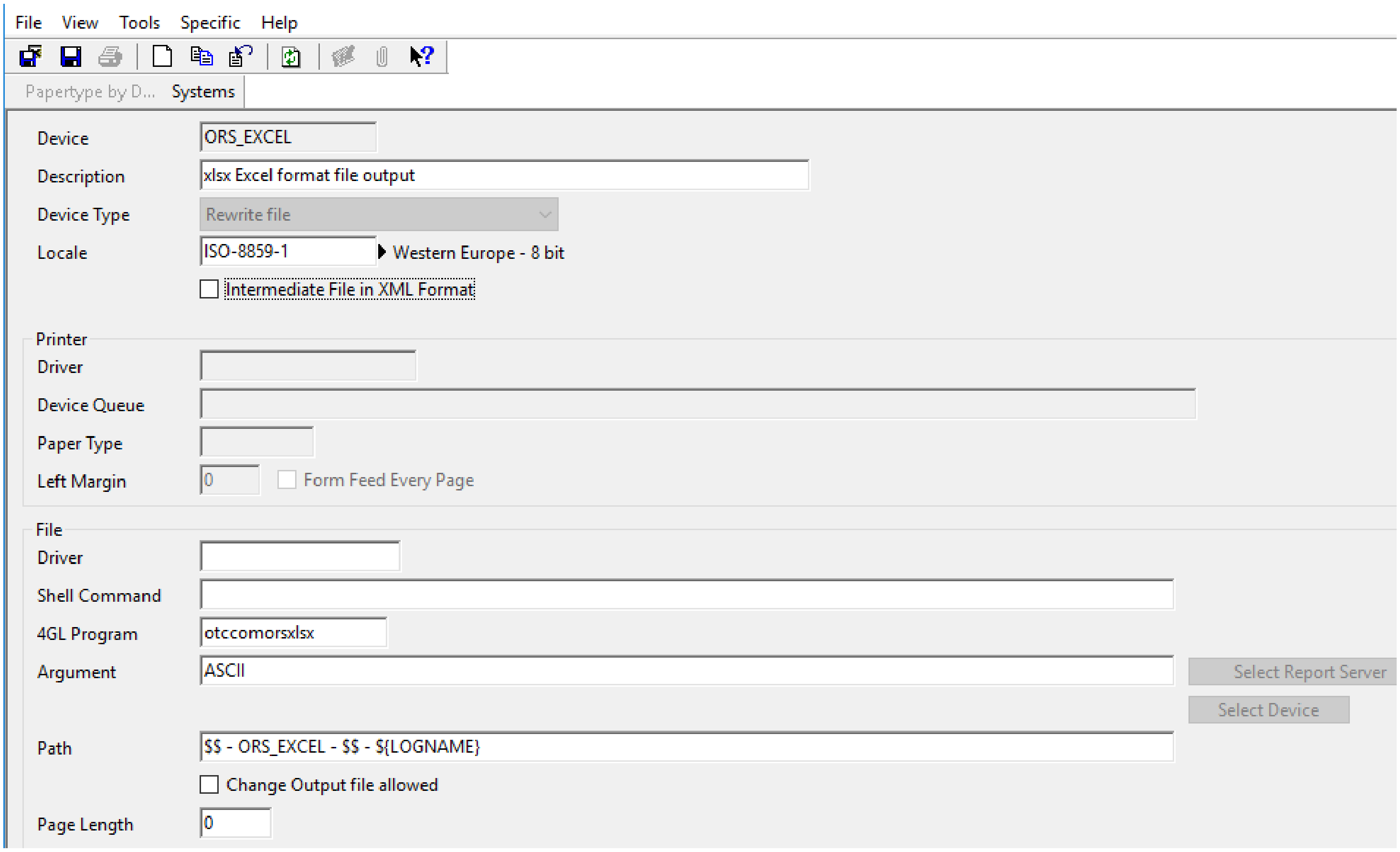
Create your printing device, login to LN and navigate to:
Tools → Device Management → Device Data run Device Data Session and add this device:



Device: ORS_EXCEL

Description: xlsx Excel format file output

Device Type: Rewrite file

Locale: ISO-8859-1 ▸ Western Europe - 8 bit

□ Intermediate File in XML Format

Printer

Driver:

Device Queue:

Paper Type:

Left Margin: 0 □ Form Feed Every Page

File

Driver:

Shell Command:

4GL Program: otccomorsxlsx

Argument: ASCII

Path: $$ - ORS_EXCEL - $$ - ${LOGNAME}

□ Change Output file allowed

Page Length: 0

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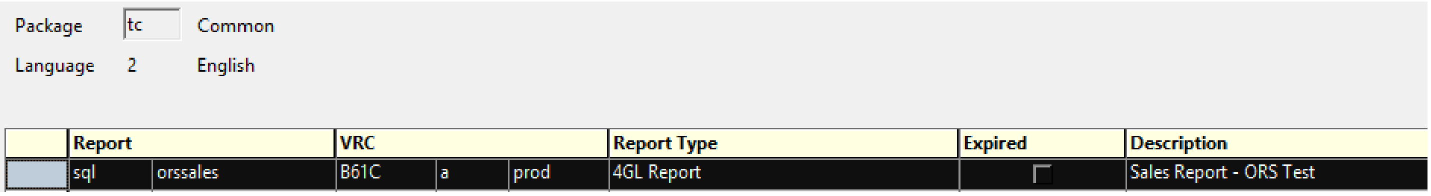
To test your new reporting system, create a query, name it tcsqlorssales with the next sql code:

```
select
      tdsls400.orno,        | Sales Order
      tdsls400.odat,        | Order Date
      tdsls400.hdst,        | Sales Order Status
      tdsls400.ddat         | Planned Delivery Date
from
      tdsls400              | Sales Orders
where
      tdsls400.hdst = tdsls.hdst.in.process
```

Once the report has been generated,go to maintain reports and find your new query report:

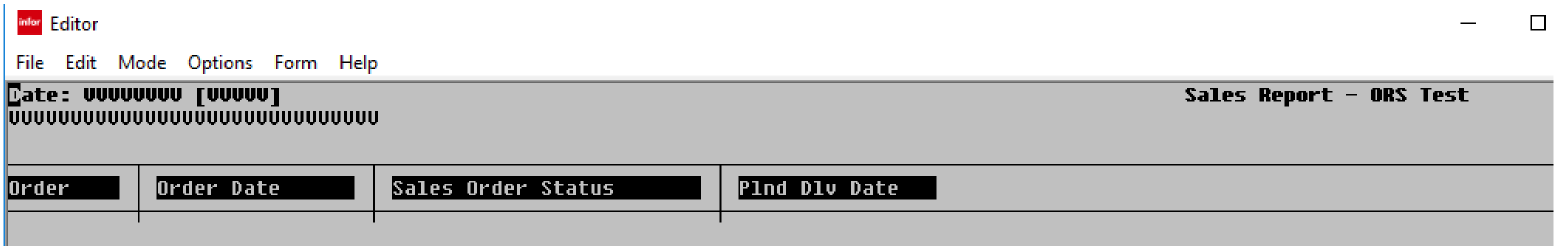


Package tc Common

Language 2 English

	Report		VRC			Report Type	Expired	Description
	sql	orssales	B61C	a	prod	4GL Report	□	Sales Report - ORS Test

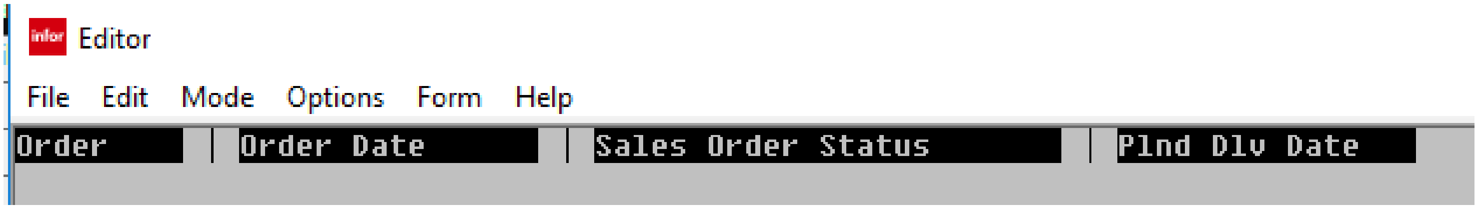
Right click on the report name and edit the layout header, it should be like this:



```
Date: VVVVVVVV [VVVVV]                                          Sales Report - ORS Test
VVVVVVVVVVVVVVVVVVVVVVVVVVVVVV

Order      | Order Date        | Sales Order Status          | Plnd Dlv Date
```

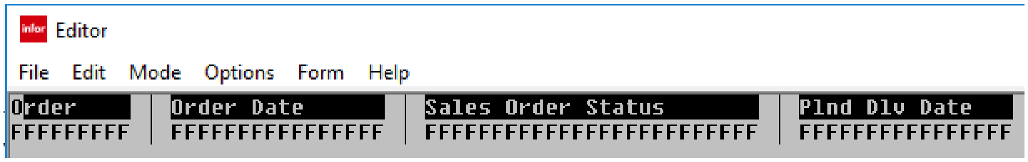
Delete all header lines but keep header column descriptions, it must be like this after your deletion:



```
Order      | Order Date        | Sales Order Status          | Plnd Dlv Date
```

Note. You must also resize the header to keep just the column descriptions line.

If you edit Header and Detail layouts, they must look like this:



```
Order     | Order Date        | Sales Order Status        | Plnd Dlv Date
FFFFFFFF  | FFFFFFFFFFFFFFFF  | FFFFFFFFFFFFFFFFFFFFFFFFF | FFFFFFFFFFFFFFFF
```

Here we are creating the header and detail for our delimited file.
Save, exit and compile your report.

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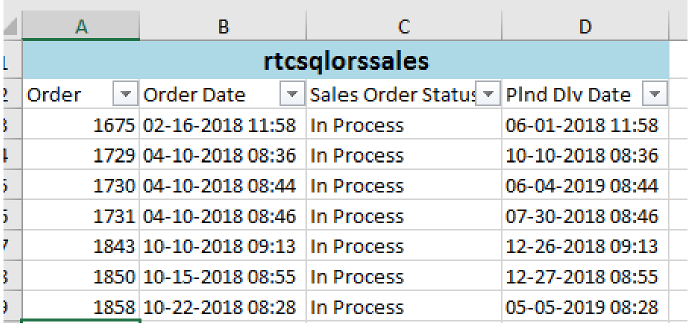
Run your sql query and use the new device: ORS_EXCEL, you must have an output like this:



rtcsqlorssales

Order	Order Date	Sales Order Status	Plnd Dlv Date
1675	02-16-2018 11:58	In Process	06-01-2018 11:58
1729	04-10-2018 08:36	In Process	10-10-2018 08:36
1730	04-10-2018 08:44	In Process	06-04-2019 08:44
1731	04-10-2018 08:46	In Process	07-30-2018 08:46
1843	10-10-2018 09:13	In Process	12-26-2018 09:13
1850	10-15-2018 08:55	In Process	12-27-2018 08:55
1858	10-22-2018 08:28	In Process	05-05-2019 08:28

All sources and documentation can be found on github: https://github.com/LaranIkal/OpenReportingSystem